



COURTHOUSE URBAN DEVELOPMENT AREA PLAN

stafford county, virginia

NOVEMBER 29, 2011
REVISED FEBRUARY 10, 2012
REVISED MARCH 29, 2012

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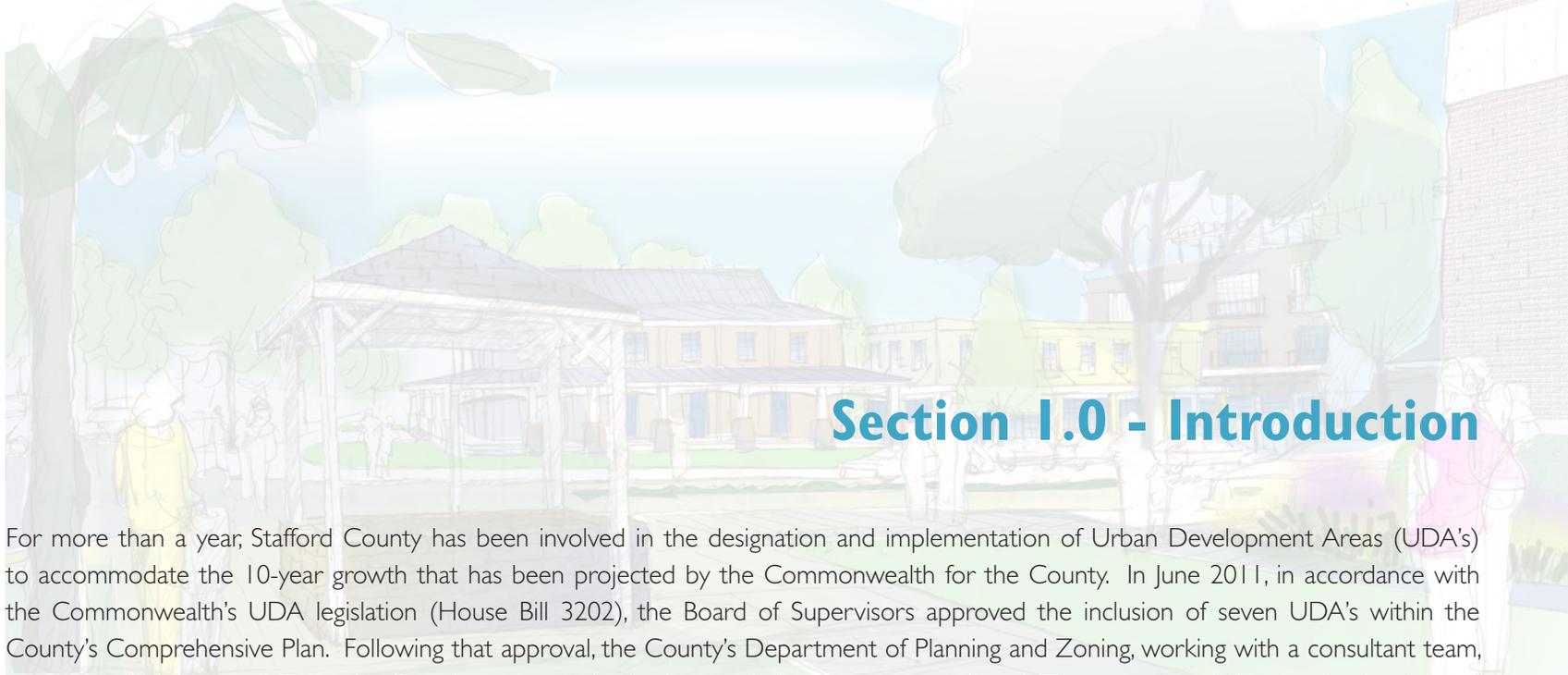
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Section 1.0 - Introduction

For more than a year, Stafford County has been involved in the designation and implementation of Urban Development Areas (UDA's) to accommodate the 10-year growth that has been projected by the Commonwealth for the County. In June 2011, in accordance with the Commonwealth's UDA legislation (House Bill 3202), the Board of Supervisors approved the inclusion of seven UDA's within the County's Comprehensive Plan. Following that approval, the County's Department of Planning and Zoning, working with a consultant team, recommended that one UDA—the Courthouse area-- be further studied at the conceptual level. The recommendation for development of a conceptual plan for this UDA serves as an example of the more detailed planning process that should be applied to each UDA to ensure that plans for development respond to the State's legislative requirements, the County's future needs, and the community's visions.

In June 2011, the Board of Supervisors approved the consultant recommendation that the County develop a Small Area Plan for the Courthouse UDA, to illustrate the basic steps needed to implement a UDA in Stafford County. This report documents the steps of implementation and describes how the process undertaken for the Courthouse UDA can be applied to the additional six UDA's in the County.

This report summarizes the public process that was used to develop both a vision and a general land use concept for the Courthouse UDA (Note: the land use concept defines the future possibilities for development in the UDA); provides a detailed description of the land use concept; summarizes the findings of the transportation analysis of the land use concept; summarizes the recommended regulatory changes needed for plan implementation; and presents a set of planning and design guidelines to be considered when implementing both the Courthouse UDA, as well as the other UDA's.

Section 1.0 - Introduction

1.1 Why develop a UDA Small Area Plan?

The VDOT grant to Stafford County includes requiring the creation of a small area plan through a public involvement process. The intention of this requirement is to provide an example of the UDA planning process that can then be applied by the County, likely in an incremental fashion, as it begins to consider development of its remaining UDA's. The small area plan example is intended to illustrate: (1) the purposes, needs and strategies to be used in establishing an appropriate community involvement process for UDA plan development; (2) the Traditional Neighborhood Development (TND)-related elements to be considered in establishing an overall land use concept; (3) the methodology to be used in analyzing potential transportation-related impacts and benefits to be accrued from UDA development; and (4) a zoning tool that will allow for, and encourage the use of, a TND option for development within the UDA.

By creating a small area plan for each UDA, the County is able to define a clear direction for the future development of that area. This will provide both Stafford citizens and landowners with a vision for each UDA that will help shape the ways in which the area grows and develops in accordance with the goals and expectations expressed as part of the planning process for that UDA.

1.2 What was the overall planning process used to develop the Courthouse Small Area Plan?

The planning team began with an analysis of existing site conditions as well as planned changes already approved and/or funded, in order to understand the land use and urban design opportunities and constraints found within the Courthouse UDA. Following on the findings of earlier plans and studies, specifically the County's *2006 Economic Development Plan* and the *2011 Master Redevelopment Plan*, the analysis included issues of topography, existing roads and access, planned new roads, historic resources, views and viewsheds, existing and planned potential economic generators, previously approved plans, plans currently under consideration, as well as current land use and zoning for the area, and the TND principles required to be incorporated in all new UDA's.

Based on this analysis, the team developed several alternative land use concepts for the UDA that included mixed-use and single-use development patterns at varying levels of density, potential street grid patterns and street hierarchies that could connect existing and planned road networks, and pedestrian accessibility.

The team reviewed these concepts with County staff, and then presented them in a workshop format to the general public. Based on feedback from the County and the public, the team developed one Small Area Plan concept for the entire Courthouse UDA. The Courthouse UDA Small Area Plan identifies a potential land use configuration that would achieve both the County's and the community's visions for the area, and meet the County's Comprehensive Plan and the UDA legislation requirements for appropriate residential and commercial densities. The Small Area Plan was used as the basis for a transportation analysis of the impact of UDA development on existing and planned roads in the area, and strategies for mitigating these impacts.

Finally, the team analyzed both the County's current zoning ordinance, and the Form-Based Code being developed for the Boswell's Corner Redevelopment Area, to understand the types of zoning options that will be needed to effectively implement the UDA in accordance with the County's vision, and in adherence to TND-based design guidelines. Each of these planning steps is described in greater detail in this report.

1.3 How does this process inform the County's Comprehensive Plan?

It is anticipated that the more detailed studies carried out as part of the Small Area Planning Process (e.g., the Courthouse UDA Transportation Analysis) will be provided as Appendices to the Stafford County Comprehensive Plan. Other elements, such as specific amendments to the County's Zoning Ordinance, modified street sections for UDA districts, and the more generalized land use plan developed for the Courthouse UDA, will be incorporated as amendments to the current Comprehensive Plan.

This Small Area Plan follows several of the policies and recommendations established in the "Stafford County Virginia Comprehensive Plan 2010 – 2030". Policies within Chapter 2 provide recommendations as to how the UDAs should be implemented. These specific policies include:

Policy 1.2.5. The County shall establish a mixed-use district and design standards for development in the Urban Development Areas. This district shall have a residential density of at least four dwelling units per acre, and shall have a minimum commercial floor area ratio of 0.40. The design standards shall incorporate principles of new urbanism and traditional neighborhood development.

Policy 1.2.6. The County shall encourage within the Urban Development Areas pedestrian-oriented neighborhoods and town centers composed of a variety of housing types and densities, incorporating shopping and work place opportunities, and public facilities.

Policy 1.2.7. Dense, compact mixed-use developments should meet the following criteria:

- Be within the current Urban Services Area;
- Is most appropriate for infill or redevelopment;
- Have a sufficient density and scale to support a mix of uses, walkability, and public transit;
- Be designed, located, and programmed to offer alternatives to single occupancy vehicle trips, by enabling safe and effective pedestrian and bicycle access to multiple uses and activities and by being accessible to public transportation;
- Be sensitive to existing environmental features and protect natural resources;
- Incorporate sustainable design features;
- Include a mix of housing types for all income levels; and
- Offset its impacts to County services.

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Chapter 3, the Land Use Plan, in the same document provides recommendations for all UDAs and each individual UDA. Overall, the Plan recommends that dwelling unit densities should be a minimum of four (4) dwelling units per acre for single family detached units, six (6) dwelling units per acre for townhouse units, and twelve (12) dwelling units per acre for apartment, condominium, or cooperative units and commercial densities should be at a minimum floor area ratio (FAR) of 0.4 for each UDA. The Plan recommends the Courthouse UDA include 2,727,310 square feet of commercial development and 1,386 residential dwelling units. The dwelling units would include a mix of 656 future apartments or condominiums, 150 townhomes and 580 single family homes. The Plan recommends the roadway network in the Courthouse Area should be designed and developed to provide a hierarchical system of interconnected streets and recognize the dual purpose and functionality of Jefferson Davis Highway. A comprehensive access management plan should be developed to mitigate the impact of new development. Furthermore, a 400-space park and ride lot with a bus stop shelter will need to be completed to offset increased vehicle volumes on Interstate 95 during peak commute periods.

It is also recommended that this UDA include passive and active recreational uses, plazas and congregational spaces, as well as cultural activity, consistent with the RDA recommendations. Dedication of open space to support these activities will be required.

1.4 Interim Implementation Measures

In spite of difficult economic conditions nationwide, Stafford County is still seeing significant interest in new development applications countywide and, specifically, within the Courthouse UDA. In recognition of the fact that these development requests will likely continue while potential zoning amendments for the Courthouse UDA are being considered, the County might consider the following options for handling this transition period:

- Option 1: Allow all essentially complete applications prior to the effective date for the new zoning to be completed under the existing code unless the developer voluntarily agrees to apply the new code standards; or
- Option 2: Encourage applicants to delay the submittal of applications while the new zoning is under consideration.

The issues that may arise from these options will fall into two possible categories:

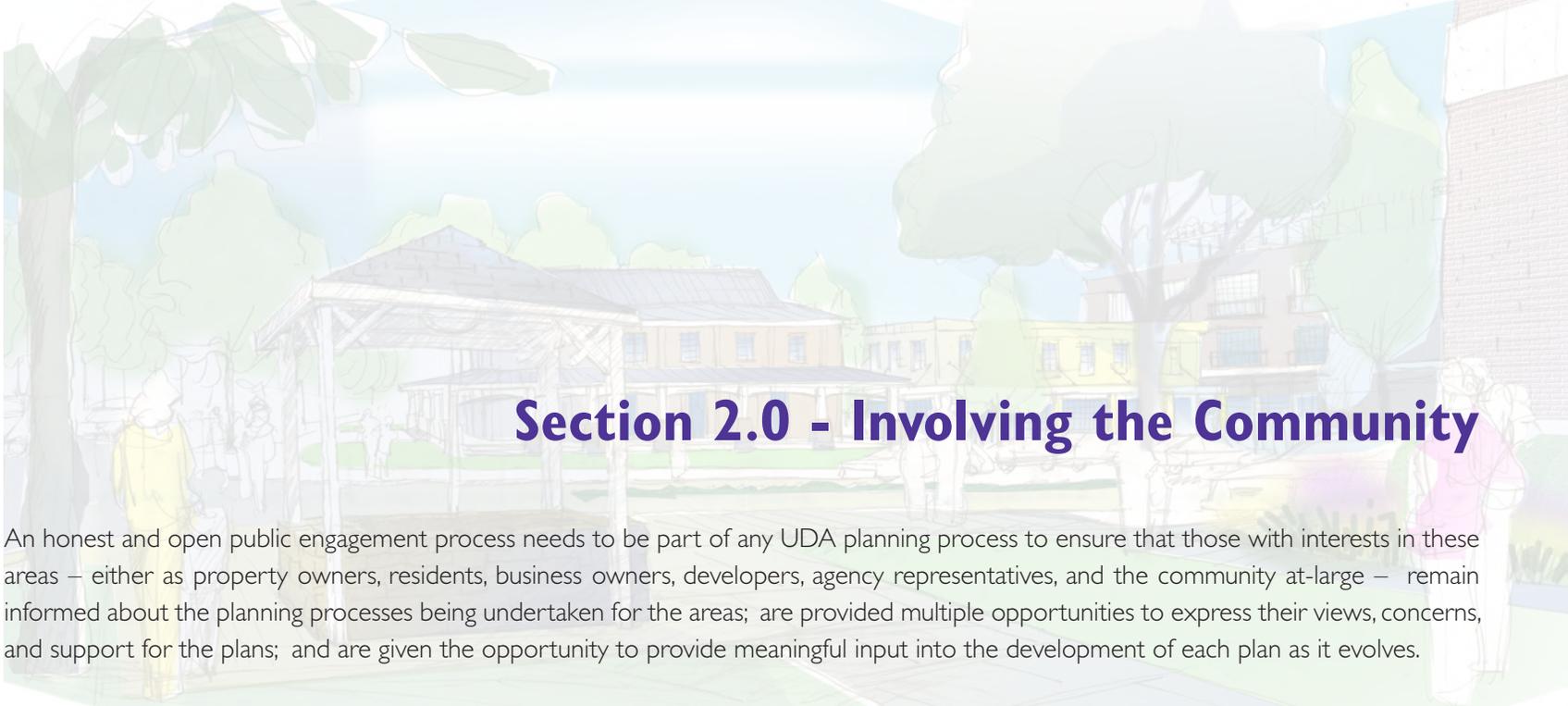
1. *Applicants who can build within their existing zoning.* Staff would typically allow these applicants to move forward but would discuss the new planning for the area, in the hope that development will occur in a pattern that, as closely as possible, responds to the new zoning and the proposed plan.
2. *Applicants who require rezonings.* The County is under no obligation to approve rezoning within the UDA during the interim period. These are special approvals that need not be allowed. Where they are allowed, the County should ensure consistency with the following critical guidelines.

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In summary, the transition should occur transparently, and deliberate action should be taken to clarify what the rules will be during this period. This can take the form of internal policy, a Board of Supervisors resolution, or even an ordinance if necessary. However, it will be important to clarify applicants' rights and available options during this interim period.

That being said, the guidelines that should be used to determine whether an application meets the planning and design intent for a UDA are as follows:

- Within the UDA, the development will meet the following minimum density requirements: 4 single-family residential units per acre; 6 townhouse units per acre, or 12 apartment, condominium or cooperative units per acre, and an authorized floor area ratio of at least 0.4 for commercial development, or any proportional combination thereof.
- The development site plan will include a grid of streets that connects to existing and planned adjacent streets in order to provide alternative circulation options for both pedestrians and both motorized and non-motorized vehicles.
- The street network will meet all VDOT SSAR regulations for compact development pertaining to both Main Street and Local roadway classifications.
- Sidewalks will be required on both sides of all new roads, with adjacent street trees (planted at 25-feet on center) to provide for shade. Sidewalk widths will be determined by the land uses and densities in the areas in which they are located.
- Provide for pedestrian crossings at all intersections, either through signalization or four-way stops.
- Establish a clear build-to line for all new structures, with building entrances and windows facing the street, and adjacent to sidewalks.
- New buildings at intersections should be required to "hold" the intersection corners.
- Parking should be located to the rear and sides of buildings, with the exception of on-street parking.
- The site plan should allow for a gradation of land use intensity with mixed- uses located at neighborhood centers, and building heights and densities decreasing as new development approaches existing and planned single-family detached residential areas.
- Include publicly-accessible, usable open spaces in mixed-use centers, bounded by streets on at least three sides.
- Provide open space linkages/buffers of at least 100-feet in depth along intermittent streams, wetlands and Resource Protection Areas.



Section 2.0 - Involving the Community

An honest and open public engagement process needs to be part of any UDA planning process to ensure that those with interests in these areas – either as property owners, residents, business owners, developers, agency representatives, and the community at-large – remain informed about the planning processes being undertaken for the areas; are provided multiple opportunities to express their views, concerns, and support for the plans; and are given the opportunity to provide meaningful input into the development of each plan as it evolves.

2.1 Previous Relevant Engagement Activities

For the Courthouse UDA Small Area planning process, the County and the consultant team began their initial engagement with the community during a series of workshops and meetings held in January, 2011, to determine the allocation of 4,000 additional housing units among the County's seven approved UDA's. While the focus of these sessions was countywide, many workshop participants expressed their initial views and visions about each of the UDA's at these sessions.

In addition to the workshops, and as part of the challenging process of determining for which of the seven UDA's to develop a Small Area Plan, the team met with ten Stakeholder Focus Groups, selected by the County, to understand countywide and UDA-specific land use and planning issues. These meetings included the following topic areas:

- Schools and Parks & Recreation
- Home Owners Associations
- Political Parties
- Environmental and Historic Preservation
- Faith and Community
- Transportation
- Quantico Facilities
- Economic Development
- Active Homebuilding/Development & Real Estate Brokerage
- Land Use and Zoning Law

A complete summary of focus group participant comments is located in Appendix A.

Section 2.0 - Involving the Community

2.2 Community Workshop

In July, 2011, the County convened a Public Workshop to explore the community visions for the Courthouse Area. Public Workshop participants were encouraged to comment on the relative potential of the preliminary land use concepts to achieve their visions, and suggest revisions to the concepts. The visions that were expressed for the Courthouse UDA were varied and exciting; many of them captured the intent and spirit of Urban Development Areas – that is, to plan areas that, through their increase in density over the current development patterns in the County, can achieve a viable mix of residential, commercial and community-based uses in active, walkable, affordable, and transportation-efficient settings. The major Courthouse UDA visions expressed at the Workshop, and in follow-up comments, can be summarized as:

- A quiet, Southern, tree-lined neighborhood with a town center, park or historic focal point
- Areas like Fredericksburg, Old Town Alexandria, Reston and Arlington
- A place that provides options to get out of your car (i.e., a walkable downtown)
- A place that offers community gathering spaces, coffee shops, shopping; a place that has more than just chain stores, but can offer nice shops and restaurants
- An entertainment center
- A place that has live, work, and play development, attracting young adults
- A place with family-oriented spaces and uses
- A place that offers attractions both for people living inside and outside the County

Based on this visioning exercise, attendees then looked at two land use concept alternatives for the area. Their input regarding these options helped to more clearly focus on defining a single land use concept for the area. From the comments, it became clear that there was a desire to preserve the historic character of the area immediately around the courthouse, while allow for more intense, active, mixed-use development within a separate, but pedestrian-accessible downtown “core,” located south of the historic area and centered eastward of Route 1. Several participants noted the need for additional office uses to support the hospital complex and to protect Route 1 South from additional commercial sprawl. In addition, attendees wanted to see the location of sufficient residential units within, or easily accessible to, the downtown core in order to support the retail uses in that area. Finally, there was overwhelming support for the various types of civic open spaces shown in both plan options.

2.3 Board of Supervisors Presentation

Following the Public Workshop, the team met with County staff to review the findings of that session, and to discuss a clear direction for a single Small Area Land Use Concept for the Courthouse UDA. This conceptual plan was drafted and then presented to the Board of Supervisors at its meeting on August 16th, 2011. In addition, the presentation included a description of the zoning code amendment process that was underway to provide the regulatory tools needed to implement the UDA concept in the Courthouse Area. The Board provided

Section 2.0 - Involving the Community

Photos of the Public Workshop



Section 2.0 - Involving the Community

the team with an approval to continue with the next steps in the UDA planning process: (1) convening a Public Open House; (2) preparing Amendments to the Comprehensive Plan as needed; and (3) preparing zoning code amendments to implement the UDA.

2.4 Public Open House

A Public Open House was held on September 26th, 2011 to present the Courthouse UDA Land Use concept and provide an additional opportunity for public feedback. While advertising this meeting to the general public, the County also sent letters to all property owners in the Courthouse UDA to inform them of this session and invite them to attend. In addition to presenting the land use/urban design concepts for the UDA, the team also invited the consultants involved in the on-going Route 1/Courthouse Road Streetscape Study to present their preliminary plans, since this study is intrinsically tied to both the function and appearance of the Courthouse UDA, and had not yet been presented to the public. The Open House included a large display area with multiple facilitated stations. The boards at these stations presented the Courthouse UDA Small Area Plan in detail, including both land use and urban design concepts, illustrative examples of how the Historic Village and Downtown Core areas might look in the future, and detailed information about the preliminary concepts that have been developed for the Route 1 and Courthouse Road Streetscape Study. In addition, one station focused on summarizing the findings of the transportation analysis that was completed for the Courthouse UDA Small Area Plan, including the improvements that will need to be considered as part of plan implementation. Boards were also provided that defined Urban Development Areas and the TND requirements to offer attendees who had not been at earlier sessions more basic information regarding the Commonwealth's UDA program.

A formal presentation was given at the Public Open House, which provided attendees with an opportunity for questions and responses. In addition to public questions and remarks, attendees were also given comment sheets and encouraged to provide written comments.

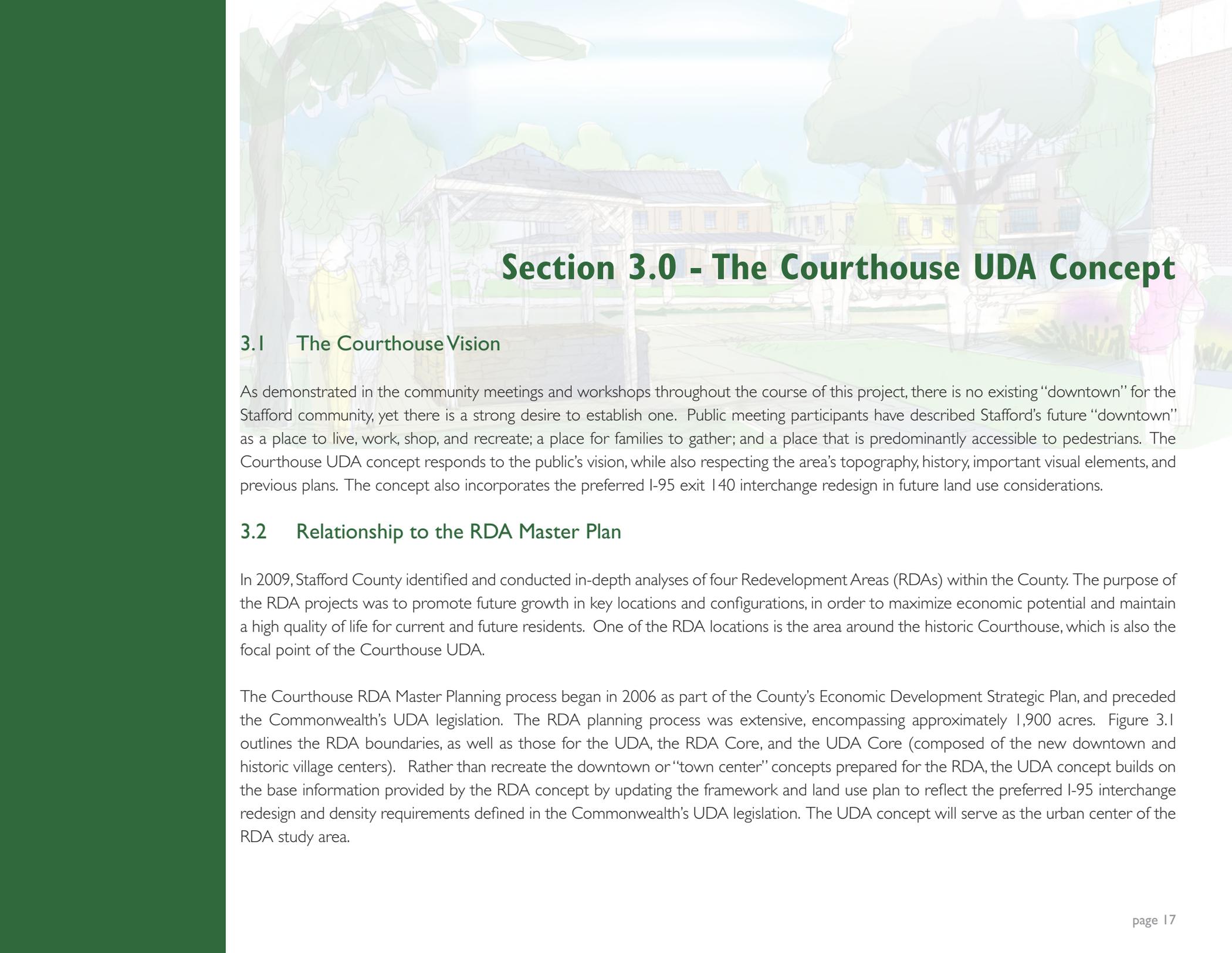
Between 45 and 50 persons attended the Public Open House, of which eight persons provided written comments. The full summary of written comments is provided as an Appendix to this document. At least half of the written comments, and the majority of verbal comments asked during the Q & A session, focused on the Route 1/Courthouse Road Streetscape Study, with most of those questioning the tree-lined, 16-foot median proposed along Route 1. Several of the participants raising these questions were property owners with businesses along Route 1, who were concerned about the potential impact of this median on access to their businesses. Several other participants were concerned about how the increased level of development in the UDA would impact traffic through the area, and most specifically on Route 1. In response to this question, the consultant team's traffic engineer presented the findings of a traffic analysis for the Courthouse UDA (see Chapter 5).

Of the comments related to the Small Area Plan, several asked for specific types of facilities that would be defined during future design phases (e.g., a parking garage in the area around the courthouse; specific types of programmed open spaces; and certain specific types of recreational facilities). One property owner requested that the County prepare a tax map parcel overlay on the concept plan.

2.5 Next Steps

The public will have several additional opportunities to provide input into the UDA planning process. These are as follows:

- The consultant team will be making a presentation to the Board of Supervisors on October 18th, 2011 to review its recommendations for Comprehensive Plan and Zoning Code amendments.
- The Planning Commission will review and hold a public hearing on the recommended Comprehensive Plan and Zoning Code amendments sometime in the November/December 2011 timeframe.
- The Board of Supervisors will review and hold a public hearing on the recommended Comprehensive Plan and Zoning Code amendments during the January/February 2012 timeframe.



Section 3.0 - The Courthouse UDA Concept

3.1 The Courthouse Vision

As demonstrated in the community meetings and workshops throughout the course of this project, there is no existing “downtown” for the Stafford community, yet there is a strong desire to establish one. Public meeting participants have described Stafford’s future “downtown” as a place to live, work, shop, and recreate; a place for families to gather; and a place that is predominantly accessible to pedestrians. The Courthouse UDA concept responds to the public’s vision, while also respecting the area’s topography, history, important visual elements, and previous plans. The concept also incorporates the preferred I-95 exit I40 interchange redesign in future land use considerations.

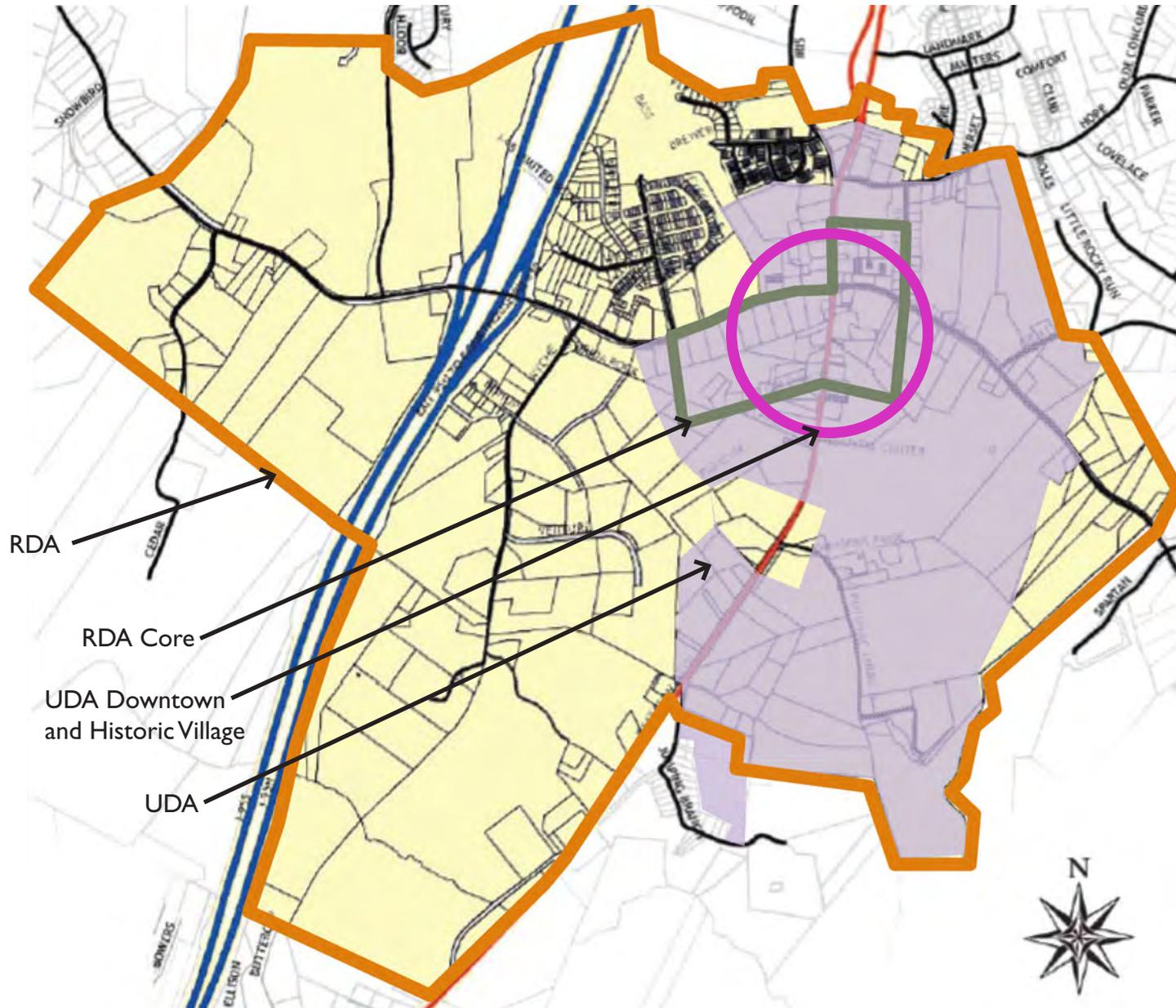
3.2 Relationship to the RDA Master Plan

In 2009, Stafford County identified and conducted in-depth analyses of four Redevelopment Areas (RDAs) within the County. The purpose of the RDA projects was to promote future growth in key locations and configurations, in order to maximize economic potential and maintain a high quality of life for current and future residents. One of the RDA locations is the area around the historic Courthouse, which is also the focal point of the Courthouse UDA.

The Courthouse RDA Master Planning process began in 2006 as part of the County’s Economic Development Strategic Plan, and preceded the Commonwealth’s UDA legislation. The RDA planning process was extensive, encompassing approximately 1,900 acres. Figure 3.1 outlines the RDA boundaries, as well as those for the UDA, the RDA Core, and the UDA Core (composed of the new downtown and historic village centers). Rather than recreate the downtown or “town center” concepts prepared for the RDA, the UDA concept builds on the base information provided by the RDA concept by updating the framework and land use plan to reflect the preferred I-95 interchange redesign and density requirements defined in the Commonwealth’s UDA legislation. The UDA concept will serve as the urban center of the RDA study area.

Section 3.0 - The Courthouse UDA Concept

Figure 3.1 - Redevelopment Area (RDA), Urban Development Area (UDA), and the RDA Core



Section 3.0 - The Courthouse UDA Concept

Table 3.1 outlines the key similarities and differences between the UDA and RDA concepts. Figure 3.2 graphically compares the land use concepts. The proposed urban centers for both concepts are essentially in the same locations. The primary difference is that the UDA urban core is divided into two areas: the historic village center and the new downtown. Taken together, however, these areas largely encompass the same locations as the RDA urban core.

A functional difference between the designs for the RDA and UDA cores is that the UDA design promotes ground floor retail on an east/west street connecting Red Oak Drive to Route 1 and Courthouse Road, rather than on the Route 1 corridor itself. The intent of shifting the primary retail corridor to a lower speed, narrower roadway is to promote pedestrian activity and safety, while still accommodating through traffic. This strategy will also minimize traffic interruptions on Route 1, a critical parallel roadway for I-95. The additional South Courthouse Commons neighborhood center on the UDA plan is secondary to the land use intensities proposed in the core.

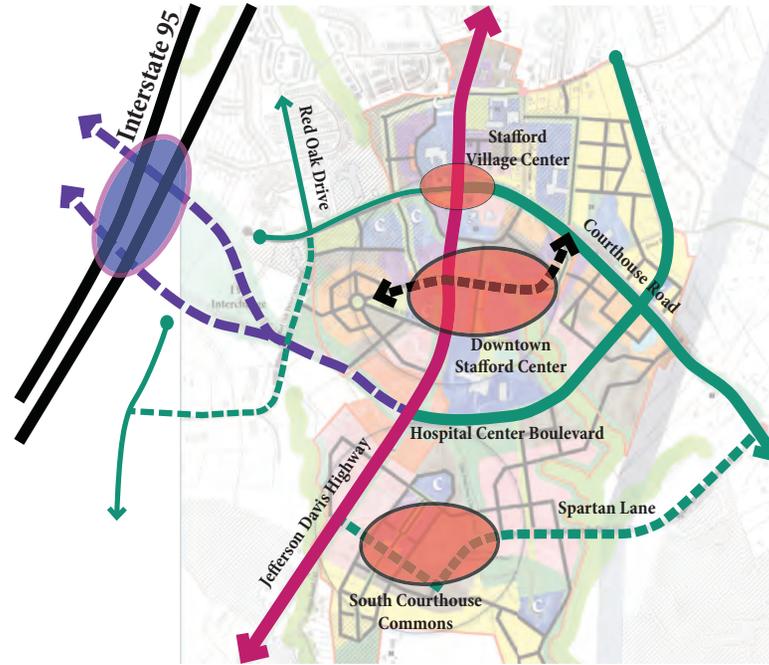
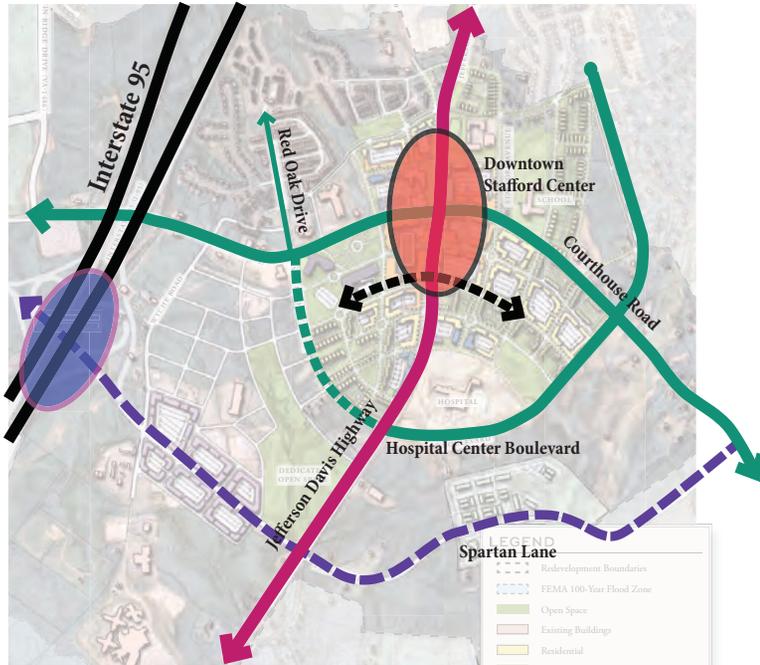
Primary arterial circulation is largely consistent across the RDA and UDA concepts. The differences generally reflect the proposed I-95 Exit 140 redesign, the details of which were not available until recently. This redesign emphasizes Hospital Center Boulevard as the key connection from I-95 to the Courthouse area, while deemphasizing the importance of Courthouse Road for this link. The other circulation adjustment made in the UDA plan relates to the ground floor retail street in the new downtown. Due to the change of uses along this street (compared with the RDA plan), the UDA plan recommends this roadway connect directly into Courthouse Road, offering another direct option for circulating back to the historic village.

Table 3.1 - Comparison: UDA and RDA Concepts

UDA & RDA Similarities	UDA Differences
Courthouse area as Stafford's pedestrian-oriented, mixed-use downtown	UDA downtown core location as a refinement of RDA's downtown core location. These refinements respond to: <ul style="list-style-type: none"> • The VDOT preferred I-95 Exit 140 interchange reconfiguration • Efforts to move the downtown's main retail street off of Route 1, therefore improving pedestrian accessibility and limiting Route 1 traffic interruptions • The public workshop preferred location
Interconnected street network distributing traffic and minimizing pressure on Route 1 and Courthouse Road	
Alignment and cross sections of major collector routes	
Structured parking and ground floor retail in mixed-use core area	
Expansion area for medical office and other hospital-related uses	
Plazas and public open space areas at Courthouse corner	
Use of flood plain northeast of hospital as a green buffer and recreational greenway	Densities reflecting Comprehensive Plan maximums

Section 3.0 - The Courthouse UDA Concept

Figure 3.2 - RDA and UDA Graphic Comparison



Concept Analysis - Redevelopment Area

-  US 1 - Jefferson Davis Highway
-  Collector Roads
-  Proposed Collector Roads
-  Proposed Arterials
-  Proposed East-West Connection
-  Proposed Urban Centers
-  Proposed Interstate Interchange (VDOT Preferred Alternative)

Concept Analysis - Urban Development Area

-  US 1 - Jefferson Davis Highway
-  Collector Roads
-  Proposed Collector Roads
-  Proposed Cul-de-sac
-  Proposed Arterials
-  Proposed East-West Connection
-  Proposed Urban Centers
-  Proposed Interstate Interchange

Section 3.0 - The Courthouse UDA Concept

3.3 The Courthouse UDA Framework

The Courthouse UDA concept can be best understood within the framework of three neighborhood centers that are interconnected by street and open space networks. As shown in Figure 3.3, the three neighborhood centers are the:

- Historic Courthouse Village
- New Downtown
- South Courthouse Commons

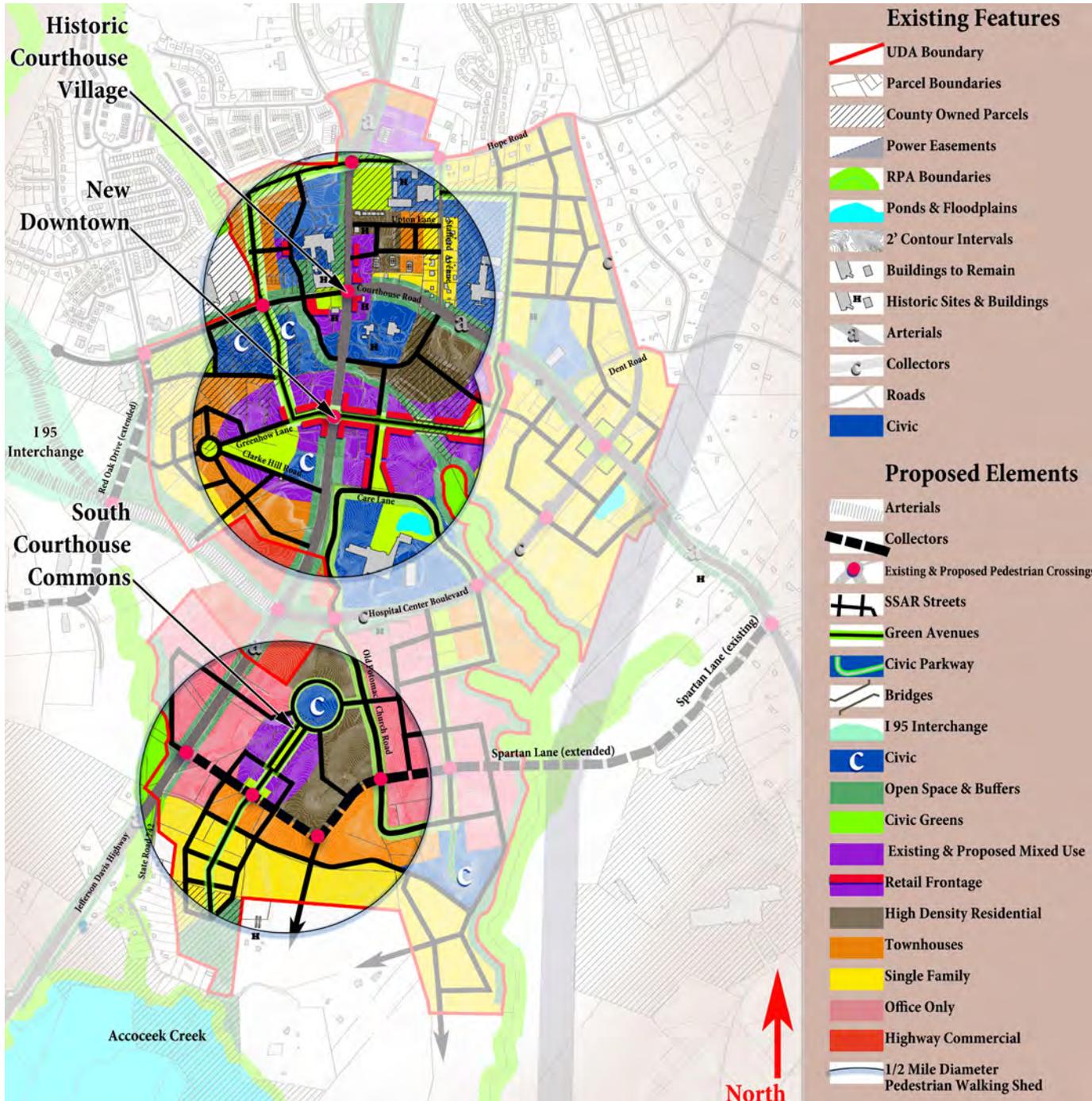
The densities within each neighborhood center are intended to step down from the highest densities, located in the neighborhood core, and move outward toward the edges of the ¼ mile pedestrian-sheds. Each neighborhood core generally includes high-density, mixed-use development, surrounded by medium- to high-density residential development (condos or townhouses). This development gradually decreases in density as it transitions outward to slightly lower-density uses, such as single-use office or single-family residential development, until the new development merges with the existing residential neighborhoods surrounding the UDA.

Figure 3.4 highlights the interconnection of each neighborhood through shared street and open space networks. A key element of the transportation network is the established hierarchy of streets, including collectors and arterials, many of which are preexisting. Figure 3.4 also displays a grid of local streets and avenues consistent with road design standards under VDOT's Secondary Streets Acceptance Requirements (SSAR). This grid is carefully designed to respect the Courthouse area's distinct topographic and natural features. It is also designed to support the preferred I-95 interchange redesign, which will direct the majority of traffic toward Hospital Center Boulevard. The red circles indicate locations where pedestrians are anticipated to cross major arterials and collectors, and, as such, must be carefully designed to safely accommodate and encourage this movement.

A special feature of the proposed street and open space network is highlighted at the northern and southern ends of this graphic, and labeled "proposed green avenues." These "green avenue" loops are intended to provide an attractive, safe route for pedestrian and bicycle circulation by means of a wide, vegetated, multiuse trail running parallel to the local street network. This loop would also connect into a greenway system, which would comprise a network of trails along the preserved stream corridors. In the downtown portions of the northern "green avenue" loop (Greenhow Lane) the trail would transition into the urban sidewalk and bike lane cross section. These two green avenue loops, combined with the stream corridor trail adjacent to the hospital, create a way for pedestrians and bicyclists to traverse much of the UDA without traveling on a major roadway. Cars can travel this same route, using Care Lane when the trail enters the stream corridor.

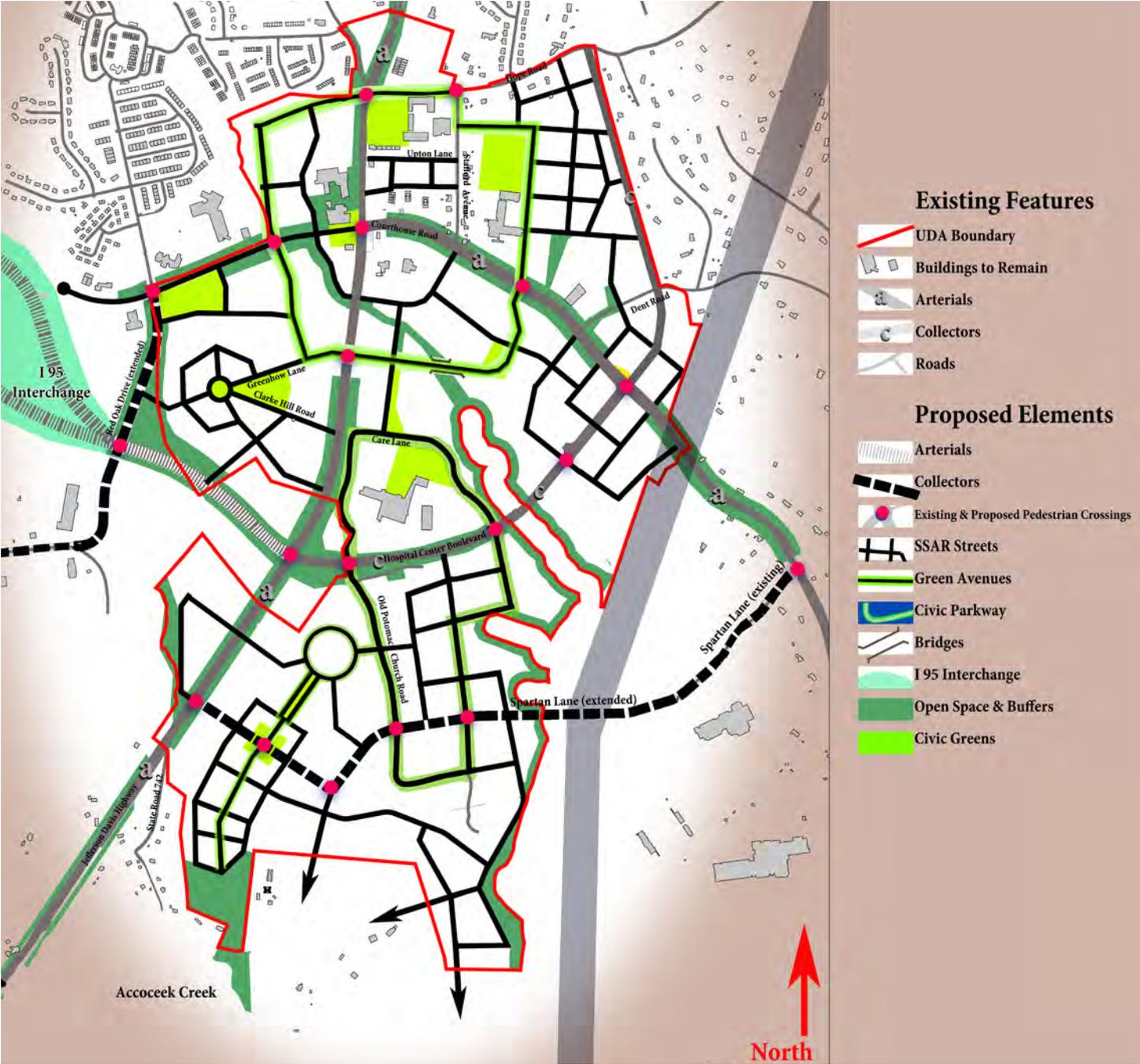
Section 3.0 - The Courthouse UDA Concept

Figure 3.3 - Courthouse UDA Plan Neighborhood Centers



Section 3.0 - The Courthouse UDA Concept

Figure 3.4 - Street and Open Space Network



Section 3.0 - The Courthouse UDA Concept

3.4 Relevant TND Elements

As required by the Commonwealth UDA legislation, Traditional Neighborhood Design (TND) principles are reflected in each neighborhood center, in addition to the UDA concept as a whole. Key elements of TND include:

- Proximity to existing development or redevelopment
- Mixed-use development, including housing choices
- Interconnected local street system and connections to adjacent or future development
- Pedestrian-oriented street and building design (parking in the rear of buildings or in parking structures wrapped with non-parking uses) If structured parking is not feasible due to market conditions, development should be designed to accommodate surface parking conversion to decks and additional development in the future
- Reduction of building setbacks, street widths and turning radii
- Minimize parking and maximize transit, bike, and pedestrian access
- Civic and park spaces within walking distance of all residences
- Preservation of natural areas

The concept of TND is described in further detail in Section 7 of this document.



Section 4.0 - Land Use Recommendations for Courthouse UDA

4.1 The Overall Land Use Concept

The land use concept for the Courthouse UDA consists of three neighborhood centers: the Historic Village, the New Downtown, and the South Courthouse Commons.

Historic Village

The focal point of the Historic Village is a mixed-use core at the intersection of Route 1 and Courthouse Road. The design and scale of this center responds to the historic Courthouse building, located in the northwest corner of the intersection. As such, three stories is the recommended maximum building height in this area. The old well and the historic Virginian Hotel building are also key features of this center and should be respected as such as the area further develops.

The UDA concept reflects a gradual expansion of the nearby County Administration Complex, located adjacent to the historic Courthouse. The large parking area behind the existing Administrative Complex provides an opportunity for infill office development, surrounded by high-density residential development. Toward the edge of the quarter mile walking distance, the densities transition to that of the existing, adjacent residential neighborhoods. This density pattern is reflected in the land use recommendations throughout the Historic Village.

As recommended in the Redevelopment Area Plan, the Historic Village would benefit from both existing and proposed civic spaces. In addition to the existing public green space located in front of the Stafford Schools Administration Building at the intersection of at the Route 1 and Hope Road, a new civic green is proposed at the intersection of Courthouse Road and Route 1. Furthermore, a large, public event park close to I-95 could provide an opportunity for hosting a farmer's market.

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Outside of the mixed-use area at the Route 1/Courthouse Road intersection, there is a building setback and green street buffer recommendation along Courthouse Road. This setback and buffer is a way to maintain an attractive visual character along a roadway that will carry significant traffic. The same recommendation is made along Route 1 south of the Route 1/Greenhow Lane intersection.

As described in detail in the Section 3 concept framework section, there is a proposed green avenue loop around the historic courthouse village and new downtown areas.

New Downtown

The focal point of the New Downtown is located at the intersection of Route 1 and Greenhow Lane with the hub of ground floor retail activity located along the new east/west oriented street south of Courthouse Road. Placing the New Downtown core off of Route 1 diverts heavy pedestrian activity away from the main thoroughfare, which not only enhances the safety and comfort of pedestrians, but also reduces the UDA impact on Route 1 through traffic.

This retail mixed-use area along Greenhow Lane (east and west of Route 1) is the heart of the Courthouse UDA concept. Throughout the course of UDA planning, public meeting participants emphasized a need for a Stafford downtown; a place where residents can gather, get out of their cars, and walk to shopping and community activities. This downtown is envisioned as a vital place, full of energy and options to live, work, and relax. The graphics in section 4.2 demonstrate how buildings such as cafes, shops and services, will be pulled up to wide sidewalks lining the streets. Residences or offices will be located above store fronts. Due to its strategic placement at the center of the County's activity, the new downtown comprises the highest densities of development in the entire UDA. Buildings in this area are recommended up to five stories in height.

This downtown retail activity extends south of Greenhow Lane, creating a strong visual connection to the Stafford Hospital complex. Additionally, the downtown retail activity that extends along Greenhow Lane slightly west of Route 1 is anchored by a public garden at the Greenhow Lane and Clarke Hill Road intersection. This public garden is envisioned to host community activities such as outdoor theater or family-oriented concerts.

Similar to the Historic Village, densities beyond the mixed-use core begin to decrease as they approach the UDA boundaries. High-density residential development surrounds the core area, followed by lower density townhouses, and ultimately a density transition into adjacent single family neighborhoods. On the southern edge of the New Downtown is the Stafford Hospital. The UDA concept allows space for both hospital expansion and new support businesses nearby. These support services could choose to locate in either the downtown core, or in the South Courthouse Commons, which emphasizes commercial mixed-use development and offers a wider range of building types. Assuming the preferred I-95 exit 140 interchange redesign, which diverts traffic south to Hospital Center Boulevard, both the New Downtown and the South Courthouse Commons would be easily accessible from I-95.

Section 4.0 - Land Use Recommendations for Courthouse UDA

A green buffer and building setback is recommended along Route 1 south of the mixed-use Greenhow Lane intersection. This green setback will create an attractive visual character for the Route 1 corridor and accommodate sidewalks well buffered from the roadway, while allowing Route 1 to carry high traffic counts at relatively high speeds (compared with the walkable mixed-use areas of the plan).

South Courthouse Commons

South Courthouse Commons is located immediately south of Stafford Hospital and Hospital Center Boulevard, which will connect to the I-95 exit 140 interchange as part of the preferred interchange redesign, providing a direct link to South Courthouse Commons.

The mixed-use core in this district is located just east of Route 1 and along Spartan Lane extension, a future high-capacity collector street connecting Route 1 and Courthouse Road. This higher density mixed-use core is surrounded by high density residential development, which transitions to single-family residential to the south, and more traditional office-only uses to the west, along Route 1, and to the east of Old Potomac Church Road. Due to topographic constraints and existing development approvals, highway commercial development is proposed at the intersection of Route 1 and Hospital Center Boulevard. This development would be buffered with vegetation from the adjacent roadways. To the south of South Courthouse Commons is a large public park on Accocek Creek, easily accessible from the single-family neighborhoods. A “green avenue” connects the mixed-use and high density residential core to the park.

Old Potomac Church Road, located in the eastern portion of this neighborhood center, becomes one segment of a green avenue loop in this concept. This green avenue loop concept is presented in further detail in the Section 3 concept framework description.

4.2 Development Densities

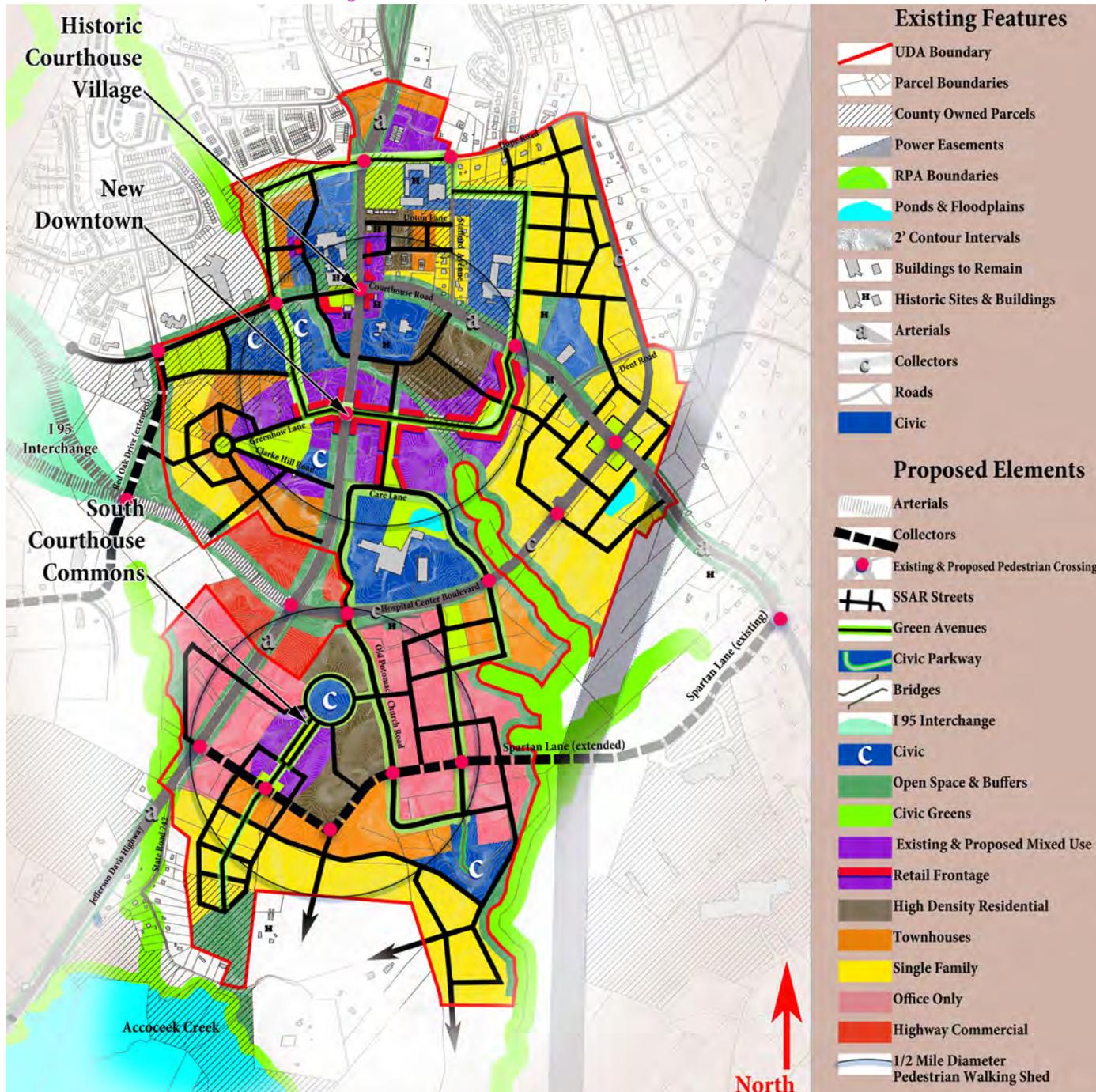
The recommended density of development in the Courthouse UDA is consistent with the recommendations in the “Stafford County Virginia Comprehensive Plan 2010 – 2030”. ~~Development within the UDAs, regardless of their location, shall meet with required minimum densities under the State Code of Dwelling units are targeted at~~ 12.0 condominiums or apartments, 6.0 townhouses, or 4.0 single family homes per acre where residential development occurs and a minimum density of 0.4 FAR where commercial development occurs. Furthermore, ~~the minimum densities a density range for each residential unit type and for commercial uses shall also serve as targeted maximum densities for those residential unit types and commercial uses~~ is recommended in Section 6.1 of this document regarding zoning district regulations.

4.3 Illustrative Examples

The following illustrative graphics demonstrate how the UDA could potentially develop, as a way to better understand the land use concept. The illustrative examples provide three different views of how the UDA might look when developed. Figure 4.2 shows these locations within the land use concept.

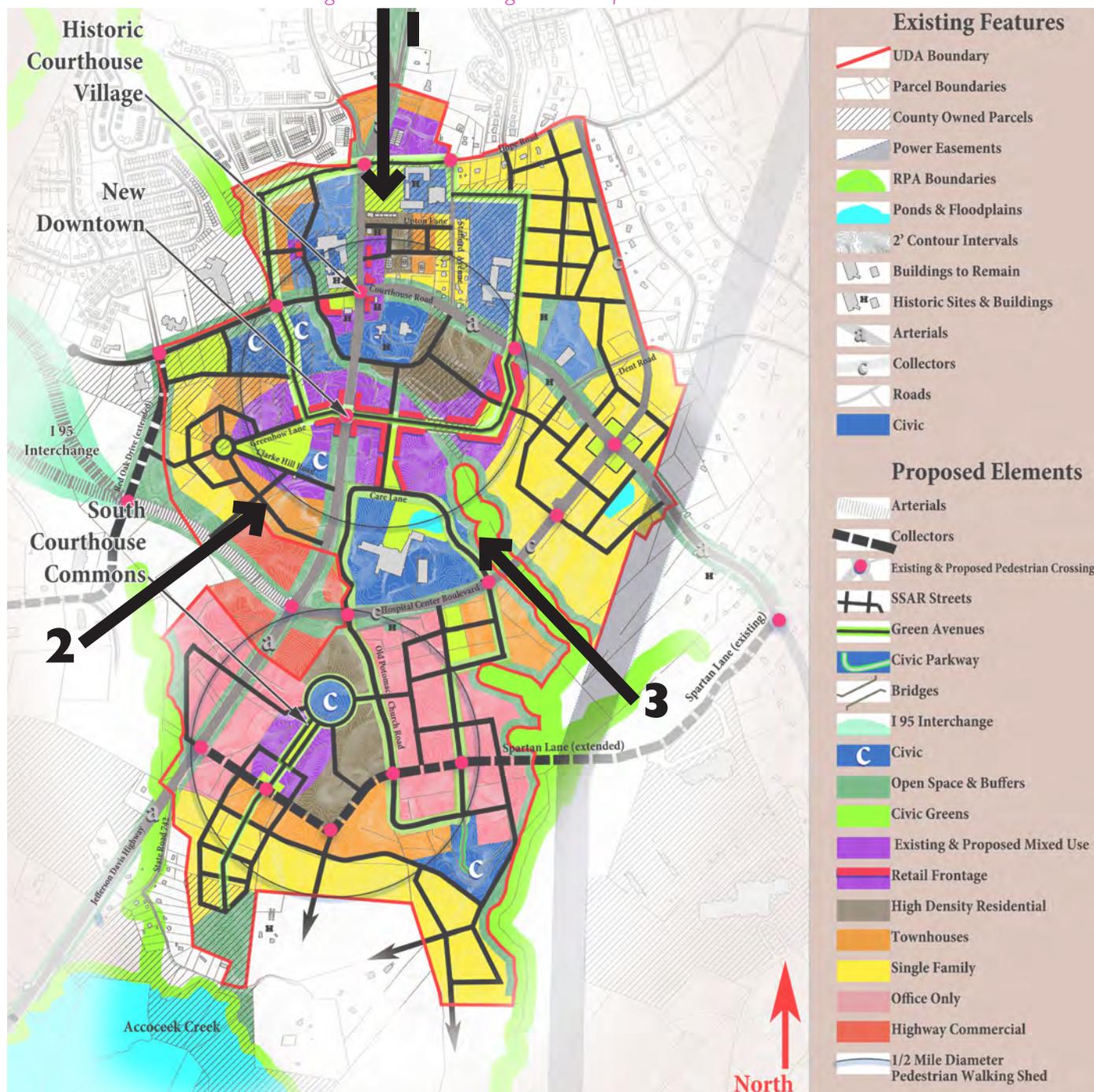
Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.1 - Courthouse UDA Land Use Concept



Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.2 - Visualizing the UDA from Three Locations



Section 4.0 - Land Use Recommendations for Courthouse UDA

Viewshed 1: Historic Stafford Village

The first set of illustrative graphics provides views south, down Route 1, toward the Village Center and Courthouse Road.

Figure 4.3 shows an aerial photo of existing conditions, followed by a three-dimensional massing and land use diagram of how the area could develop over time.

Figure 4.4 provides a sketch from the same aerial perspective shown in Figure 4.3.

Figure 4.5 is a street level view at the Village Center and Figure 4.6 is a hand sketch from a similar perspective.

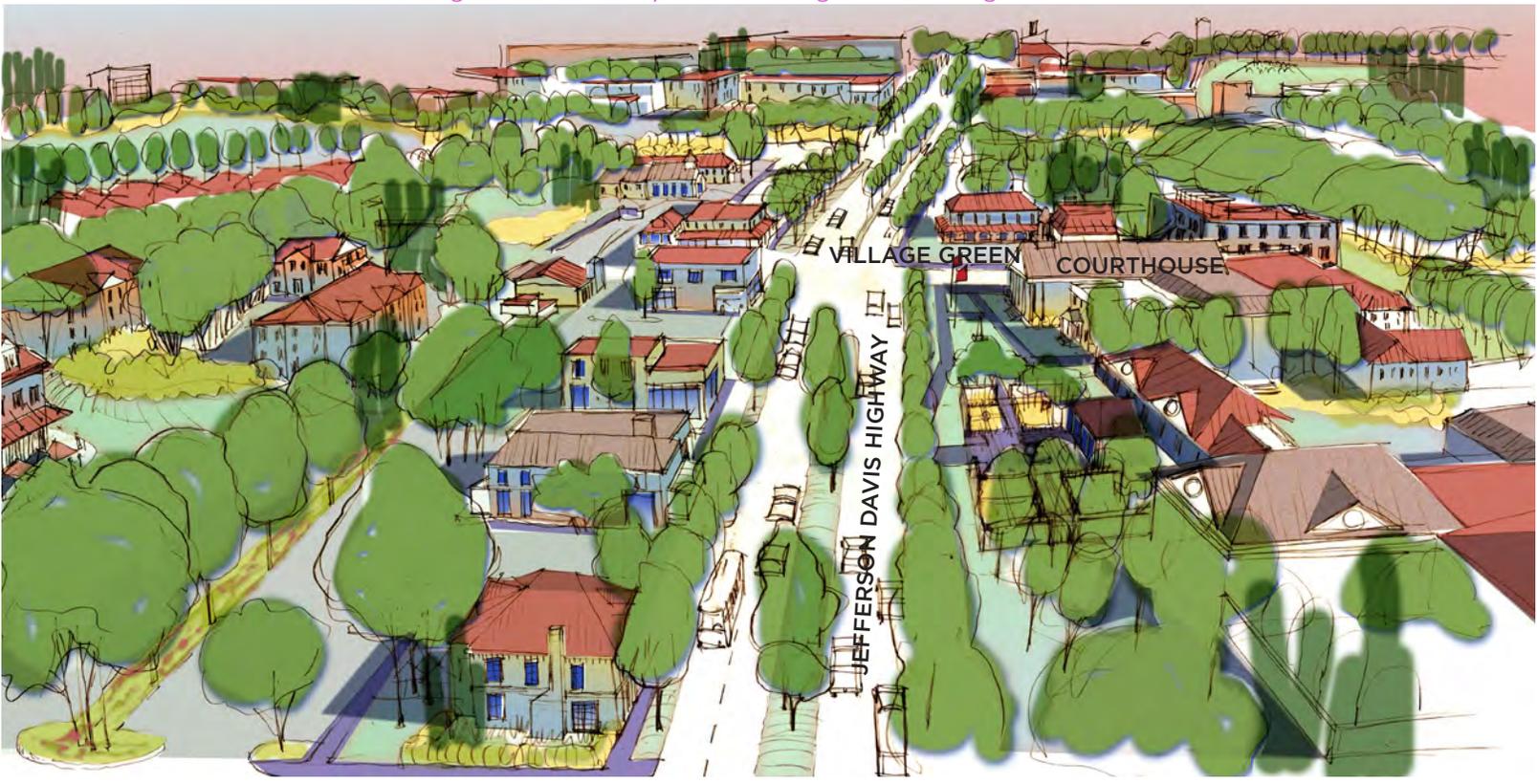
Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.3 - View South at Village Center



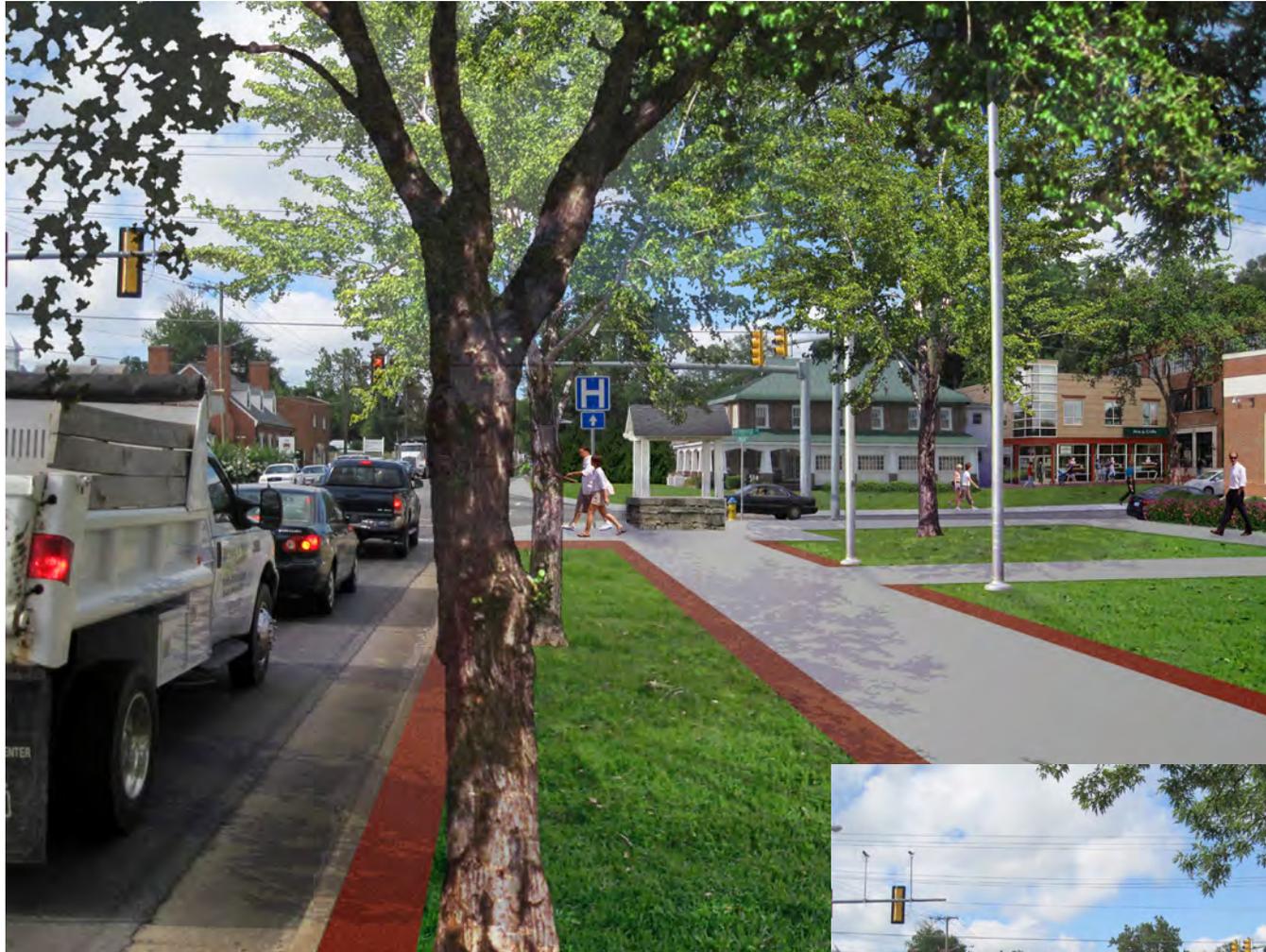
Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.4 - Bird's-Eye View Looking South at Village Center



Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.5 - Street Level View at Village Center



Before

After



Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.6 – Street Level View at Village Center Hand Sketch



Section 4.0 - Land Use Recommendations for Courthouse UDA

Viewshed 2: New Downtown / Public Garden

The second set of illustrative graphics shows the view northeast, with the New Downtown in the center, and the public garden in the foreground.

Figure 4.7 shows an aerial photo of existing conditions, followed by a three-dimensional massing and land use diagram of how the area could develop over time.

Figure 4.8 provides a sketch from the same aerial perspective shown in Figure 4.7.

Figure 4.9 is a street level view at the New Downtown.

Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.7 - View Northeast at the New Downtown



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Figure 4.8 - Bird's-Eye View Looking Northeast at the New Downtown



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Figure 4.9 - Street Level View at the New Downtown (Public Garden in the Background)



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Viewshed 3: New Downtown Core

The third set of illustrative graphics shows the view northwest of the New Downtown, with Stafford Hospital in the foreground.

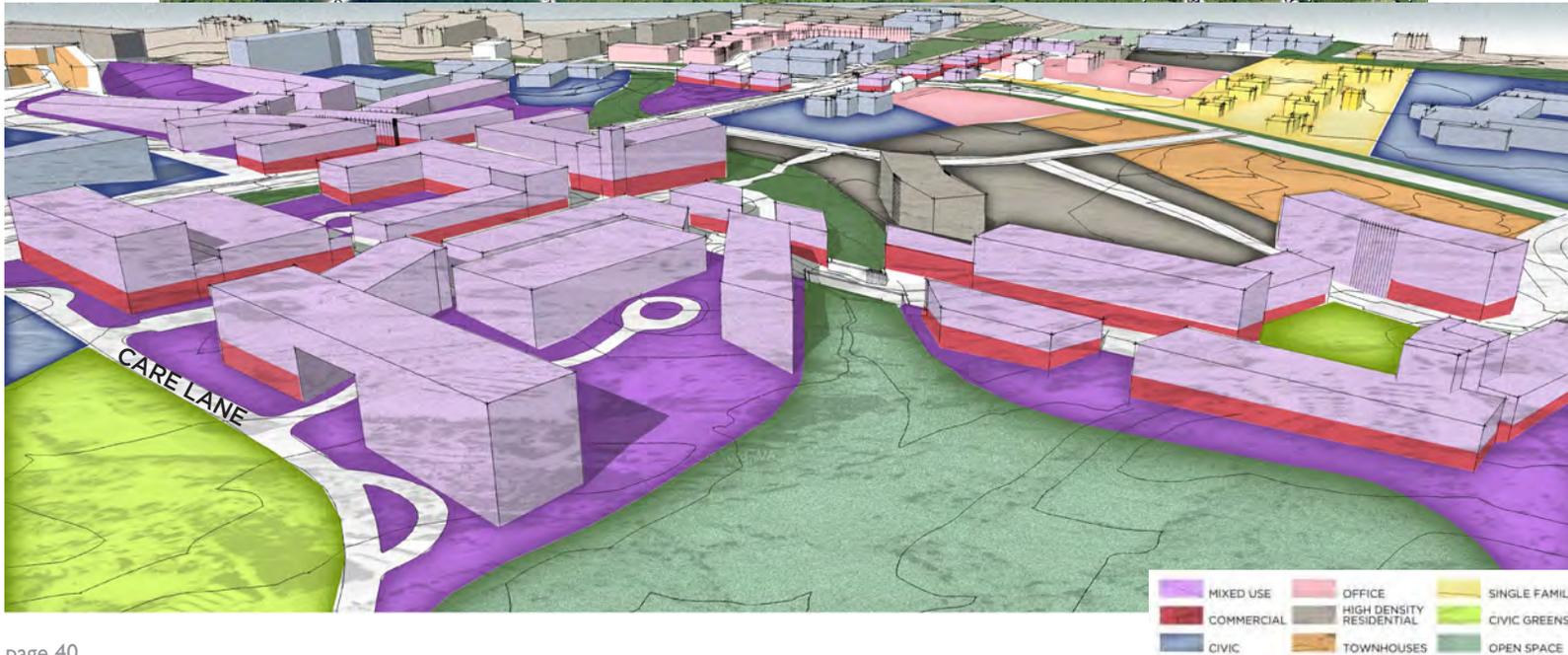
Figure 4.10 shows an aerial photo of existing conditions, followed by a three-dimensional massing and land use diagram of how the area could develop over time.

Figure 4.11 provides a sketch from the same aerial perspective shown in Figure 4.10.

Figure 4.12 is a street level view at the New Downtown with the hospital in the background.

Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.10 - View Northwest of the New Downtown



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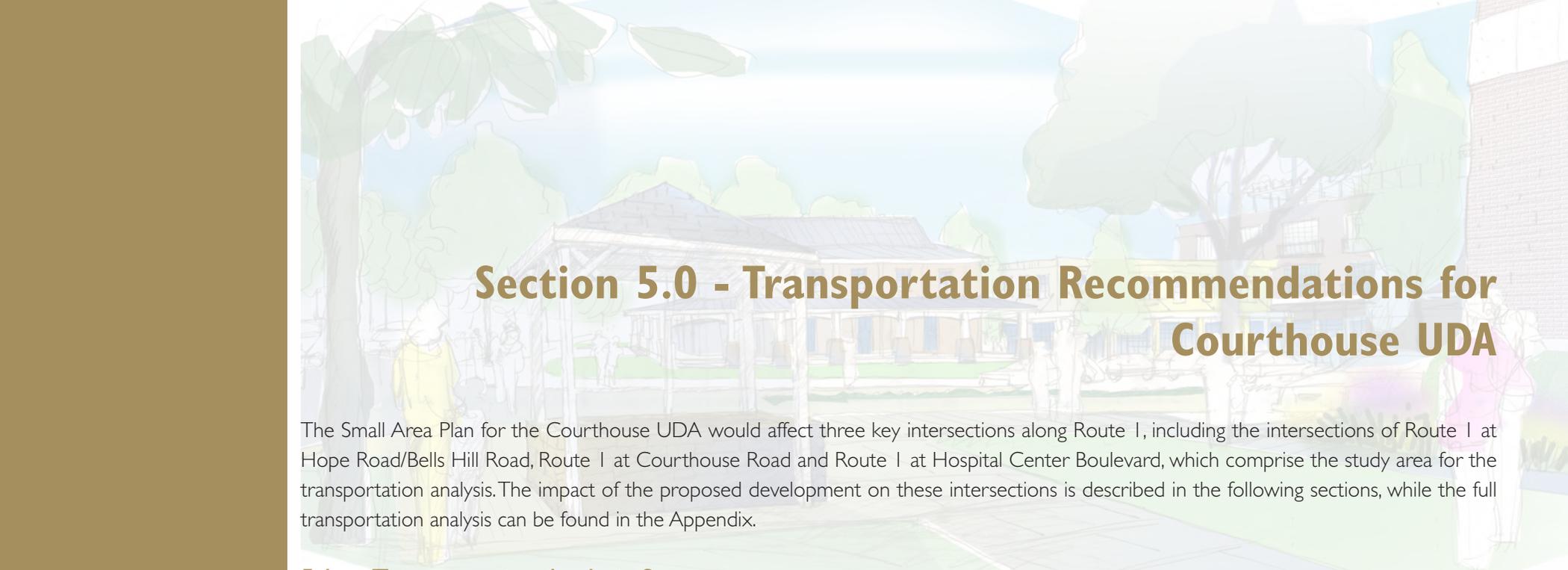
Figure 4.11 - Bird's-Eye View Looking Northwest at the New Downtown



Section 4.0 - Land Use Recommendations for Courthouse UDA

Figure 4.12 - Street Level View of the New Downtown (Hospital in the Background)





Section 5.0 - Transportation Recommendations for Courthouse UDA

The Small Area Plan for the Courthouse UDA would affect three key intersections along Route 1, including the intersections of Route 1 at Hope Road/Bells Hill Road, Route 1 at Courthouse Road and Route 1 at Hospital Center Boulevard, which comprise the study area for the transportation analysis. The impact of the proposed development on these intersections is described in the following sections, while the full transportation analysis can be found in the Appendix.

5.1 Transportation Analysis Summary

Assumptions of the 2020 Background Conditions

The background conditions for the projected year of build-out, 2020, provide a baseline for the analysis of impacts associated with development of the Courthouse UDA on the existing transportation network. The 2020 background conditions assume the following:

- The growth rate will be two percent per year for the Year 2020 Background condition.
- The 2020 traffic volumes will be redistributed by a new interchange at Courthouse Road and I-95, which will be served by a relocated Route 630 that will intersect Route 1 at Hospital Center Boulevard.
- Route 1 will be retained as an improved, four-lane facility.
- Traffic generated by the completion of all development proposed within the UDA, plus the 2 percent per year background growth, will account for all traffic growth in the Courthouse UDA between 2011 and 2020.

Section 5.0 - Transportation Recommendations for Courthouse UDA

Figure 5.1 - Current 2011 Traffic Volumes

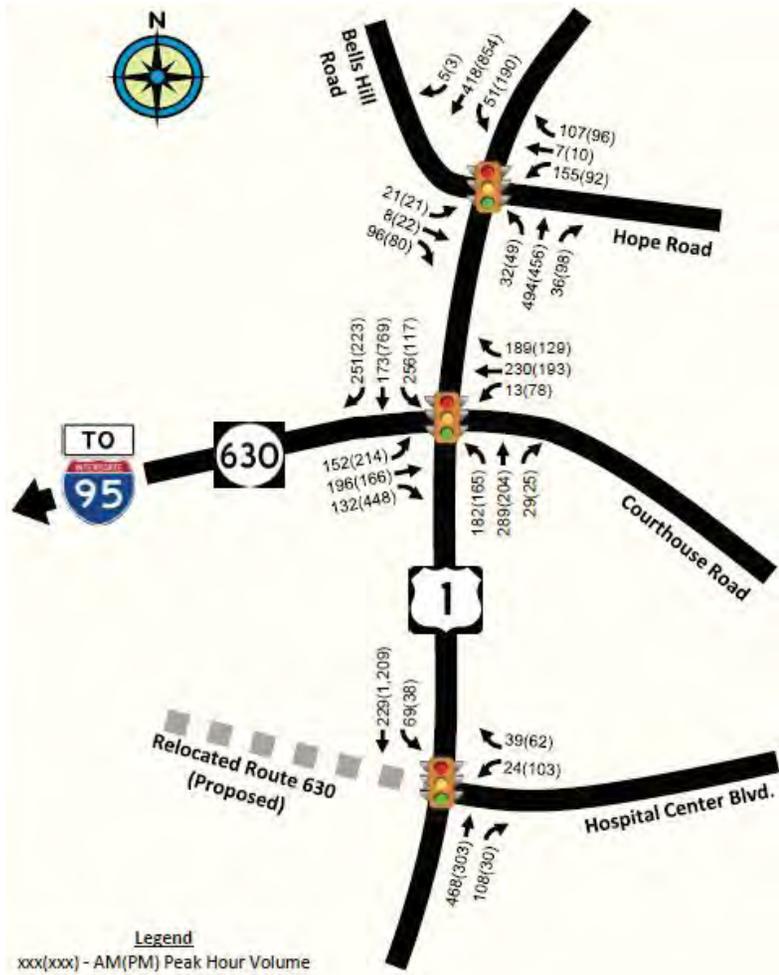
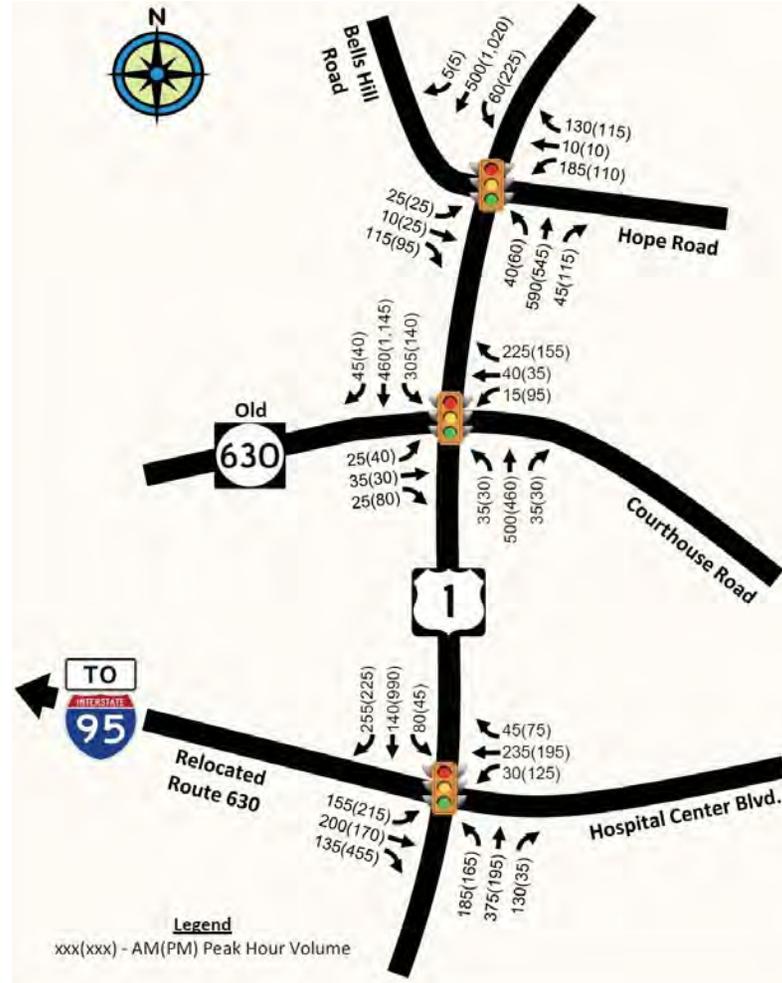


Figure 5.2 - Year 2020 Background Traffic Volumes



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Trip Generation Estimates

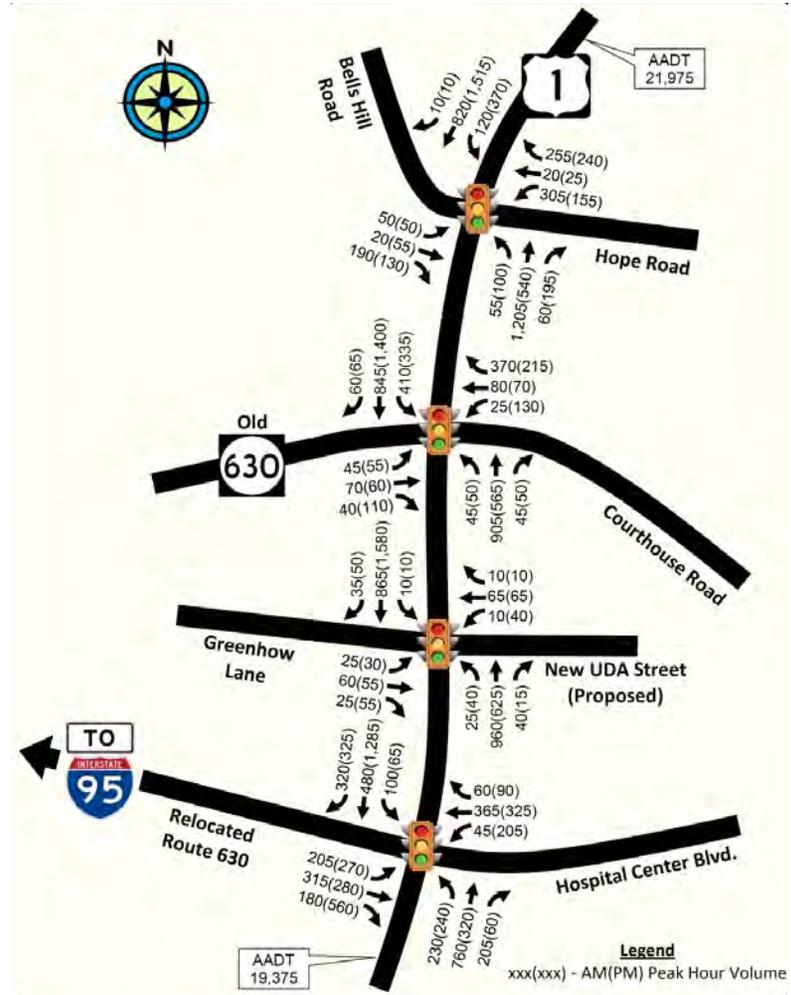
Trip generation estimates for land uses in the UDA accounted for multifamily, townhouse, single-family, retail and office uses, as shown in the Courthouse UDA concept. Traditional trip generation estimates are based on stand-alone land uses, which contradict the mixed-use emphasis of Traditional Neighborhood Design, as encouraged by the UDA legislation. The Courthouse UDA concept incorporates a vertical mix of land uses and utilizes a fully connected, internal street grid that would accommodate several modes of transportation. As a result, the original trip generation counts for the Courthouse UDA, which assumed stand-alone land uses, were reduced to account for the proposed connected, mixed-use, pedestrian-accessible pattern of development. The reduced trip generation estimate was generated by applying the Institute of Transportation Engineers (ITE) internal trip capture estimation process and the appropriate ITE rate for pass-by trip reductions for retail development during the PM peak hour.

According to historic VDOT average annual daily traffic (AADT) data, traffic volumes on Route 1 within the UDA have remained static for the past ten years; however, the Metropolitan Washington Council of Government's (COG) travel demand model shows six percent growth per year for the next ten years, and the VDOT Route 630 Interchange Study shows eight percent growth per year. The COG and VDOT studies include development proposed to be consolidated within the Courthouse UDA; therefore, a growth rate of two percent per year was assumed for the Year 2020 Background conditions in this analysis. It is possible that unforeseen future development located adjacent to the UDA could generate additional traffic within the UDA; however, without historic data to generate a model for such growth, transportation impacts of substantial and unanticipated development cannot be determined.

Section 5.0 - Transportation Recommendations for Courthouse UDA

Figure 5.3 - Trips Generated by Courthouse UDA

Figure 5.4 – Year 2020 Total Traffic Volumes with Courthouse UDA Full Build-Out



Section 5.0 - Transportation Recommendations for Courthouse UDA

Levels of Service

The roadway network analyzed for the Courthouse UDA included the same network used for the 2020 background conditions study. Additional, intermediate intersections, other than the three studied for this analysis, will provide access to and from the new internal streets that will be provided in the UDA. There is a relatively high level of uncertainty associated with projecting specific turning movement volumes at new intersections with minor streets; therefore, only one of these intermediate intersections is being evaluated as part of this study (the intersection of Greenhow Lane/New UDA Street and Route 1). To prevent undue uncertainty from entering into the analysis, the traffic volumes along Route 1 between each of the key intersections along the corridor is assumed to be balanced (i.e., the volume of traffic entering an intersection equals the volume of traffic that departed the upstream intersection).

Traffic operations in 2020 were analyzed with the additional trips that would be generated by full build-out of the Courthouse UDA. The additional traffic that would be generated by the full build-out of the Courthouse UDA would result in Level of Service (LOS) (F) during one or both of the peak hours for all three existing intersections. In order to achieve LOS (D) at these locations, the following capacity improvements are recommended:

Route 1 at Bells Hill Road/Hope Road Intersection

- Widen to provide a separate left-turn lane in each direction along Route 1
- Swap the lane designations on the side street approaches to provide a separate left-turn lane and a shared through/right-turn lane
- Eliminate all split-phasing and provide protected/permissive left-turn phasing

Route 1 at Courthouse Road Intersection

- Widen to provide a separate left-turn lane in each direction along Route 1
- Swap the lane designation on the eastbound Courthouse Road approach to provide a separate left-turn lane and a shared through/right-turn lane
- Of the two existing departing lanes on the east leg of Courthouse Road, remove the left lane and replace it with a separate westbound left turn lane, resulting in separate left, through, and right turn lanes on the westbound Courthouse Road approach.
- Replace the existing split-phasing with protected/permissive left-turn phasing on the Courthouse Road approaches and protected-only left-turn phasing on the Route 1 approaches.
- Provide a permissive-overlap right-turn phase for the westbound Courthouse Road approach.

Route 1 at Relocated Route 630 / Hospital Center Boulevard

- Widen to provide a 2nd left-turn lane on all approaches
- Widen to provide a separate right-turn lane on the westbound approach
- Convert the eastbound right-turn lane into a free-flow channelized right-turn lane

Section 5.0 - Transportation Recommendations for Courthouse UDA

Table 5.1 - Summary of Level of Service (LOS) and Delay

Existing 2011 Traffic Operations

HCM 2010 Analysis	AM Peak Hour		PM Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1) Route 1 @ Hope Rd / Bells Hill Rd	D	49.7	E	58.3
2) Route 1 @ Route 630 (Courthouse Rd)	E	76.4	F	126.9
3) Route 1 @ Hospital Center Boulevard	A	8.8	A	8.8

Year 2020 Background Traffic Operations¹

HCM 2010 Analysis	AM Peak Hour		PM Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1) Route 1 @ Hope Rd / Bells Hill Rd	E	76.9	E	63.0
2) Route 1 @ Courthouse Rd	F	139.4	E	68.9
3) Route 1 @ Hospital Center Blvd / Route 630 Relocated	C	30.8	E	56.9

Year 2020 Traffic Operations With UDA Full Build-Out²

HCM 2010 Analysis	AM Peak Hour		PM Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1) Route 1 @ Hope Rd / Bells Hill Rd	F	151.7	F	185.7
2) Route 1 @ Courthouse Rd	F	203.2	F	152.9
3) Route 1 @ New Proposed UDA Street	A	7.5	A	9.3
4) Route 1 @ Hospital Center Blvd / Route 630 Relocated	D	50.6	F	89.4

Year 2020 Traffic Operations With UDA Full Build-Out & Traffic Impact Mitigation For Los D Or Better³

HCM 2010 Analysis	AM Peak Hour		PM Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1) Route 1 @ Hope Rd / Bells Hill Rd	C	30.7	D	42.9
2) Route 1 @ Courthouse Rd	C	33.6	D	39.2
3) Route 1 @ New Proposed UDA Street	B	19.8	C ⁴	21.5
4) Route 1 @ Hospital Center Blvd / Route 630 Relocated	C	30.9	D	39.8

¹ Assumes ambient traffic growth at 2% per year, with select roadway improvements from the VDOT long-range plan.

² Assumes traffic growth due to UDA development, with select roadway improvements from the VDOT long-range plan. Through the application of trip reduction factors calculated using the VDOT MXD v4.0 model for mixed-use developments, the UDA-generated traffic volumes inherently account for the increased connectivity and walkability provided by the conceptual internal street grid system that would accompany the full build-out of the UDA.

³ The following traffic impact mitigation improvements are recommended to achieve the LOS shown in this table:

Hope Rd/Bells Hill Rd: Add separate left-turn lanes along NB and SB Route 1 and replace the NB/SB split-phasing with protected/ permissive left-turn phasing; Swap the Hope Rd/Bells Hill Rd lanes to provide separate left turn lanes, and replace the EB/WB split-phasing with protected/ permissive left-turn phasing.

Courthouse Rd: Add separate left-turn lanes along NB and SB Route 1 and replace the existing NB/SB split-phasing with protected/ permissive left-turn phasing; Reconfigure the EB Courthouse Rd approach to consist of a separate left-turn lane and a shared through/right-turn lane, with EB/WB protected/permissive left-turn phasing replacing the existing EB/WB split-phasing; remove the outbound left lane heading east and replace it with a separate WB left turn lane, resulting in separate left, through, and right turn lanes on the WB approach; Provide a right-turn overlap phase for the WB right turn movement along Courthouse Rd.

Hospital Center Blvd/Route 630 Relocated: Convert the EB right turn lane into a channelized free-flow right turn lane, with an acceleration lane along SB Route 1 departing the intersection; Add a second left-turn lane along all approaches; Add a separate right turn lane on the WB approach.

⁴ The PM peak hour LOS at this intersection is worse with traffic mitigation than without mitigation due to the signal timing offset between this intersection and the adjacent signals. For the traffic impact mitigation scenario, the offset here is optimized for efficient flow at the higher-volume intersections to the north and south, but results in slightly worse LOS at this minor intersection.

Section 5.0 - Transportation Recommendations for Courthouse UDA

5.2 Transportation Benefits of UDA's

One of the major benefits to be accrued from the more compact, diversified UDA form of development pattern is its enhanced internal connectivity. The Courthouse UDA land use plan creates a new "gridded" street network that allows the dispersion of vehicular and nonmotorized trips throughout the area. Therefore, while vehicles in the Courthouse Area today are channeled onto Route 1 and Courthouse Road, the new Courthouse UDA street network would improve mobility in the area by providing options for motorists, and would distribute the additional vehicle trips generated by higher density development, thus reducing the likelihood of traffic congestion and the need for significant road improvements to Route 1 and Courthouse Road.

In addition, the local streets within the UDA would be designed to encourage reduced vehicle speeds through the area, thus providing a safe and attractive environment for walking and biking. The provision of amenities, such as attractive and shaded sidewalks and safe and connected bicycle lanes throughout the UDA encourages people to get out of their cars, and provides an increase in foot traffic for local businesses within the UDA. Moreover, the provision of a true mix of attractive uses within easy walking distances means a higher rate of UDA "trip capture", resulting in fewer vehicular trips in and out of the area --- again reducing impacts on surrounding roads.

It appears likely that, with the build-out of this connected street grid, a number of the road improvements indicated in the transportation analysis described above might not be needed, might be smaller in scale, or might be delayed for a significant period of time.

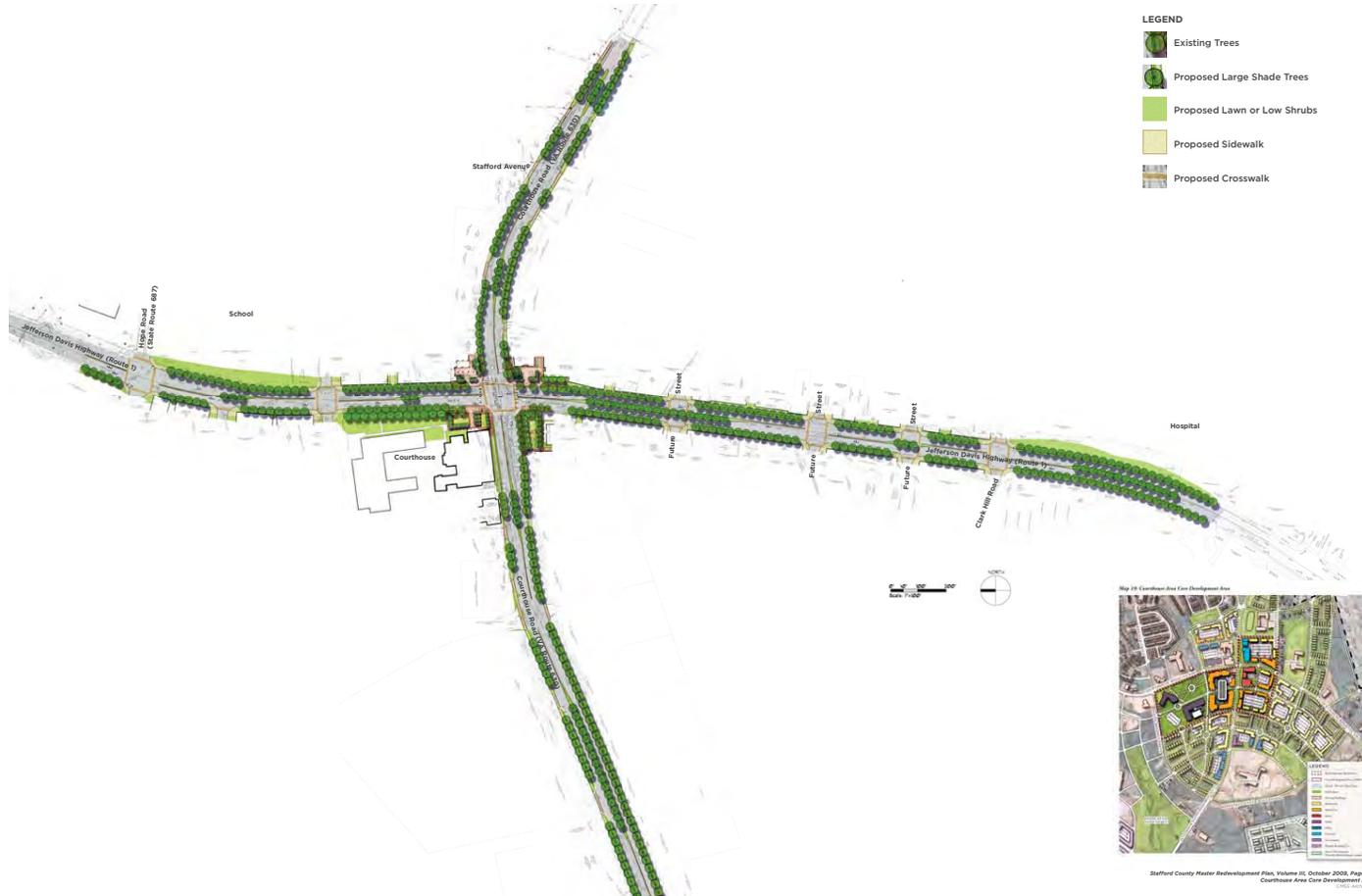
5.3 Relationship to the Route 1 Streetscape Improvements

Additional improvements to the Route 1 and Courthouse Road corridors within the Courthouse UDA include proposed streetscape enhancements to the area surrounding the Stafford County Courthouse. These enhancements are based on the County's vision for redevelopment of the Courthouse area into a pedestrian-friendly commercial and residential center, per the Courthouse Master Redevelopment Plan. The streetscape project is funded in part by a VDOT Streetscape Enhancement Grant, and will address the rapidly growing corridors along the US Route 1-Jefferson Davis Highway and VA Route 630-Courthouse Road. Elements addressed by the streetscape project include installation of raised medians for better traffic control, sidewalk paving, pedestrian crosswalks, street furnishings, street lighting and street trees.

The Route 1/Courthouse Road lane configuration recommendations for the streetscape project differ from the UDA project because the UDA analysis assumes completion of the I-95 Exit 140 intersection redesign, which will significantly reduce the traffic volumes at the Route 1/ Courthouse Road intersection. The streetscape project is intended to be implemented prior to the I-95 intersection redesign.

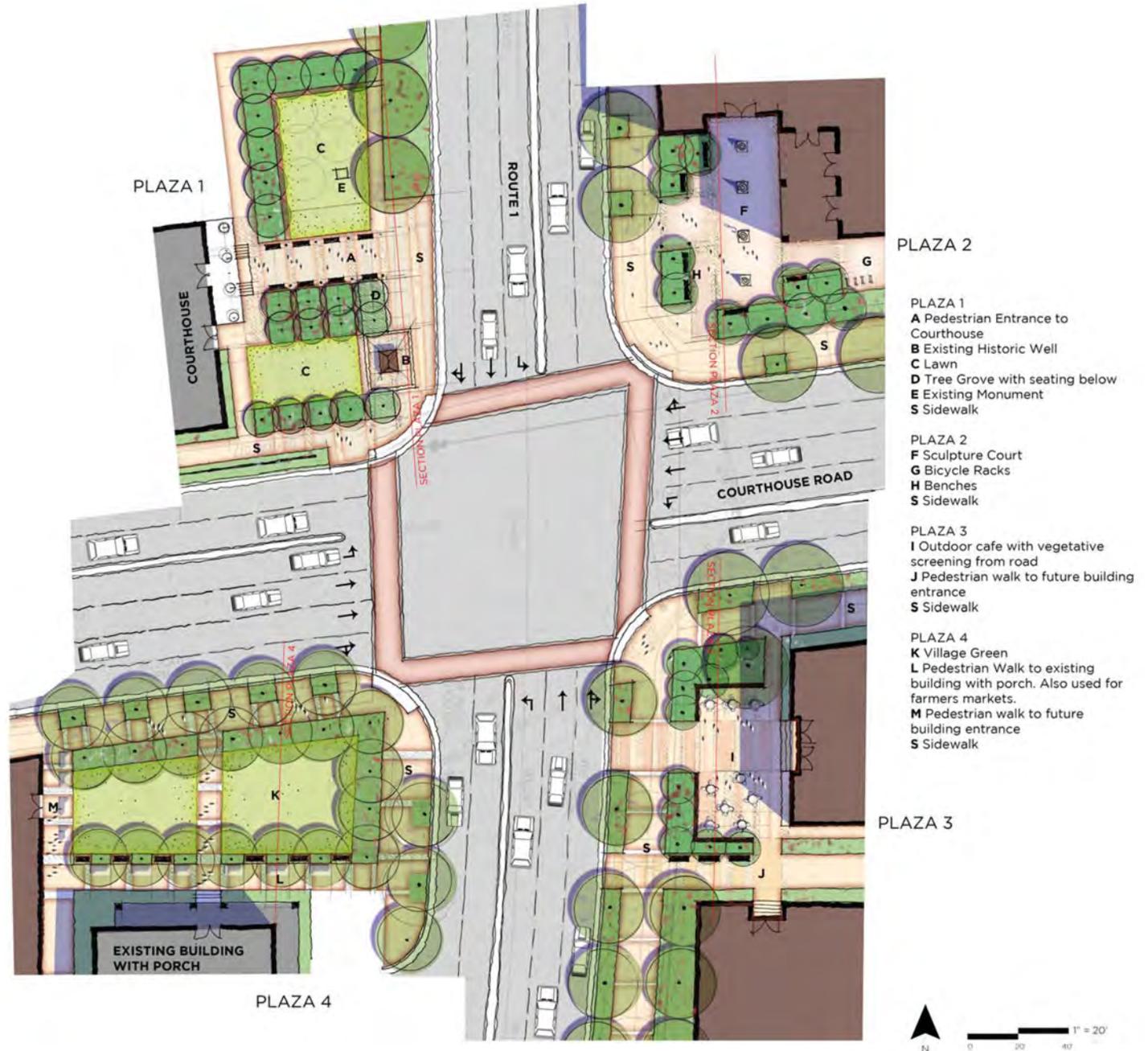
Section 5.0 - Transportation Recommendations for Courthouse UDA

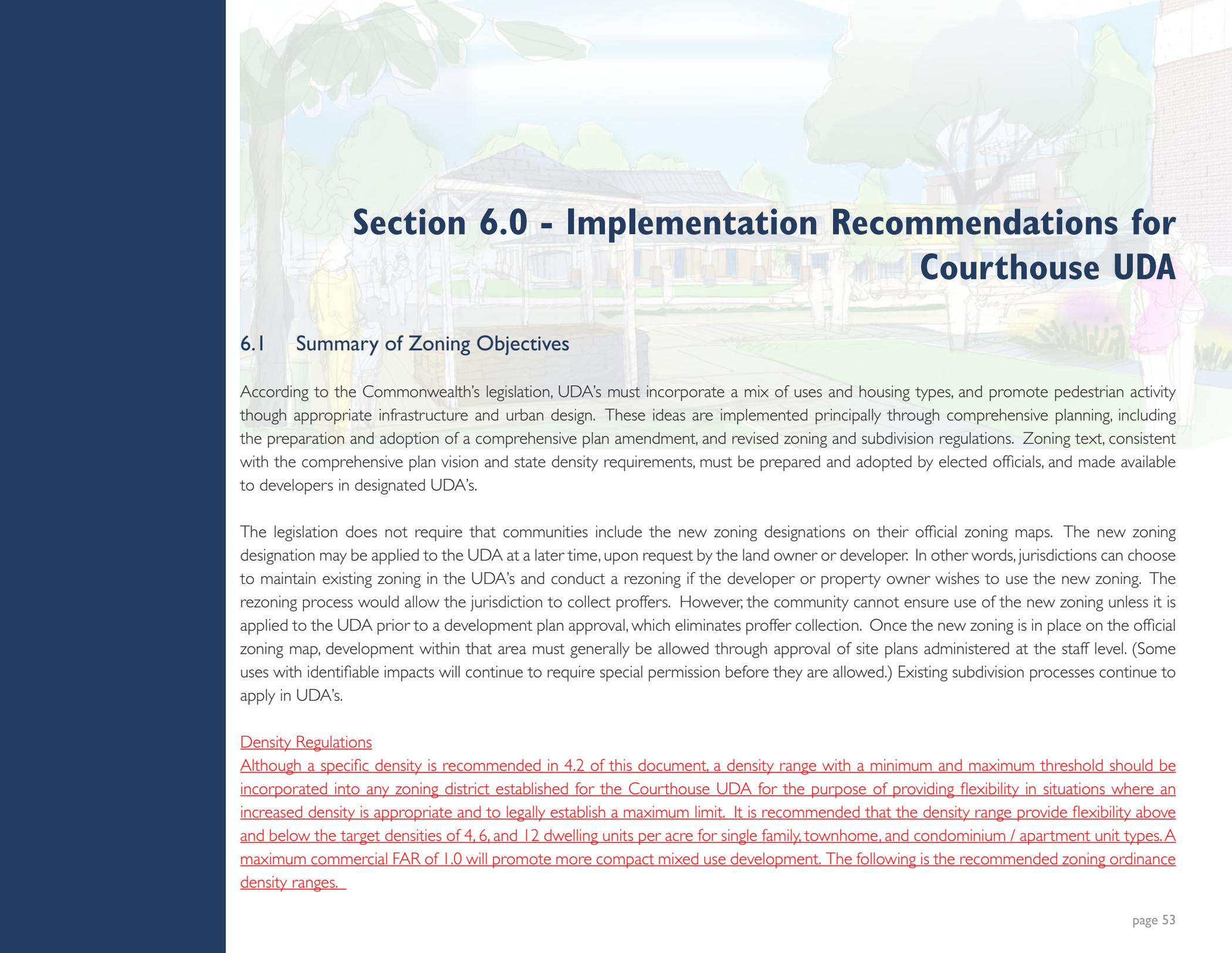
Figure 5.5 – Stafford County US Route 1 & VA Route 630 Courthouse Road Streetscape Concept Plan



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Figure 5.6 – Concept Design for Plazas at Intersection of Route 1 and Courthouse Road





Section 6.0 - Implementation Recommendations for Courthouse UDA

6.1 Summary of Zoning Objectives

According to the Commonwealth's legislation, UDAs must incorporate a mix of uses and housing types, and promote pedestrian activity through appropriate infrastructure and urban design. These ideas are implemented principally through comprehensive planning, including the preparation and adoption of a comprehensive plan amendment, and revised zoning and subdivision regulations. Zoning text, consistent with the comprehensive plan vision and state density requirements, must be prepared and adopted by elected officials, and made available to developers in designated UDAs.

The legislation does not require that communities include the new zoning designations on their official zoning maps. The new zoning designation may be applied to the UDA at a later time, upon request by the land owner or developer. In other words, jurisdictions can choose to maintain existing zoning in the UDAs and conduct a rezoning if the developer or property owner wishes to use the new zoning. The rezoning process would allow the jurisdiction to collect proffers. However, the community cannot ensure use of the new zoning unless it is applied to the UDA prior to a development plan approval, which eliminates proffer collection. Once the new zoning is in place on the official zoning map, development within that area must generally be allowed through approval of site plans administered at the staff level. (Some uses with identifiable impacts will continue to require special permission before they are allowed.) Existing subdivision processes continue to apply in UDAs.

Density Regulations

Although a specific density is recommended in 4.2 of this document, a density range with a minimum and maximum threshold should be incorporated into any zoning district established for the Courthouse UDA for the purpose of providing flexibility in situations where an increased density is appropriate and to legally establish a maximum limit. It is recommended that the density range provide flexibility above and below the target densities of 4, 6, and 12 dwelling units per acre for single family, townhome, and condominium / apartment unit types. A maximum commercial FAR of 1.0 will promote more compact mixed use development. The following is the recommended zoning ordinance density ranges.

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- For single family homes: 3 to 6 dwelling units per acre
- For townhomes: 5 to 8 dwelling units per acre
- For condominiums or apartments: 11 to 14 dwelling units per acre
- For commercial development: 0.4 to 1.0 floor area ratio

6.2 Zoning Implementation Concept

There are two options for implementing UDA's in Stafford County. The first would be to apply the recently-adopted P-TND District. This district provides for walkable, urban neighborhoods that would meet the use and density requirements set out in the state legislation; however, the preparation of the required documentation for a P-TND requires a substantial amount of design work (well beyond the conceptual stage). This implies a substantial up-front expenditure without knowing whether the development will be approved. Also, the P-TND District is written primarily for newly developing areas, where large tracts of land are in single ownership. This P-TND option does not apply very easily to areas with multiple owners and existing development.

The second option is to prepare new zoning districts that would achieve the state's objectives and provide a more certain environment for developers, through the use of a more traditional base (not planned) zoning district. This new "urban development" district would include:

- Siting and configuration requirements for each allowable building type
- Land use and building type restrictions for sub-areas within the "urban development" district
- Simplified (and reduced) parking requirements
- Block standards that break up large parcels to ensure connectivity
- Street cross-sections that promote narrower urban street types

The new zoning district must offer several "flavors" of development that, when combined, create a walkable urban center. These include:

- Residential Attached - a residential subarea that would serve as a transition to existing single-family areas surrounding the urban development area (if any)
- Residential Townhouse - a residential subarea that would allow slightly higher density residential through the addition of townhouse development
- Residential Mixed-Use - a mostly residential subarea for the highest density residentially-dominated areas, including apartments and corner stores
- Mixed-Use Village Center - a mixed-use subarea intended to serve as the focal point for lower intensity urban development areas (up to three stories in height), allowing ground floor retail and residential or office in upper stories
- Mixed-Use Urban Center - a subarea intended to serve as the focal point for higher intensity urban development areas (up to five stories in height) with some structured parking, and allowing ground floor retail and residential or office in upper stories

Figure 6.1 demonstrates how building types could be incorporated into the new zoning.

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Figure 6.1 - Regulating Building Types

(a) Building Types Established

This section establishes and defines each building type to ensure that proposed development is consistent with the district goals for building form, physical character, land use and quality.



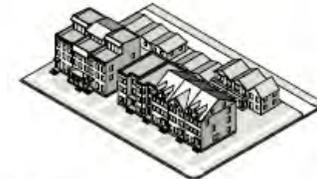
(1) Detached House

A building type designed primarily to accommodate one dwelling unit on an individual lot. In more intense subdistricts, a detached house may be used for mixed purposes.



(2) Attached House

A building type designed primarily to accommodate two dwelling units on an individual lot. In more intense subdistricts, an attached house may be used for mixed purposes.



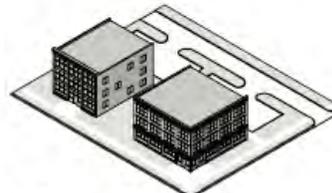
(3) Townhouse Building

A building type designed primarily to accommodate two or more dwelling units consolidated side-by-side into a single structure. In more intense subdistrict, a townhouse may be used for mixed purposes.



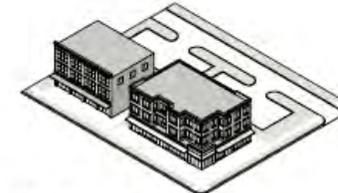
(4) Apartment Building

A building type containing three or more dwelling units consolidated into a single structure. Units must be either situated wholly or partially over or under other units, or back to back with other units in the same structure.



(5) General Building

A building type intended primarily for commercial, office, manufacturing and employment uses.



(6) Mixed Use Building

A building type intended primarily for ground floor commercial uses with upper-story residential or offices uses.



(7) Civic Building

A building type intended primarily for civic, institutional or public uses.



(8) Cottage Court

A group of small detached or attached houses centered around a common open space or courtyard.



(9) Carriage House

A small dwelling located on the same lot as a detached house. A carriage house may be located above a garage.

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Figure 6.2 - Illustrating complex regulations improves administration of the code.

(11) Transparency

- a. The minimum percentage of windows and doors that must cover a ground story facade is measured between 0 and 12 feet above the adjacent sidewalk. The standard applies only on street-facing facades, and not interior or rear-facing facades (including the sides of mid-block buildings where no corner buildings have been constructed).



Preparation of new zoning (the second option) is preferable because it offers the County an opportunity to replicate good urban patterns on multiple, individually-owned parcels of land, transforming currently under-utilized areas with substantial existing infrastructure investment (roads, water and sewer), into urban areas that generate substantially higher tax revenues and provide for the state's intended, walkable mixed-use development.

New zoning should be graphically-oriented, to ensure ease of use for applicants, neighbors and review staff alike. A more visual code that leads by example, broadcasting the County's intentions for these areas, could go a long way toward improving the quality of urban development.

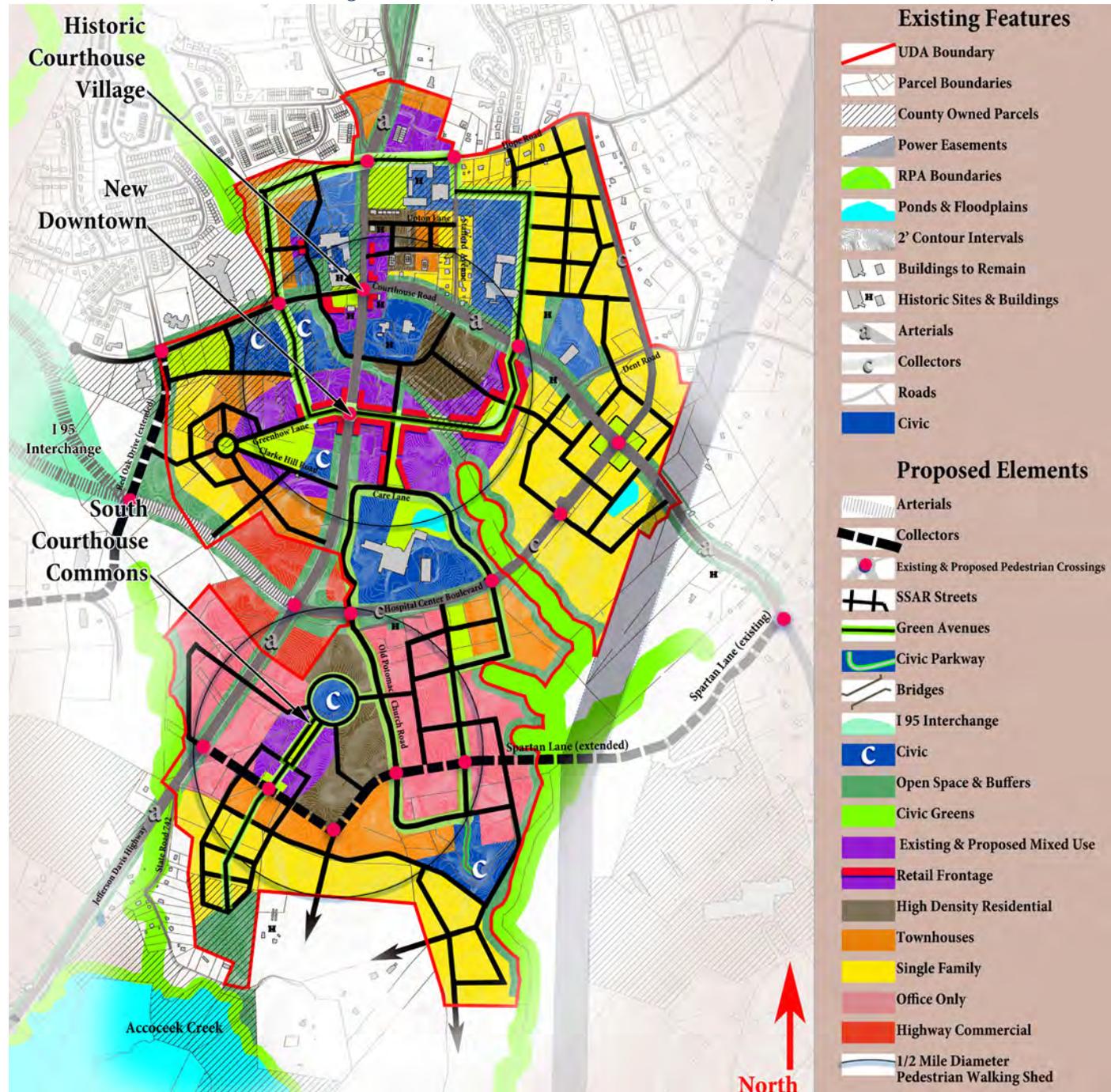
Figure 6.2 offers an example from a zoning code with visual elements.

Using the conceptual land use diagram for the Courthouse UDA, a model of how the new "urban development" zoning might meet the objectives above has been prepared, along with a conceptual street map illustrating which proposed street types would be applied.

The same general principles and zoning objectives will help the County apply the new zoning in other areas appropriate for urban development.

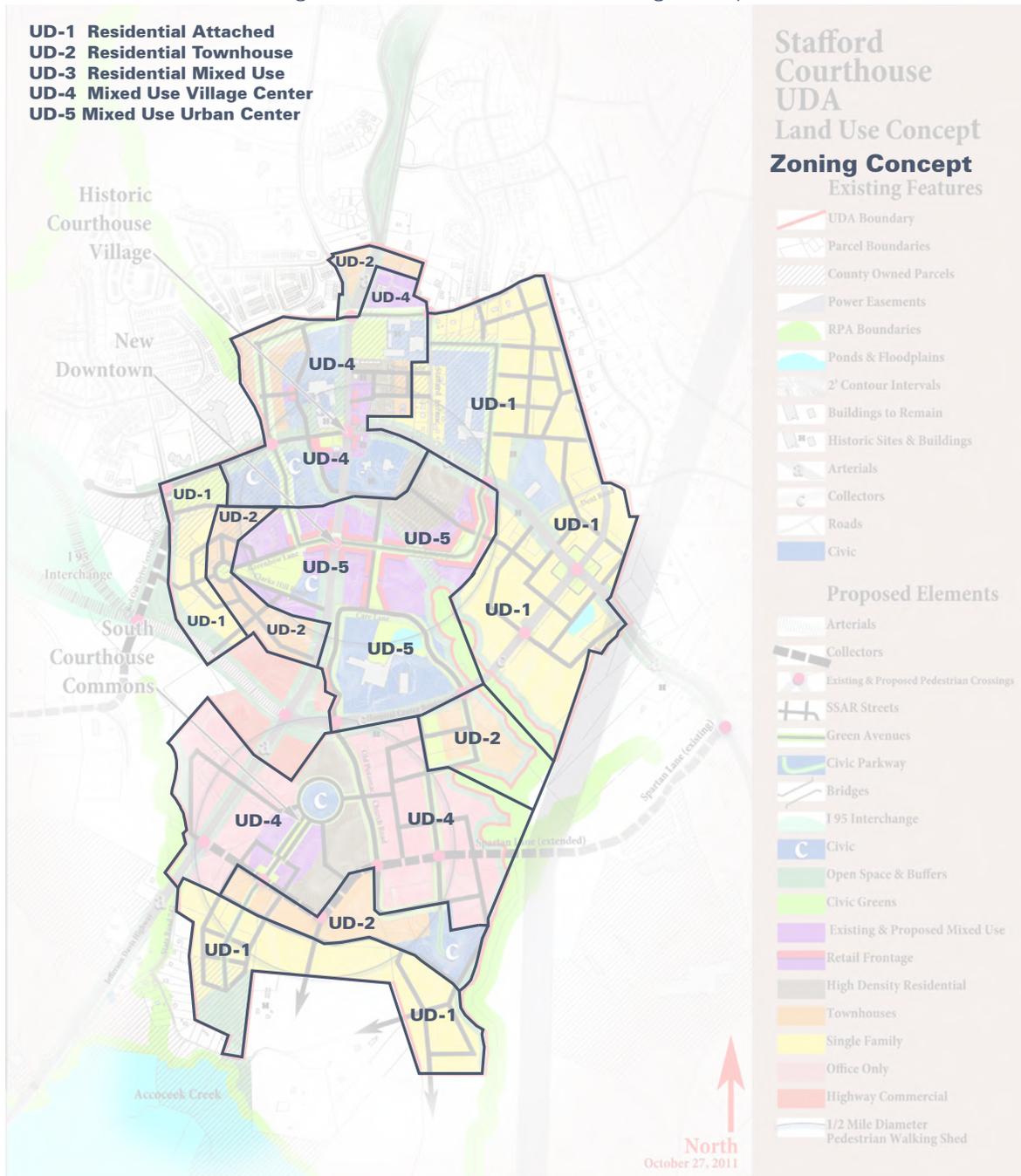
Section 6.0 - Implementation Recommendations for Courthouse UDA

Figure 6.3 – Courthouse UDA Land Use Concept



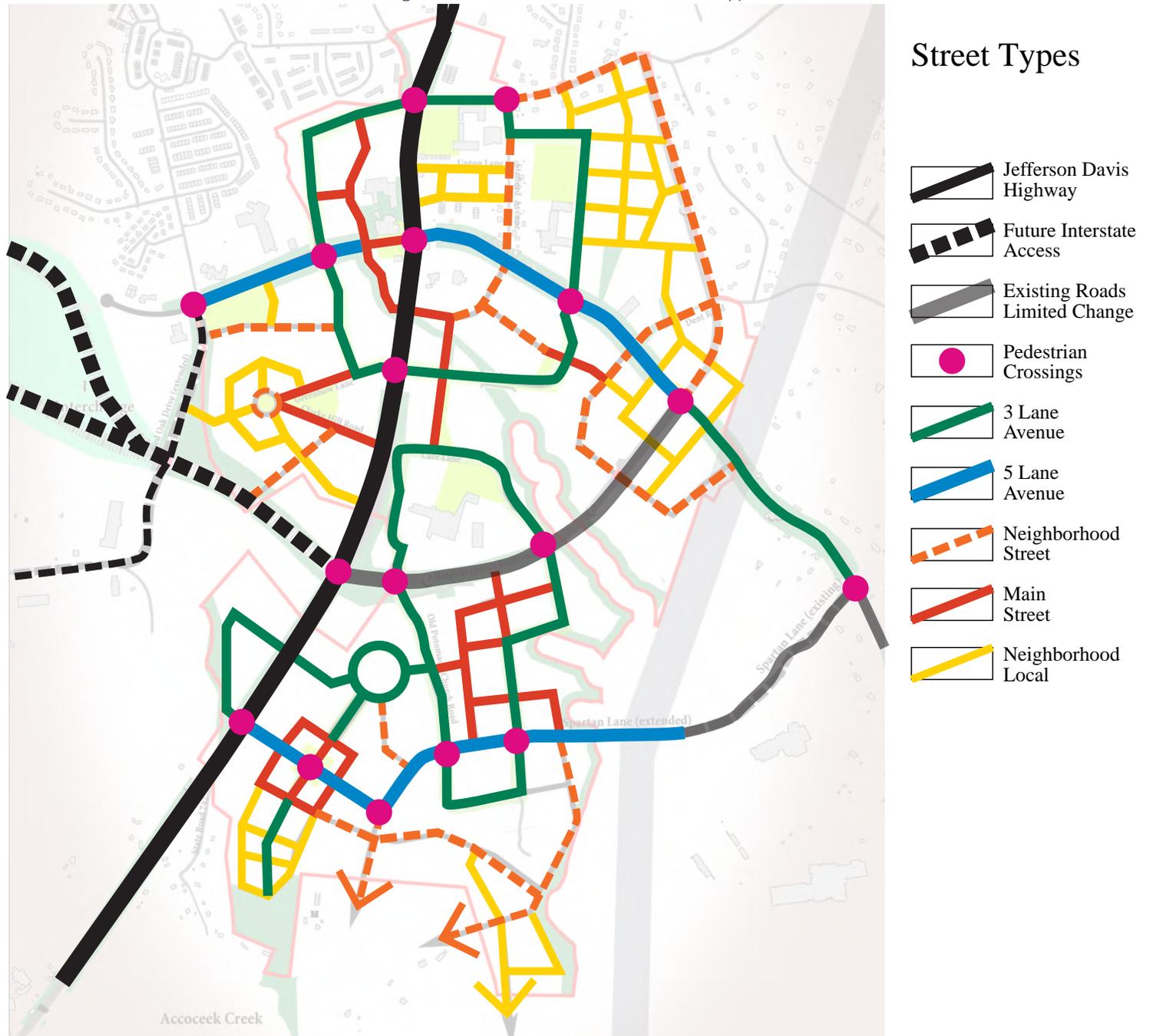
Section 6.0 - Implementation Recommendations for Courthouse UDA

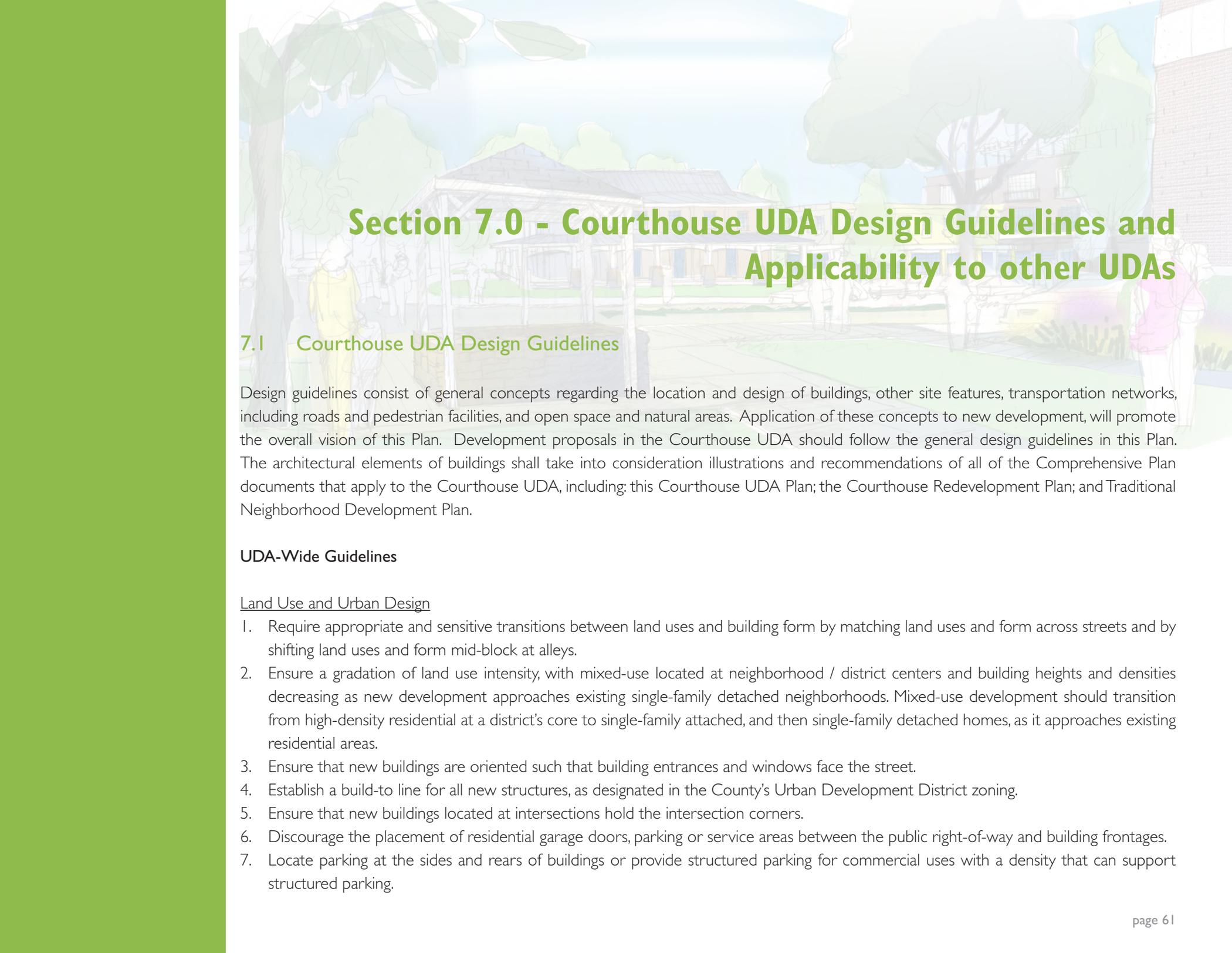
Figure 6.4 – Courthouse UDA Zoning Concept



Section 6.0 - Implementation Recommendations for Courthouse UDA

Figure 6.5 – Courthouse UDA Street Types





Section 7.0 - Courthouse UDA Design Guidelines and Applicability to other UDAs

7.1 Courthouse UDA Design Guidelines

Design guidelines consist of general concepts regarding the location and design of buildings, other site features, transportation networks, including roads and pedestrian facilities, and open space and natural areas. Application of these concepts to new development, will promote the overall vision of this Plan. Development proposals in the Courthouse UDA should follow the general design guidelines in this Plan. The architectural elements of buildings shall take into consideration illustrations and recommendations of all of the Comprehensive Plan documents that apply to the Courthouse UDA, including: this Courthouse UDA Plan; the Courthouse Redevelopment Plan; and Traditional Neighborhood Development Plan.

UDA-Wide Guidelines

Land Use and Urban Design

1. Require appropriate and sensitive transitions between land uses and building form by matching land uses and form across streets and by shifting land uses and form mid-block at alleys.
2. Ensure a gradation of land use intensity, with mixed-use located at neighborhood / district centers and building heights and densities decreasing as new development approaches existing single-family detached neighborhoods. Mixed-use development should transition from high-density residential at a district's core to single-family attached, and then single-family detached homes, as it approaches existing residential areas.
3. Ensure that new buildings are oriented such that building entrances and windows face the street.
4. Establish a build-to line for all new structures, as designated in the County's Urban Development District zoning.
5. Ensure that new buildings located at intersections hold the intersection corners.
6. Discourage the placement of residential garage doors, parking or service areas between the public right-of-way and building frontages.
7. Locate parking at the sides and rears of buildings or provide structured parking for commercial uses with a density that can support structured parking.

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8. Minimize the amount of space required for surface parking lots by allowing an unlimited number of parking spaces per parking bay.
9. In surface parking lots, require internal parking islands with a minimum width of 6 feet.
10. Screen building service areas with 5-foot masonry walls.
11. Where surface parking lots face the street, screen parking areas with a 6-foot-minimum planted strip with continuous evergreen hedges that are 30 inches high at minimum.
12. Locate civic buildings at the visual terminus created by intersecting streets.
13. Utilize topographical high points as locations for architectural focal points, particularly as applied to proposed civic sites.
14. Locate new schools, churches and other civic buildings such that building entrances face public greens and parking is located at the sides or rear of buildings.
15. Visually protect all nationally- or state-designated historic resources from adjacent uses.

Circulation

1. Ensure that new roads meet VDOT's Secondary Street Acceptance Requirement (SSAR) regulations for compact development pertaining to the Main Street and Local roadway classifications.
2. Ensure that all development meets the SSAR-required connectivity ratio of 1.6 between street segments and intersections.
3. Where feasible, incorporate a system of alleys throughout the UDA to enable access to all residential and some commercial uses, thereby minimizing the number of curb cuts and associated conflicts between vehicles and pedestrians. Locate service areas on alleys at the rear of buildings.
4. In accordance with SSAR standards, require sidewalks on both sides of all new roads, with adjacent street trees (planted at 25-foot on-center spacing) to provide for shade. The appropriate width of sidewalks should be determined by the land use character and density of the areas in which they are located.
5. Provide pedestrian crossings where indicated in the UDA concept, either at signalized intersections with pedestrian priority facilities or at four-way stops with pedestrian priority facilities.

Open Space and Natural Areas

1. Locate public greens at mixed-use centers, bounded by streets on a minimum of three sides.
2. Ensure that public recreation areas are bounded by a street along at least one major edge.
3. Maximize connections between civic sites and streets into buffers and open space areas through multi-use trail linkages.
4. Provide open space linkages and/or buffers along intermittent streams and wetlands, as well as at all edges of Resource Protection Areas. All open space linkages and/or buffers should be a minimum of 100 feet in depth on both sides of the resource; these areas should be wider, if needed, to provide internal trail slopes of no greater than 5 percent.
5. All open space areas should be publicly accessible.
6. Protect vegetated areas with slopes over 20 percent. Provide retaining walls, no more than 6 feet in height, for these areas.
7. Allow for the provision of stormwater management facilities as part of open space linkages.

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Historic Village Guidelines

1. Encourage buildings with smaller floor plates (no larger than 15,000 SF) and massing at a village scale (3 stories maximum). If needed, a developer may link multiple 15,000 SF, 3-story building masses into one larger building, without creating a single building mass with an apparent footprint over 15,000 square feet.
2. Take architectural cues from existing nationally- and state-designated historic resources.
3. Incorporate the historical use of Aquia sandstone through the use of similar sandstone materials.
4. Provide a simple combination of sidewalks, lawns and trees along the street edge consistent with the village center character.
5. Extend open space along stream corridors, along the face of the courthouse complex as well as along Courthouse Road to create a green approach to the village center.

New Downtown Guidelines

1. Allow for unlimited building footprint sizes in the core area.
2. Encourage ground-floor shopfronts in areas where retail frontage is noted in the UDA concept.
3. Integrate the intermittent stream bridge crossing along Greenhow Lane with adjacent shopfront architecture.
4. Locate a public garden large enough to accommodate performance space and public gathering spaces at the intersection of Greenhow Lane and Clarke Hill Road.
5. Encourage a strong visual and functional relationship between the downtown and the Stafford Hospital.
6. Integrate civic greens into the streetscape system as indicated in the UDA concept.

South Courthouse Commons

1. Ensure strong UDA connectivity across Jefferson Davis Highway (Route 1), including at least one pedestrian crossing linking both sides of Route 1.
2. Maintain an undisturbed buffer along Jefferson Davis Highway to continue the parkway character north of State Road 742.
3. Make open space and streetscape connections south into publicly-owned land and to Accokeek Creek, as part of the UDA open space system.

Section 7.0 - Applicability to Other UDAs in Stafford County

7.2 Applicability to Other UDA's

The Courthouse UDA Small Area Plan provides a model for implementing the County's remaining six UDA's, both in terms of planning process as well as the regulatory, policy and illustrative tools needed to fulfill the County's vision for each area. The 2011 Comprehensive Plan describes the overall vision for each of the seven designated UDA's; however, the current plan does not address the specific strategies needed for realizing these visions and for ensuring that the County's UDA's fulfill both the expectations behind the County's intent in designing these areas as well as the mandates established by the Commonwealth of Virginia when it envisioned the need for more intensely developed, and more transportation efficient, clusters of growth in the state's fastest-growing jurisdictions. This section, therefore, identifies the "lessons learned" from the Courthouse UDA Small Area planning process that can be applied in planning Stafford's remaining UDA's.

Lesson 1. It is essential to create a Small Area Plan for each of the County's designated UDA's.

As recognized in the 2011 Comprehensive Plan, each UDA needs to be planned conceptually as a single entity, so that County citizens, staff and elected officials can assess whether future development proposals are suitable for the conceptual framework established for that area. The process of defining a Small Area Plan for each UDA allows the County to ensure that incremental development in an area will be compatible with the overall UDA goals for that area. Moreover, the Small Area Plan development process allows the County to achieve public consensus around both a workable vision for each area, and a land use concept for implementing that vision.

Lesson 2. Ensure that the Small Area planning process includes a well-defined and meaningful public engagement strategy.

As demonstrated in the planning process for the development of the Courthouse UDA, providing multiple opportunities for the community to have timely, focused input into plan development from the outset is vital to its long-term success. The importance of public input from a short-term perspective is achieving consensus on a collective development vision for the area, and, in the longer term, providing a publicly-supported framework to guide future development projects in that area. A variety of engagement tools can be used effectively, ranging from individual interviews and focus group meetings with key stakeholders, to public workshops and charrettes, as well as public meetings, open houses and presentations. In addition, the use of the internet and other social media tools should be explored as the County begins to reach out for feedback on visions and concepts. An effective community engagement strategy should be defined at the beginning of each Small Area planning process, and monitored frequently to ensure that citizens are provided with opportunities to have a role in shaping the plan for each UDA.

Lesson 3. Establish a set of TND Planning Principles that can be used to help guide in the development of a Small Area Plan for each UDA.

The spatial and design elements embedded in the implementation of Traditional Neighborhood Development can be considered a starting point in determining the appropriate pattern of development for each UDA. Traditional Neighborhood Development (TND) is a development technique that combines several, distinct, design features to improve connectivity, promote pedestrian activities and reduce automobile travel in an effort to create attractive, efficient and livable communities. This is achieved by providing a well-connected, gridded network of streets and blocks that effectively tie together areas of compact mixed-use development. The efficiency of this design is distinguished by the availability of multiple, more direct automobile, pedestrian, bicycle and transit routes between various destinations. As a result, residents of

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TND communities are provided with diverse opportunities to live, work, and “play” within reasonable walking and/or biking distances, without the need to get into a car, or travel outside of their community in order to satisfy their basic daily requirements.

The following planning principles form the basis for implementing a vibrant, walkable TND community.

Streets Networks

1. Ensure that all streets within the UDA connect with each other, and with the streets of immediately adjoining communities; do not provide for dead-end roads and cul-de-sacs within a UDA.
2. Design internal, neighborhood streets to be only as wide as needed to accommodate low-speed vehicular traffic, in compliance with VDOT's Secondary Street Acceptance Requirements (SSAR).
3. Design all streets as Complete Streets, to accommodate walking, cycling and activities such as shopping, eating and strolling.
4. Provide adequate street widths on all major access streets to accommodate current or future public transit (bus, street car, etc.).
5. Assume that all streets will contain sidewalks on both sides of each street, and will meet current ADA regulations.
6. Assume the potential for on-street parking on all streets.
7. Provide frequent, safe, at-grade pedestrian crosswalks throughout the UDA.

Building Placement and Location of Uses

1. Cluster development in compact, walkable areas that can accommodate a mix of residential, retail, commercial and civic uses within a 10-minute walk or ½-mile radial distance from the core of the area.
2. Allow for a variety of scales of retail and commercial uses in order to meet common household needs, such as convenience stores, post offices, and banks, as well as larger office and retail uses.
3. Civic uses should be located within walking distance of a majority of residential uses.
4. Where appropriate, public buildings should be located on prominent, focal point sites.
5. Buildings should be scaled to pedestrians, such that front entrances are located at the edges of sidewalks, facing onto streets.
6. Individual blocks should incorporate a vertical mix of uses, such as retail on the ground floors of residential and/or office buildings, in combination with all residential, all commercial, civic, or residential/commercial buildings.
7. Development should be located in areas with existing or planned infrastructure and utilities that have sufficient capacity for growth.
8. Residential development should be located no more than ½- mile from each UDA core community areas.
9. Historic and cultural buildings should be rehabilitated, reused and integrated into the UDA design.

Public Parks and Open Spaces

1. The UDA should offer a variety of usable open space areas, including options for civic greens, plazas or squares, parks and greenways, located at identifiable intersections.
2. The central core area of the UDA should contain a significant civic green space to provide opportunities for gatherings, festivals, farmers markets, and informal recreation.

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3. Residential development should either include, or be located within close proximity to, a park, multiuse trail or playground facility.
4. Sensitive environmental and natural features should be preserved and development should avoid habitat fragmentation, particularly in areas with streams, shorelines and forests. These areas provide excellent opportunities for the creation of greenways, easements, and conservation areas.

These elements are further described in Section 6.0 of this report.

Lesson 4. Create and adopt a clearly communicated, easy-to-use zoning option for the UDA that can guide development for the area in ways that support the vision for the area.

Under the Commonwealth's current UDA legislation, land owners are allowed to develop under the current, underlying zoning within each UDA area, but may choose to develop in accordance with newly-created UDA zoning for that area. The County will need to determine whether it wishes to establish a single zoning code option that can be applied, across the board, to all UDA's or, alternatively, establish a separate code option for each UDA that would reflect any specific characteristics and requirements for that UDA. In order to encourage use of either type of optional zoning, the code(s) must be easy to understand and apply, and, when complied with, should ultimately shorten the County development review periods as an incentive for implementation. This issue is discussed in greater detail in Section 6 of this report.

Lesson 5. Plan to submit each UDA Small Area Plan to VDOT as part of its Chapter 527 plan review process.

As part of the Small Area planning process for each UDA, the County will likely perform a transportation analysis of, at a minimum, the major intersections within that UDA, in order to determine if, and what, future actions will be needed to accommodate future development within each area. This analysis will be critical in addressing both County and community concerns about the impacts associated with implementing the UDA Small Area Plan, and will serve as the basis for submitting the plan to VDOT for its Chapter 527 review process.

Lesson 6. Continue to educate the public, the development community, and future business investors about the advantages of developing within the County's designated UDA's.

Stafford's UDA's represent some of the key future growth areas for the County. As such, they provide excellent opportunities to cluster dense development in settings that will attract a high quality of development, including top quality national retailers and local small businesses, and a broad range of residents who prefer compact, convenient and walkable communities in which to live, work and shop. By highlighting both physical and related social attributes, Stafford's UDA's can serve as exemplary models for successful community growth. The County's planning and economic development strategies can build on the potential of these areas to attract future residents and businesses to the County while, at the same time, assuring existing residents that clustered UDA growth can potentially minimize the liabilities, and maximize the advantages, of shaping future changes in the County.

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7.3 Recommendations for Amending the Comprehensive Plan

The 2011 Comprehensive Plan contains a very complete description of the County's designated Urban Development Areas (UDA's), and references UDA's in appropriate places throughout the document. However, with the completion of the Courthouse UDA Small Area Plan and implementation tools, and with the lessons learned from this process that can be applied in planning the County's six remaining UDA's, there are a few locations where the amendments to the Comprehensive Plan are recommended for the County's consideration. These are noted below.

In *Chapter 2, The Foundation for the Future*, under *Section 2.2 (Goals, Objectives and Policies)*, consider the following:

- Transportation Objective 6.3/Policy 6.3.6. Consider adding a statement about the establishment of pedestrian-scaled block sizes and a grid-pattern of connected streets to encourage walking.
- Transportation Objective 6.4. Consider adding a policy statement about the establishment of a connected, intersecting network of roads throughout designated UDA's in order to provide alternative options for vehicular circulation and for slowing traffic within in a development as is appropriate for more densely developed, urban patterns.
- Transportation Objective 6.6. Consider adding a policy that encourages the location of future transportation facilities in areas that can easily accommodate related Transit-Oriented Development which has been shown nationally to produce a higher level of economic development than do areas without such transit options.
- Transportation Objective 6.7. Consider adding a policy that ensures that all plans for new roads will account for the potential accommodation of future transit.
- Economic Development Objective 7.2/ Consider adding a new policy that encourages retail and other commercial nodes within Urban Development Areas to have the potential to serve local, county-wide and regional communities as may be appropriate given the character and location of each area.

In *Chapter 3, The Land Use Plan*, under *Section 3.5 (Land Use Designations)*, consider the following:

- Under Form-based Codes, final paragraph, consider adding text to note that the County has established a form-based urban development district for the Courthouse UDA, which can serve as a model for the implementation of the County's other UDA's.
- Under UDA I: Courthouse, additional text should note that a Small Area Plan has been developed for this area indicating the recommended Land Use Pattern for the area. A description of the Courthouse Small Area Plan could be inserted here, or could be located in the Appendix with a reference to it here.
- Under UDA I: Courthouse, update the Courthouse UDA map to reflect the Courthouse Small Area Plan boundary. See Figure 7.1 for a comparison of the currently approved Courthouse UDA boundary, as shown in the Comprehensive Plan, and the Small Area Plan recommended boundary. These revisions were made during the Small Area Planning process. Table 7.1 explains the reasons for the boundary change recommendations.

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Table 7.1 - Boundary Change Recommendations

Boundary Change Description	Reason for Boundary Change
Add land area between Hope Road and Courthouse Road, east of the current UDA boundary line.	Include a direct Hospital Center Boulevard extension between Courthouse Road and Hope Road within the UDA, and plan for the large undeveloped lots between the current UDA line and existing residential development.
Remove land area south of Courthouse Road, including the power line easement and the small area east of the power line easement.	Remove the power line easement from the UDA, and historic properties east of the power line easement.
Add land area between the existing southern UDA boundary and Accocek Creek	Design a connection between the South Courthouse Commons Neighborhood Center and the publicly held land on Accocek Creek.
Add land area west of Route 1 and south of Hospital Center Boulevard	Design both sides of Route 1 to ensure an appropriate "southern gateway" for the UDA and New Downtown.
Remove land area at the intersection of Route 1 and Hospital Center Boulevard (in the northwest, northeast, and southeast quadrants)	Remove the designated "highway commercial" land uses at the Route 1/ Hospital Center Boulevard intersection from the UDA.

In *Chapter 4, Transportation Plan*, in Table 2, consider adding the recommended new turn lanes at the Route 1/Hope Road, Route 1/Courthouse Road, and Hospital Center Boulevard as it intersects with the proposed relocated Route 630 (Courthouse Road).

In *Chapter 6, The People and the Place*, under Section 6.1.2 (*Zoning Regulations*), consider adding a separate zoning category and description for a new Urban Development District to implement the County's UDA's, as recommended in Section 6 of this report. This would also require a minor revision to Section 6.1.4, to include "20 zoning districts" instead of the stated 19.

In the *Appendix to the Comprehensive Plan*, consider adding a new section, "H. Urban Streets," that provides cross-sections of the street types that are applicable within UDA's. These are shown, in draft form, in the Appendix to this report.

