

MONTGOMERY COUNTY PLANNING COMMISSION
April 20, 2011 @ 7:00 P.M.
Board Room, Government Center

A G E N D A

CALL TO ORDER:

DETERMINATION OF A QUORUM:

APPROVAL OF AGENDA:

APPROVAL OF CONSENT AGENDA:

PUBLIC ADDRESS:

PUBLIC HEARINGS:

1. Montgomery County requests a Comprehensive Plan amendment to add a policy map designation and supporting language for proposed Urban Development Areas (UDA) to comply with Section 15.2-2223.1 of the Code of Virginia. The proposed UDAs will permit residential densities of up to twelve (12) units per acre and commercial densities of 0.4 FAR. The proposed areas are located in the unincorporated area of the County and contain approximately 450 acres in the Route 177 Corridor and Merrimac areas. These areas are currently designated as Urban Expansion areas in the County Comprehensive Plan with an overall maximum allowable residential density of four (4) units per acre.
 - a) Staff Presentation (Steven Sandy)
 - b) Consultant Presentation (Renaissance Planning)
 - c) Public Comment
 - d) Discussion/Action

2. Montgomery County requests a Comprehensive Plan amendment to incorporate the 177 Gateway Area Plan into the existing Route 177 Corridor Land Use Plan. The proposed amendment will revise the proposed future land use map of the area adjacent to Exit 109 and identify this area as an Urban Development Area (UDA) to comply with Section 15.2-2223.1 of the Code of Virginia.
 - a) Staff Presentation (Steven Sandy)
 - b) Consultant Presentation (Renaissance Planning)
 - c) Public Comment
 - d) Discussion/Action

OLD BUSINESS:

NEW BUSINESS:

WORKSESSION:

- Zoning Ordinance Amendments Discussion (Steven Sandy & Renaissance Planning)
 - PUD-TND (New District)
 - TND-Infill (New District)
 - Residential R-2 & R-3 Compact (Modified District)

MEETING ADJOURNED:

UPCOMING MEETINGS:

- | | |
|----------------|---|
| April 27, 2011 | Planning Commission Annual Training Event
NRV Planning District Commission, Fairlawn (6:00-9:00pm) |
| May 11, 2011 | Planning Commission Public Hearing (7:00 pm) |
| May 18, 2011 | Planning Commission Site Visits (To be determined)
Planning Commission Regular Meeting |

**MONTGOMERY COUNTY PLANNING COMMISSION
CONSENT AGENDA
April 20, 2011**

A. APPROVAL OF MINUTES

- May 9, 2011

ISSUE/PURPOSE:

The above listed minutes are before the Planning Commission for approval.

B. SCHEDULE THE FOLLOWING ITEMS FOR PUBLIC HEARINGS BEFORE THE PLANNING COMMISSION ON MAY 11, 2011 AND BOARD OF SUPERVISORS ON MAY 23, 2011

1. A request by **James C. & Lorilee B. Tannahill** for a Special Use Permit on approximately 1 acre parcel in a General Business (GB) zoning district to allow truck, trailer, heavy equipment sales, service, and rental. The property is located at 2397 Tyler Road and is identified as Tax Parcel No. 104-A-13A (Parcel ID: 029000) in the Riner Magisterial District (District D). The property currently lies in an area designated as Urban Expansion in the 2025 Comprehensive Plan and further designated as Business in the Route 177 Corridor Plan.

AT A MEETING OF THE MONTGOMERY COUNTY PLANNING COMMISSION ON MARCH 9, 2011 IN THE BOARD ROOM, SECOND FLOOR, COUNTY GOVERNMENT CENTER, CHRISTIANSBURG, VIRGINIA:

CALL TO ORDER:

Mr. Rice, Chair called the meeting to order.

DETERMINATION OF A QUORUM:

Mr. Thum established the presence of a quorum.

Present: Bryan Rice, Chair
Walt Haynes, Vice Chair
Ryan Thum, Secretary
William Seitz, Member
Frank Lau, Member
Malvin Wells, Member
Robert Miller, Member
John Tuttle, Member
Mary Biggs, Board of Supervisors Liaison
Marty McMahan, County Attorney
Steve Sandy, Planning Director
Dari Jenkins, Planning & Zoning Administrator
Jamie MacLean, Development Planner
Brea Hopkins, Planning & Zoning Technician

Absent: Joel Donahue, Member

APPROVAL OF AGENDA:

On a motion by Mr. Haynes, seconded by Mr. Miller, and unanimously carried the agenda was approved as amended by placing New Business prior to the work session on the agenda.

PUBLIC ADDRESS:

Mr. Rice opened public address; however, there being no speaker the public address session was closed.

NEW BUSINESS:

Eagle Rock Subdivision

Mr. Sandy stated the request is to allow a private street to serve a proposed subdivision. Generally frontage on a public street is required; however, private streets can be allowed if approved by the Board of Supervisors. There is not a requirement for the Planning Commission to make a recommendation; however, previously the Board of Supervisors has asked the Commission to review the requests. The proposed subdivision currently has 9 lots. The private streets will not be maintained by the state or county and there will be no public services, such as mail delivery or school bus service, on the private street. The proposed street will be within a 50 foot right of way and have a 17% maximum grade. Statements have been made that the road could be graded to meet VDOT standards. It should be noted that the grade on the North facing slope could pose longer periods of ice or snow cover in the winter months. Without meeting state standards, the development may not be adequately or safely served by fire and/or rescue personnel in the event of an emergency. The road is over 1800 ft. and the County Emergency Services Coordinator has expressed concern regarding water supply for fire protection. Other portions of Northwoods subdivision have been approved but never platted and recorded. Staff is concerned because problems tend to occur between lot owners regarding maintenance, usage etc. when there is a private street.

Mr. Rice discussed the limits that were placed on the lots within Tejas subdivision. The lots were limited to 20 acres in size.

Mr. Seitz asked if the subdivision could be reconfigured prior to being submitted for approval.

Mr. Sandy stated it would be limited to 9 lots and conditions could be placed to limit road length or other specifications.

Mr. Lowell Bowman, Anderson & Associates, stated the plan submitted was a preliminary plat. The Tejas subdivision that was previously approved has more lots and is much larger in size than the current proposal. Based on Agricultural A1 zoning only 9 lots can be achieved if developed by right. The median lot size is 7 acres. A road maintenance agreement and access plan has been prepared and would be recorded with each deed. The road has been designed and meets all the requirements for a private road. Maximum grade of the proposed street is 17%, 18 ft. minimum width with an all weather surface. A plan review meeting with the county was held and there were no issues raised. In regards to fire and rescue access, a turn-around at the end of the road will be provided that will adequately serve those larger vehicles. Snow and ice removal is covered by the road maintenance agreement and contractors will be hired to maintain the road.

Mr. Lau asked if lot 9 would be further developed and served by the private road. That could put severe strain on the road if the request were approved.

Mr. Bowman stated that lot 9 could also be accessed by Haywood Lane. At this time there is no further development of that property planned. If the property were to be further developed a rezoning would be necessary.

Mr. Thum asked if Haywood Lane could be utilized to serve the subdivision. He noted his concerns regarding a steep grade and potential weather hazards.

Mr. Bowman stated it may not be possible to upgrade Haywood Lane to serve the subdivision due to topography.

Mr. Price, owner, stated the Board of Supervisors passed a resolution that Haywood Lane would be upgraded provided the right of way is given. He noted he was willing to give the right of way; if the Board will proceed with the upgrades. Haywood Lane cannot be utilized as part of this project. The 72 acres contained within lot 9 can be used by owners within the development for recreational purposes, such as trails, horseback riding, etc. That parcel of land has also been looked at by churches, hunt clubs, etc. There is interest for large lots of land in this area.

Mr. Seitz asked the road could not be constructed to VDOT standards.

Mr. Price stated he did not want to develop a subdivision on a public street. There are people who prefer privacy and a different quality of life. The only thing necessary to bring it to VDOT standards is to improve the grade, which can be accomplished if necessary.

Mr. Bowman stated he did not foresee an issue with building the street to VDOT standards.

Mr. Price stated little more time to discuss the request may be desirable. The proposal came from the idea that professional people who work at the hospital need a closer place to live that is not necessarily part of a large subdivision. The vision is for this to be 5-10 acre lots, rural environment allowing small scale agriculture activities. He noted the desire for the proposed development to be in compliance with the county code. Other subdivisions in the area have many more lots on a private road. All property cannot be served by public utilities. There are many nice homes in rural areas where public water is not available and do not have adequate fire protection. Any rezoning or future development would have to be brought back to the Planning Commission and Board of Supervisors. Lot 9 is the residual of the property and the initial plan would be to provide some horseback riding trails. He noted he did not foresee any issues regarding postal delivery or school bus service since owners would be notified prior to purchasing the property that the road was private.

Mr. Wells asked if he had considered a gated community.

Mr. Price stated that it was considered; however, one of the prospective buyers is not in favor of that type of community. There will be signage installed to indicate that it is private property.

Mr. Sandy asked if the remainder lot could be placed in a conservation easement.

Mr. Price stated there have been considerations and it may be done at a later date. He noted he currently owned additional property on the mountain which has been placed in conservation easements.

Ms. Jan Perfator, co-owner of Triple J investments, stated she had been working on this project. One of the discussions has been the importance and need to have private properties for families who do not enjoy being right on the road. She noted that her children are taken to the school bus currently because their house is 500-600 ft. from road. She noted there are no worries about people driving off the road, children playing outside, etc. She noted there

would not be issues with postal services not being provided along the street. Mailboxes could be placed at the end of the road. She noted that in her opinion, the project is important to the county.

Mr. Price's grandson, stated this project is a great plan because it enables people to live on properties large enough to raise animals. The initial grade to get into the property is 17%; however, the property is relatively flat. Many people are not fortunate enough to be able to have animals. It is important to live close to the town and schools; however, there needs to be developments that allow people a place to get away.

Mr. Thum stated he did not think the public services are the issue. If someone is looking for a lot of this type they will accept what comes with it. For a rural community it is common to have large lots on private streets. He noted he was concerned regarding fire and rescue access to the property. It would be more desirable if the road meets VDOT standards. There will be notices provided when the lot is purchased that it is a private road.

Mr. Sandy stated there are other regulations that would have to be met such as connectivity. The actual road specs can be met; however, those other regulations may not be possible.

Mr. Bowman stated the design regulations could be met; however, other regulations such as connectivity may not be possible.

Mr. Thum noted he was only concerned about the specs of the design not with issues such as connectivity since there was not further development planned.

Mr. Wells noted that fire and rescue vehicles did not have an issue with grade like they previously had. He discussed requirements needed for fire response. The problem fire and rescue tends to have with private roads is lack of maintenance. If it is properly maintained then it should not be an issue to navigate. There should be mutual agreements to call on neighboring fire stations if additional water is needed.

Mr. Haynes stated he felt there were too many questions left to answer before making a recommendation.

Mr. Seitz stated he resides in a subdivision with private roads and understands the need for them to be constructed to VDOT standards. He noted he would like to hear a positive response from staff before recommending approval. Tabling the request would allow Mr. Price to meet with staff and address some of the concerns.

Mr. Rice stated he was concerned that approving the private street would set a precedent for allowing numerous private streets.

On a motion by Mr. Seitz, seconded by Mr. Haynes and carried by a 7-1 vote (Lau opposed) the planning commission tabled the Eagle Rock Subdivision request for private roads until the March 16, 2011 meeting to allow the applicant time to evaluate if the road could be constructed to VDOT standards.

WORKSESSION:

On a motion by Mr. Wells, seconded by Mr. Thum and unanimously carried the planning commission opened the worksession.

Urban Development Areas (UDA) Updates

Mr. Sandy stated meetings had been held regarding Route 177 Corridor. Consultants have prepared a presentation regarding the TND-Infill ordinance, Route 177 Gateway Area Plan, comprehensive plan amendments, and the new population figures.

Mr. Vlad Gavrilovic stated input from the meetings had been very informative.

Ms. Amanda Poncy discussed the new census data and the impacts on the UDA Acreage requirements. Due to the Town of Christiansburg being required to develop a UDA, the area had to be reduced. The new requirements are a minimum of 204 acres (10 year) with a maximum of 448 acres (20 year) to be included in the UDA.

Mr. Sandy stated effort had been made to maintain some flexibility so the area may be revised to include a couple more parcels.

Mr. Poncy discussed an overview of zoning ordinance revisions to encourage TND principles. She reviewed the TND-Infill district features and objectives.

Mr. Gavrilovic discussed key features of the districts noting that submittal requirements should be similar to other zones with the exception of the concept plan requirement, reduced permit fees in return for survey requirement, and

the minimum district size should be 0 acres (would not be spot zoning since meets intent and purposes set forth in the ordinance). The Board of Supervisors could grant waivers to the district requirements. He also noted that 2nd floor uses do not count toward density. BOS can grant waivers.

The consensus of the commission was to reduce the fee in order to obtain a survey.

Mr. Gavrilovic discussed the Route 177 Gateway Area Plan. The goal is to plan for the long term development of the area. He discussed information gathered from the staff and area property owners. He defined key issues such as transportation, infrastructure, etc.

Mr. Sandy stated most property owners are ready to develop; however, have no funds. They would like the county to help with ideas to encourage development, incentives, etc. They also welcome the opportunity to sit together and discuss the future plans. The owners expressed an interest in obtaining help from economic development to locate commercial businesses. Existing businesses expressed they should not be required to pay for infrastructure again.

Sign Ordinance Amendment Discussion

Mr. Sandy stated this discussion would be deferred. He noted that a table was provided for the commission to review and contact staff with questions.

On a motion by Mr. Wells, seconded by Mr. Miller and unanimously carried the Planning Commission closed the work session.

NEW BUSINESS:

Voting & Conflicts of Interests Discussion

Mr. McMahon discussed the Conflict of Interest Act. The act states commission members are not allowed to participate when there is a personal interest in the transaction. Personal interest means a financial benefit or liability that accrues to the member or immediate family member or someone residing in their residence. Interest can be business interest (employee, owner, investor). If a conflict of interest is identified the member should not participate in conversation or vote on the request. The member must abstain publicly or privately. When abstaining from the vote the member needs to specifically state why he/she is abstaining. It is acceptable to participate in transactions when the member is one of many within a group. It is still required that the member state he/she is affected but can make an unbiased decision because he/she is only one of many people affected. It is also acceptable to abstain if a meeting is missed and the member is not informed on the topic up for vote.

LIAISON REPORTS:

Board of Supervisors

Ms. Biggs stated there was a work session on the budget; however, a tax rate could not be agreed upon. The budget includes a tax increase of 4 cents given the reassessment with 2 cents proposed to go toward school construction. There are a lot of public safety and education needs. The State continues to push down unfunded mandates. She expressed her appreciation for the dedication of staff and commission members.

Agriculture & Forestal District

No report.

Blacksburg Planning Commission

No Report

Christiansburg Planning Commission

Mr. Rice stated the planning commission voted approval of the Ivy Ridge subdivision near the county line on Route 114.

Economic Development Committee

No Report

Public Service Authority

Mr. Wells stated the PSA discussed the waterline being installed to the Brabham development at Exit 128 has been delayed due to environmental issues.

Parks & Recreation

No report.

Radford Planning Commission

No report.

School Board

No report.

Transportation Safety Committee

No report.

Planning Director's Report

Mr. Sandy discussed the Planning Commission training event held by the NRV Planning District Commission on April 27th. Please let staff know by April 13th if you are interested in attending.

There being no further business, the meeting was adjourned at 9:35 pm.

Appendix A. Revised Comprehensive Plan Text with strikethrough and underline

Montgomery County 2025—Adopted 12 October 2004

Planning & Land Use

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Looking across US 460 towards Virginia Tech. Photo by Bill Edmonds

Planning & Land Use: Executive Summary

The Planning and Land Use chapter covers three main goals: 1) balanced growth, including a description of the policy areas and land use policies; 2) policies for new development; 3) policies for community design.

The Future Policy Map incorporates the following:

- Blacksburg and Christiansburg will continue to accommodate two-thirds of the County's growth;
- Urban Expansion Areas and Villages/Village Expansion Areas have the potential to accommodate the remaining one-third of the County's growth;
- Designated Urban Development Areas are sufficient to accommodate the next 10-20 years of growth for the Unincorporated Areas of the County
- Eighty percent (80%) or more of the growth in the Unincorporated Areas is targeted for the Urban Development Areas, Urban Expansion Areas, the Villages and Village Expansion Areas, and the Residential Transition Areas; and
- Twenty percent (20%) or less of the growth in the Unincorporated Areas is targeted for the Rural Communities, Rural Areas, and Resource Stewardship Areas.

Above: Big Spring Mill, Elliston, 2004. North Fork Valley, 2004. Photos by Chris Valluzzo.

COMMUNITY SURVEY RESULTS

Of the three land use issues, "using the zoning ordinance to guide growth or protect property values" had the highest mean score (4.20), with 81% rating the issue as either important (22%) or very important (59%). Not surprisingly, 63% of participants who owned their own home ranked the "zoning" issue as very important, while only 38% of those who rent felt the same way. Residents in the unincorporated areas were only slightly less likely to rate "zoning" as very important (57%) than were residents in either of the two towns (62% for Blacksburg and 63% for Christiansburg). As with other issues on the survey, support for "zoning" increased based on the participant's age, 51% of participants age 25-34, 60% of participants age 35-49, and 69% of participants age 50-65 ranked "zoning" as very important. Support among participants 65 and older was lower (56%) than the previous two age groups, but higher than those under the age of 34. Overall, only 5% of participants rated the issue as either unimportant or minimally important.

In their comments, participants focused on the need for zoning enforcement and consistency, controlling growth, protecting the environment, protecting neighborhoods, and protecting the historical infrastructure. Some of the participants focused on the county's need to provide "zoning protection for historic preservation and natural environment (streams, forests, farmland, etc.) conservation" and to provide zoning protection and tax incentives in order to "encourage productive use/ renovation of existing buildings, especially those of historic value." Others saw zoning as a way to "reduce overcrowding in schools," "discourage sprawling subdivisions," and "enhance existing neighborhoods." Participants were split, however, on the issue of using the zoning ordinance to separate uses. While several participants felt that residential, commercial, and industrial uses should be separated, others felt that the county should encourage the development of mixed-use neighborhoods and developments.

The issue of "sprawl or unplanned growth" was a close second behind zoning, with a mean score of 4.07.

Of the citizens who participated in the community survey, 76% felt the issue "sprawl or unplanned growth" was either important (17%) or very important (59%). Only 7% of participants ranked it as either not important or minimally important. Concern about sprawl or unplanned growth was strongest among participants from civic (60%), religious (75%), and government (75%) organizations, and weakest among respondents from commercial and realty organizations (31%). Finally, concern over sprawl or unplanned growth was stronger in Blacksburg, where 68% rated the issue as "very important" than in either Christiansburg (56%) or the unincorporated areas of Montgomery County (56%).

While a few of the participants wrote of the extremes of either allowing unfettered growth or stopping growth altogether, far more commented on the need to limit, focus, concentrate, or, in some fashion, control commercial and residential growth. Their suggestions included "limiting the amount of land that can be developed with a specific time period," "encouraging higher concentrations," "revising [the] taxation structure and rates to discourage sprawl," and "providing incentives to concentrate residential development." In addition, a number of participants provided specific suggestions on areas where they felt growth and development were most and least appropriate. By in large, participants felt that growth should be concentrated in Blacksburg and Christiansburg and limited in rural areas, including the land bordering the Little River. As with other issues, participants came to differing conclusions: one participant supported apartments and duplexes near the New River Valley Mall, while another wrote that:

"Look at the impact of more residences at roads that are already maxed out (Rt. 114). Some county roads (Peppers Ferry Rt. 114) are already. This has not been done and more building is planned for Rt. 114."

Of the three land use issues, "concentrating growth where utilities are already provided" garnered the least support (mean score of 3.46), although 56% still rated the issue as either important (31%) or very important (26%). Support for the issue (ranked as either important or very important) was strongest among those ages 35-49 and 50-65 (59% for each), and lowest among those ages 24-34 (47%). Among other groups, support for the issue was reasonably even, regardless of gender, location of residence, organizational ties, or previous participation. One noticeable variation in support occurred between those participants living in single-family stickbuilt residences versus those living in manufactured or modular residences. Of participants living in stickbuilt residences, 57% ranked the issue as either important or very important, while only 44% of those living in manufactured or modular housing gave it the same rankings.

In their written comments, participants drew the connection between limiting growth to areas where utilities were already provided and using utilities to "direct growth to appropriate areas." One chided the county for "subsidizing development" through the provision of utilities "outside the areas near the towns." Others, however, had a more expansive view of the connection between infrastructure and growth, by including transportation, schools, and other public facilities. As one participant wrote:

"Before development is allowed in an area look at future needs for schools, rescue & fire and police. Will the development cover the cost of building new schools, rescue & fire departments & increase size of police department including additional need for courts, etc."

Participants planning-related comments, however, were not limited to the three planning issues included in the community survey. Planning-related issues generated 634 written comments, covering subjects as diverse as the need for greater public involvement to the need to increase ADA accessible residential development, including:

- Increased cooperation between jurisdictions;
- Increased public/private cooperation;
- Commercial and industrial development;
- Environmental concerns; the connection between planning and human services;
- Sustainability;
- Compact and cluster development;
- Revitalization and preservation;
- Development in villages;

- Stricter codes (not just for zoning) and regulations; and
- Overall quality of planning in Montgomery County.

Participants felt strongly about the need for public involvement and for the need to be careful in “amending the comprehensive plan” while remaining both flexible and innovative.

CURRENT AND HISTORIC TRENDS AND CONDITIONS

Planning Ordinances:

In the years since the last comprehensive plan was adopted in 1990, much has changed in Montgomery County, including the major revisions of the subdivision ordinance in 1993 and the zoning ordinance in 1999.

The revised subdivision ordinance allowed the County to track minor and family subdivisions through a process of plat approval, eliminated many loopholes, and added a variance procedure.

The new zoning ordinance, adopted in December of 1999, introduced the County to sliding scale zoning and eliminated large-scale, “by right” residential development, on lots as small as 1/2 acre, in the agricultural zone. The sliding scale specified the number of lots that could be created by right, based on the acreage of the original (parent) parcel. The revised zoning ordinance provided the tools to allow the County to take a more proactive approach to planning.

Special Plans:

In addition to the passage of two significant ordinances, Montgomery County also took on a number of area and subject-specific plans, including the 1990 Bikeway Walkway Plan, included as an addendum to the comprehensive plan, the Rt. 177 Corridor Plan, and a Regional Approach to Telecommunications Towers plan. These three plans are incorporated into Montgomery County, 2025.

Urban Development Areas:

In 2007, the General Assembly added Section 15.2-222.1 to the Code of Virginia requiring high growth localities to designate Urban Development Areas in their comprehensive plans by July 1, 2011 (counties) and July 1, 2012 (cities and towns). Designated Urban Development Areas (“UDA”) are to be areas of reasonably compact development that can accommodate 10 to 20 years of projected growth. In 2010, the legislation was amended to establish density and design criteria for UDAs, and to improve the coordination between transportation and land use.

The UDA legislation defines high growth localities as having either a population of at least 20,000 and a 5% growth rate, or a growth rate of 15% or more, between the most recent decennial censuses (§15.2-222.1 B). According to data currently available from the U.S. Census Bureau, Montgomery County grew from 83,639 in 2000 to approximately 94,392 in 2010, representing a growth rate of 12.9%. Based on the growth rates and population thresholds outlined in the legislation, Montgomery County is therefore required to amend their Comprehensive Plan to incorporate at least one Urban Development Area that will allow for development at a density of at least four single-family residences, six townhouses, or 12 apartments, condominium units, or cooperative units per developable acre, and a floor area ratio of at least 0.4 per acre for commercial development, or any proportional combination thereof.

Existing Land Use (1)

As the Existing Land Use Map indicates, single-family residential development (yellow) is slowly beginning to claim much of the road frontage in the rural portions of Montgomery County, while leaving the

more remote land undeveloped. While there are significant areas of contiguous open space, in the form of agricultural and wooded areas throughout the County (green), development along the roadways creates the perception that open space is being significantly diminished. In some cases, that perception is true, most notably in the suburbanized areas adjacent to Blacksburg and Christiansburg; in the Childress area west of Riner, flanking Peppers Ferry Road (Rt. 114) and Prices Ford Road; and along portions of Riner Road (Rt. 8) and Radford Road (U.S. Rt. 11). There are also significant rural lands under federal (Jefferson National Forest), state (Virginia Tech, Selu Conservancy, Pedlar Hills Natural Area Preserve), religious, and charitable (Nature Conservancy, Camp Ala Mons, Izaak Walton League) ownership.

POPULATION, LAND USE, AND THE FUTURE POLICY MAP

Population projections form the basis for most current and future planning decisions. From a public sector perspective, the current and anticipated population of a county determines the public facilities and services a county will need to provide. From a private sector perspective, the current and anticipated population of a county determines land use changes (residential, commercial and industrial) that a county will need to accommodate.

The purpose of this chapter is to provide information and analysis concerning growth trends in Montgomery County. A population planning range for the year 2030 has been developed. This population planning range, in turn, has been used as a guide in developing a future policy map for land use.

Population: Historic Trends

The first US Census in 1790 found Montgomery County with a total population of 13,228. By the year 1900, the County's population had only risen to 15,852. Between 1900 and 1960 the County's population slowly doubled to 32,923. From 1960 to the present, Montgomery County experienced 20 years of rapid population growth followed by 20 years of steady population growth. The rapid growth from 1960-1980 saw a population increase of 30,000+ persons. During this time period County growth rates greatly exceeded the state growth rates. The steady growth period from 1980-2000 saw a smaller population increase of 20,000+ persons. During this time period County growth rates were similar to state growth rates. The most recent US Census in 2000 found a County population of 83,639.

Regional and Local Trends

In absolute numbers, the population increase in Montgomery County has consistently exceeded those of all surrounding jurisdictions. Montgomery County increases of 10,000+ persons (1980-1990) followed by 9,000+ persons (1990-2000) exceeded Roanoke County increases of 6,000+ persons (1980-1990) and 6,000+ persons (1990-2000).

Moreover, population increases in Montgomery County have been distributed across the county. The towns of Blacksburg and Christiansburg and the unincorporated portion of the County have experienced similar rates of population growth. As a result, approximately 2/3rds of the County's total population has consistently been located within the two towns of Blacksburg and Christiansburg, while the remaining 1/3rd has been located in the unincorporated area of the County.

Population Forecasts

Several population forecasts for Montgomery County were developed in order to provide a population planning range for the unincorporated area of Montgomery County for the year 2030. Each population projection is based on different assumptions and arrives at a different population total. Used together, the three projections provide the population planning range that is then used as a guide in developing a future policy map for land use.

Population Projections based on Virginia Employment Commission (VEC) Growth Rates:

The first set of projections are based on data from the Virginia Employment Commission (VEC), a state agency. The VEC regularly develops population projections for each city and county throughout the state. These projections are then used by other state agencies for planning purposes. Currently available VEC population projections (May, 2003) were used for Montgomery County. Projections are 90,800 for 2010, 97,900 for 2020 and 105,000 for 2030. These VEC projections yield the following average annual growth rates for Montgomery County as a whole:

2000-2010 0.86%
2010-2020 0.78%
2020-2030 0.73%

Applying the VEC growth rates for Montgomery County as a whole to Blacksburg, Christiansburg and the unincorporated area of Montgomery County produce the following population projections:

Population Projections based on Blacksburg Growth Rates:

The second set of projections is based on the Blacksburg 2046 Comprehensive Plan (BCP) adopted by the Blacksburg Town Council in November 2001. The BCP developed town population projections to the year 2046. Projections were 46,750 in 2010, 49,680 in 2020, and 52,700 in 2030.

The BCP assumes that Virginia Tech will add an additional 5,000 graduate students between the years 2001 and 2010 slowly increasing enrollment to 30,783 by 2010 and thereafter remaining at this enrollment level. It assumes that town population growth from 2000 to 2010 will grow largely due to enrollment increases at Virginia Tech. The nonstudent population will grow at a moderate rate for this period of time. After 2010 population projections in the Town are solely attributed to nonstudent residential growth based on the expansion and success of the Corporate Research Center, Industrial Park, and improved interstate access. The Town population will continue to grow at an increasingly slower rate until population growth levels off to about 5% per decade by 2046. It also assumes that the percentage of total student enrollment living in Blacksburg (on- and off-campus) will stay consistent with 1990-2000 statistics when 95% of total enrollment lived within town boundaries.

The BCP projections yield the following average annual growth rates for the Town.:

2000-2010 1.81%
2010-2020 0.63%
2020-2030 0.61%

Applying the BCP growth rates to Christiansburg and the unincorporated area of Montgomery County, in addition to Blacksburg, produce the following population projections:

Population Projections based on 1980-2000 Growth Trend:

The final set of projections is based on a continuation of the steady growth trend exhibited by Montgomery County during the 1980-2000 time period. Each decade during this period saw a population increase for the county of approximately 10,000 persons. A continuation of this trend would result in population projections of 93,600 in 2010, 103,600 in 2020, and 113,600 in 2030. These projections yield the following average annual growth rates for Montgomery County as a whole:

2000-2010 1.19%
2010-2020 1.07%
2020-2030 0.97%

Applying these growth rates for Montgomery County as a whole to Blacksburg, Christiansburg, and the unincorporated area of Montgomery County produces the following population projections.

Summary of Population Projections

Three population projections were developed for Montgomery County to the year 2030. Each is based on differing growth assumptions. They yield a population planning range of 105,000-113,600 for Montgomery County as a whole and 34,000-36,850 for the unincorporated area of the county. They assume that the growth rate of the unincorporated area will be the same as the county as a whole. Therefore, approximately 1/3rd of the County's total population will continue to be located in the unincorporated area and approximately 2/3rd's will continue to be located in the two towns of Blacksburg and Christiansburg.

Projected Residential Land Use Need

The population planning range previously developed for the unincorporated area of the county yields an increase of 6,900 to 9,750 persons over the 30 year time period, 2000- 2030.

To convert this increase in population into an increase in housing units necessitates an assumption be made regarding the number of persons per household. On a national basis the number of persons per household has been slowly declining. From 1990 to 2000 the US Census showed the number of persons per household (average household size) decreasing from 2.63 to 2.59. This trend is reflected in Montgomery County. From 1990 to 2000 the US Census showed the number of persons per household in the unincorporated area of Montgomery County decreased from 2.6 to 2.5. For planning purposes, a continuation of this trend will be assumed with a lower figure of 2.3 persons per household used for the year 2030.

Based on this assumption, the increase of 6,900 to 9,750 persons yields an increase of 3,000 to 4,200 dwelling units over the time period 2000 to 2030 calculated as follows:

Low population projection (Virginia Employment Commission growth rates) for the unincorporated area:

- 2030 population projection = 34,000, 2000 population = 27,109
- $34,000 (2030) - 27,109 (2000) = 6,900$ person increase 2000-2030
- $6,900 \text{ persons} / 2.3 \text{ persons per household} = 3,000$ dwelling units

Middle population projection (Blacksburg Comprehensive Plan growth rates) for the unincorporated area:

- 2030 population projection = 36,100, 2000 population = 27,109
- $36,100 (2030) - 27,109 (2000) = 9,000$ person increase 2000-2030
- $9,000 \text{ persons} / 2.3 \text{ persons per household} = 3,900$ dwelling units

High population projection (1980-2000 Growth Trend) for the unincorporated area:

- 2030 population projection = 36,850, 2000 population = 27,109
- $36,850 (2030) - 27,109 (2000) = 9,750$ person increase 2000-2030
- $9,750 \text{ persons} / 2.3 \text{ persons per household} = 4,200$ dwelling units

Projected Residential Land Use Need: Summary

The Comprehensive Plan proposes that the majority of the need for residential land uses in the unincorporated area of Montgomery County be met from three land use policy areas: 1) Urban Expansion Areas, 2) Villages, and 3) Village Expansion Areas.

The identified needs for residential land uses to the year 2030 can be met through the development of properties within the Urban Expansion Areas around Blacksburg, Christiansburg and Radford and within the six Village/Village Expansion Areas of Belview, Elliston/Lafayette, Plum Creek, Prices Fork, Riner, and Shawsville.

In particular, a range of 3,000-4,200 dwelling units is needed in the unincorporated area of Montgomery County to the year 2030. The designated Urban Expansion Areas and Village/Village Expansion Areas can

accommodate 11,600 dwelling units at full development.

Population Projections and calculations to address the Urban Development Area Legislation

The state mandated Urban Development Area legislation requires that the designated urban development area “shall be sufficient to meet projected residential and commercial growth in the locality for an ensuing period of at least 10 but not more than 20 years” and specifies that “future residential and commercial growth shall be based on official estimates of the Weldon Cooper Center for Public Service of the University of Virginia or official projections of the Virginia Employment Commission or the United States Bureau of the Census.” The legislation further encourages consultation and cooperation with adjacent localities to establish the appropriate size and location of urban development areas to promote orderly and efficient development of their region and states that “if a town has established an urban development area within its corporate boundaries, the county within which the town is located shall not include the town’s projected population and commercial growth when initially determining or reexamining the size and boundary of any other urban development area within the county.”

Because the County’s population figures typically include the Town of Blacksburg and the Town of Christiansburg, each jurisdiction was analyzed separately to determine compliance with the legislation. Based on 2000-2010 census data, both the Town of Christiansburg and the Town of Blacksburg qualify for UDAs. As per requirements in the legislation, the UDA capacity calculation for the County could not include either the populations of Blacksburg or Christiansburg (since they are required to adopt their own UDAs). In addition, none of the official sources cited in the legislation address population growth projections for towns.

The VEC State Demographer Projections for Montgomery County will not be available from VEC until December 2011, following the release of the 2010 Census figures. Therefore, for the purposes of establishing County and Town 10 and 20 year projections, the most recent available VEC data was used to establish an Average Annual Growth Rate that was used to estimate future population. Average annual average growth rates were calculated by Renaissance as 0.58% for the 2010 - 2020 period and 0.65% for the 2020 - 2030 period. The 2020 and 2030 projections for Montgomery County shown for UDA capacity have been calculated by applying these growth rates to the latest 2010 US Census base year population for each locality, and are presented in Table 1. Note that the 10-20 year projected growth includes only the projected population for the unincorporated areas of Montgomery County, excluding Blacksburg and Christiansburg, (see Table 2). The tables on the following pages describe the calculations used to establish the required UDA capacity for Montgomery County as required by the legislation:

- Table 1 summarizes the population estimates based on average annual growth rates derived from the latest VEC projections.
- Table 2 summarizes the population projections for the unincorporated areas of the county, which are considered for UDA designation.

Table 1. Population Estimates and Forecasts

Table 1 – Population Projections ¹						VEC AAGR ²	
Locality	1990	2000	2010	2020	2030	2010-2020	2020-2030
Montgomery County VEC	73,213	83,629	91,363	96,782	103,244	0.58%	0.65%

Projections							
Montgomery County Census 2010 Revised Total	23,913	83,629	91,392	99,991	106,667	-	-
Blacksburg 2010 Revised Total	31,933	39,573	43,620	45,148	48,162	-	-
Christiansburg 2010 Revised Total	15,302	16,947	21,044	22,289	23,777	-	-
Unincorporated 2010 Revised Total	23,589	27,109	30,731	32,554	34,727	-	-

* VTC's State Demographer Projections have not yet been updated following the release of the 2010 Census figures. Average Annual Growth Rates were derived based on the 2010 Census Data and currently available MDC projections (as of 2/25/14). Annual average growth rates are 0.58% for the 2010-2020 period and .65% for the 2020-2030 period. The 2020 and 2030 projections shown above for UDA have been calculated by applying these rates to the latest 2010 US Census base year of 91,392.

** Both towns in Montgomery are now required to do UDA based on the percent change in population from 2000-2010. Previously only Blacksburg was required to do UDA based on the percent change in population from 1990-2000. All calculations for County UDA Areas reflect only on the unincorporated portions of the County.

Table 2. Population Projections for Unincorporated Areas of Montgomery County

Locality	1990	2000	2010	2020	2030
Montgomery County Unincorporated	23,589	27,109	30,731	32,554	34,727

The state code requires that the UDA be a contiguous geographic area that is a selected and contiguous area for the next 10 to 20 years. As a whole, the county is expected to add approximately 3,700 people during the next 10 years, and 12,273 people during the next 20 years. Of the Unincorporated Areas, the projected growth is 1,823 people during the next 10 years and approximately 4,904 people during the next 20 years. This growth will result in an increase of 39% to 1,385 new housing units and 109,165 to 140,000 square feet of commercial and industrial development.

Urban Development Areas

Montgomery County's vision for the Urban Development Areas is one of connected, self-sustaining communities that offer a mix of residential, commercial, and employment uses; a full complement of public services and facilities; amenities that support a high quality of life; and design that complements the County's surrounding rural area, incorporating cluster development, conservation design and/or Traditional Neighborhood Design. The County, in collaboration with other governmental agencies and the private sector, is committed to ensuring that all public spaces in residential and commercial areas within the Urban Development Areas become increasingly pedestrian friendly through a variety of measures. These measures may include the construction, improvement, and maintenance of public squares, parks and pedestrian

connections, and the attention to street design details such as landscaping, lighting, and provision of attractive street furniture. Residential, office, civic and commercial areas in the Urban Development Area should have convenient access by foot, bicycle, and transit.

Growth will be directed toward the Urban Development Areas through a variety of incentives. Such incentives may include but not be limited to density bonuses, reduced application fees, fast track permitting, and plan review. Targeted public investments in amenities such as street lighting, landscaping, street furniture, sidewalks and trails may be focused in UDA areas to attract and augment private investment and to support community design in keeping with the traditional design principles outlined in the UDA legislation. Additionally, public investment in utilities and capital facilities may be focused in UDA areas as appropriate to promote compact development and to encourage, attract and leverage private investments. Offering such incentives only or primarily within Urban Development Areas increases the likelihood that these areas will be the focal point for future growth and help the County to meet established goals of reducing public costs and improving service delivery while accommodating population growth in a planned manner. Land Use Policies governing Urban Development Areas are found under PLU 1.9.

Urban Expansion Areas:

Urban Expansion Areas are the preferred location for new residential and nonresidential development occurring in unincorporated areas of Montgomery County. These areas will accommodate a full range of residential unit types and densities. These are areas adjacent to Blacksburg, Christiansburg and Radford and are intended to be natural expansion areas for uses occurring within town and city boundaries. Transportation improvements within Urban Expansion Areas will be designed to tie into the existing street network serving the City and the towns and development in these areas will be compatible with and complimentary to development within corporate limits. Land Use Policies governing Urban Expansion Areas are found under PLU 1.8.

Villages:

Villages should be predominately residential but may include a “downtown” area of business, commercial and institutional uses at densities higher than found in surrounding rural areas. Villages are larger rural communities where limited mixed-use development activity has historically occurred and public utilities are available. They are separate and distinct from each other and from nearby towns. Villages have served as and will continue to serve as focal point for surrounding rural areas. Land Use Policies governing Villages are found under PLU 1.7.

Village Expansion Areas:

Village Expansion Areas are intended to provide an alternative to scattered rural residential development and to provide an opportunity to enhance the vitality of existing villages by providing for compatible expansions of residential and employment uses. Village Expansion Areas are adjacent to existing villages where appropriate new development can be accommodated while retaining the viability and character of the historic village core. These are natural expansion areas for the Villages that may potentially be served by future public sewer and water extensions. Development in Village Expansion Areas should be designed to tie into the existing street network serving the village it is adjacent to and to complement and augment the historic character and development pattern of the existing village. A mix of appropriately scaled residential, non residential and community uses are anticipated in Village Expansion Areas. Using the Future Policy Map, each Urban Expansion Area and each Village/Village Expansion Area was evaluated to determine its future capacity for residential development. Both the approximate amounts of undeveloped acreage and undeveloped lots were determined.

Undeveloped acreage included larger parcels that have not been developed to date, that are not restricted

by steep slopes, and that are not in preferred locations for commercial or industrial development. It should be noted that the three Urban Expansion Areas were not evaluated for future residential development because of their potential for primarily commercial and/or industrial development: Falling Branch Urban Expansion Area (Parkway Drive), Christiansburg Industrial Park Urban Expansion Area (Houchins Road), and Bypass East Urban Expansion Area (Peppers Ferry Road Extension). Undeveloped lots included small parcels that have been subdivided but not developed to date and parcels that have been zoned for future residential development. Examples include Warm Hearth Retirement Community (Mabry Lane) and the Greear Planned Unit Development (Riner). Land Use Policies governing Village Expansion Areas are found under PLU 1.6.

Residential Transition Areas

Residential Transition Areas are stable, low-density residential neighborhoods in close proximity to Municipalities and Urban Expansion Areas or areas of higher density residential development outside of Village/Village Expansion Areas or Rural Communities such as major subdivisions, mobile home parks, and residentially zoned land. Land Use Policies governing Residential Transition Areas are found under PLU 1.5.

Rural Communities

Rural communities are small-scale, stable rural residential communities of local historical significance. They have specific place names, are often located at crossroads, and have traditionally functioned as community focal points. The existing development pattern in these areas should be preserved. Land Use Policies governing Rural Communities are found under PLU 1.4.

Rural Areas:

Rural Areas include areas not generally served by public utilities, where agricultural and rural residential uses are predominant, and should be preserved and stabilized. Land Use Policies governing Rural Areas are found under PLU 1.3.

Resource Stewardship Areas:

Resource Stewardship Areas are rural areas with high resource value based on soil types, environmental sensitivity, or other unique land characteristics. These areas also include land that is preserved from future development through public or private conservation efforts. Land Use Policies governing Resource Stewardship Areas are found under PLU 1.2.

FUTURE LAND USE SUMMARY

The primary land use goal in this Comprehensive Plan is for "focused growth." This goal directly reflects the comments and recommendations from many participants in the community survey. It necessitates a proactive approach by the County to maintain a balance between urban and rural areas by planning for orderly growth to occur in areas with adequate resources and services to support growth.

Building on the comments and recommendations from the community survey, the concepts described by "focused growth" were actively debated by several of the citizen working groups as they developed specific goals and strategies. In particular, the Government & Planning Working Group discussed and developed the idea of distinct villages in the county, each with its own historic core, character and community focus, and with the basic public utilities and facilities to support future growth. Government & Planning also discussed urban expansion areas as a land use designation to address the inevitable growth outward from Blacksburg, Christiansburg and Radford. Similarly, the Environment Working Group discussed and developed the concept of a stewardship approach for natural resources that would benefit both current landowners and future generations.

The next step in the process was taken by Herd Planning & Design. The planning consultant considered the comments and recommendations and concepts that had been developed to date and shaped a specific set of future policy area designations for Montgomery County. The Herd report also called for development of a

countywide natural resource overlay map indicating critical, sensitive and special resources. These features are shown on the Critical Features Map. (2)

As a final step, the policy area designations were applied to the population and land use projections to yield the Future Policy Map. The Future Policy Map for land use identifies distinct urban and rural areas, while providing sufficient land to accommodate the expected demand for new housing and commercial and industrial development. New urban development is expected and encouraged to occur in areas of the County where adequate roads, utilities, and public facilities (schools, parks, etc.) are available, planned, or may be logically extended or enhanced to support higher density development. These areas generally include undeveloped properties and infill properties around Blacksburg, Christiansburg, Radford, and the larger Villages.

The Future Policy Map incorporates several important assumptions and targets regarding future development. They are summarized below:

1. Blacksburg and Christiansburg will continue to accommodate 2/3rd's of the Future Development within Montgomery County.

It is assumed that the future growth rate for the unincorporated areas for Montgomery County will approximate the future growth rate for the two towns of Blacksburg and Christiansburg. Therefore, approximately 1/3rd of Montgomery County's future residential development will continue to be accommodated in the unincorporated areas while the remaining 2/3rd's will continue to be accommodated in the two towns.

2. Urban Development Areas, Urban Expansion Areas and Village/Village Expansion Areas have the potential to accommodate the 1/3rd of Future Development within Montgomery County that is anticipated to occur in the Unincorporated Areas:

Urban Expansion Areas, including the designated Urban Development Areas, adjacent to Blacksburg, Christiansburg, and Radford are planned for a broad range and mix of uses at urban development densities and intensities. These areas are served by or planned for central sewer and water service and will provide natural expansion areas for uses occurring within town and city boundaries. Accordingly, the County will need to work closely with respective municipalities on the planning and development of these areas.

The six Village/Village Expansion Areas of Belview, Elliston/Lafayette, Plum Creek, Prices Fork, River, and Shawsville are also important to the County's future. They are separate and distinct from each other and from nearby towns. They serve as focal points for surrounding rural areas. With the extension of public utilities, the provision of public facilities, and the application of traditional development patterns, they can accommodate new development while retaining their vitality and historic character. Accordingly, the County will need to work jointly with the residents of each village/village expansion area to prepare a village plan to guide future development.

A projected range of 3,000-4,200 new dwelling units are needed in the unincorporated areas of Montgomery County to accommodate future development to the year 2030. The designated Urban Expansion Areas and Village/Village Expansion Areas have the potential to accommodate approximately 44,600 new dwelling units at full development.

3. Designated Urban Development Areas are sufficient to accommodate the next 10-20 years of growth for the Unincorporated Areas of the County

Urban Development Areas are designated areas within the Mid County and V/V Urban Expansion Areas adjacent to the Town of Blacksburg, the Town of Christiansburg and the City of Radford that are planned for compact, mixed use development at urban development densities and intensities. They are intended to serve as a focal point for growth over the next 10-20 years. Development within the UDA must be compact, using Traditional Neighborhood Design principles, and designed to accommodate pedestrian and vehicular traffic with a full complement of services and amenities. Development in the UDA should also provide for transit facilities or stops. Urban Development Areas are served by or planned for central sewer and water service, and transportation infrastructure.

A projected range of 792 to 1,738 new housing units and 109,365 to 240,000 square feet of commercial space (retail and office) are needed in the unincorporated areas of Montgomery County to accommodate future development to the year 2030. This translates to approximately 204 to 418 acres of land. The designated Urban Development Areas have the potential to accommodate approximately this projected development.

7.4. 80% or more of Future Development within the Unincorporated Areas is targeted for the Urban Development Areas, Urban Expansion Areas, Village/Village Expansion Areas, and Residential Transition Areas.

Urban Development Areas, Urban Expansion Areas and Village/Village Expansion Areas can be provided with the necessary infrastructure, such as utilities, roads, and public facilities, to accommodate future growth and development. Going forward, this will necessitate coordination and cooperation between county government, municipalities, residents, and land developers.

7.5. 20% or less of Future Development within the Unincorporated Areas is targeted for the Rural Communities, Rural Areas, and Resource Stewardship Areas.

Rural Communities and their surrounding Rural Areas have the potential to develop and evolve into the next generation of Villages. However, this progression is limited in the near term by their smaller size and their lack of public utilities and facilities.

The preferred uses for Resource Stewardship Areas are a continuation of agriculture, forest uses, outdoor recreational uses, and other natural resource based uses. This continuation can only be successful if most development is successfully accommodated elsewhere.

The County has significant natural features that present constraints to development but that also offer opportunities to develop a system of open space and scenic resources throughout the County. These are shown on the Critical Features Map that can be used in conjunction with land use policies to evaluate development applications.

Planning and Land Use: Introduction

Photo by Chris Valluzzo

Photo by Chris Valluzzo

West of Shawsville. Photo by Chris Valluzzo

Riner Historic District, Riner, Virginia. Photo by staff.

1. Additional planning information, including discussions of rezonings, special use permits, zoning variances and appeals, and building permits, is included in the Planning and Government chapter, immediately following this chapter. There are two Planning related chapters in this Plan: one which relates to Land Use Policies and one which relates to the process of Planning, including public information, public involvement, and local and regional cooperation.

Riner Historic District, Riner, Virginia. Photo by staff.

Alleghany Springs Road. Photo by C. Valluzzo.

Yellow Sulphur Springs. Photo by C. Valluzzo

Cross References and Notes:

2. Please see "Land Use Policies/Designations," Herd Planning & Design, 2005. The report is available, upon request, from the Montgomery County Planning Department.

Planning & Land Use Policies

PLU Goal 1.0 Balanced Growth: The County will maintain a balance between urban and rural areas by planning for orderly growth to occur in areas with adequate resources and services to support growth.

PLU 1.1 Planning Policy Areas: Establish boundaries for distinct urban and rural planning policy areas and identify preferred development patterns for each planning area to (i) promote growth where it can be supported by infrastructure improvements; (ii) maintain existing community character; and (iii) preserve agriculture, forestry, and related uses where most appropriate based on natural resources and where existing development and land use patterns support the continuation of these uses.

PLU 1.1.1 Policy Area Designations: Develop a policy for the periodic consideration by the county of landowner requests to change policy area designations in the Comprehensive Plan.

PLU 1.2 Resource Stewardship Areas: Resource Stewardship Areas are generally defined as rural areas of the County that have high resource value based on soil types, or that are environmentally sensitive due to topography or unique land characteristics. These areas include national forest land, state lands, private preserves, undeveloped prime agricultural soils and soils of local importance, agricultural and forestal districts, land that is subject to private conservation easements and conservation zoning and areas of predominantly 25% slope or greater. This planning policy area is the least densely developed of all of the planning areas and includes many largely undeveloped areas of the County. (3)

PLU 1.2.1 Resource Stewardship Area Land Uses:

- a. The preferred land uses for Resource Stewardship Areas include agriculture, forest uses, outdoor recreational uses, other natural resource based uses and accessory uses directly related to the support of the preferred land uses.
- b. Low-density residential development will be permitted, but not encouraged, as a secondary use in Resource Stewardship Areas.
- c. Private and public conservation efforts and farmland retention programs, such as agricultural and forestal districts, should be focused in Resource Stewardship Areas. (4)
- d. Non-residential uses, except those incidental to and supportive of agriculture, forest, outdoor recreational or other preferred land uses, will be discouraged in Resource Stewardship Areas.
- e. Rezoning to allow higher intensity uses in Resource Stewardship Areas will be discouraged.
- f. The County may permit new non-agriculturally related institutional uses by special use permit provided the use is compatible in scale and intensity with agricultural and rural residential uses, poses no threat to public health, safety and welfare, and if the use helps preserve farmland, open space or historic, scenic or natural resources.

PLU 1.2.2 Resource Stewardship Area Community Design:

- a. Development densities in Resource Stewardship Areas are based on a sliding scale approach and range from .05 to 1.0 dwelling units per acre. (5)
- b. New residential development proposed in Resource Stewardship Areas should be clustered, or exhibit other conservation design principles, to preserve on-site natural, cultural, historic, scenic, open space or environmental resources. (6)
- c. The County will vigorously support "Right to Farm" policies in Resource Stewardship Areas to protect existing farms and farmers from nuisance complaints from neighboring

rural residents. Plans for new residential lots located in the Resource Stewardship Area shall disclose that the preferred land use in the immediate vicinity of the new lot is agriculture, forestry, and related uses. (7)

PLU 1.2.3 Resource Stewardship Area Community Facilities and Utilities:

- a. Future sewer and water service extensions to Resource Stewardship Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (8)
- b. With the exception of public parks and outdoor recreation facilities, Resource Stewardship Areas will not be a preferred location for new community facilities.
- c. Transportation access and improvements in Resource Stewardship Areas will be limited to what is necessary to serve very low-density development. New rural residential subdivisions should be served by internal streets that connect to existing rural roads to avoid strip development and to minimize individual driveway access along existing public roads.
- d. The use of private roads will generally be discouraged in Resource Stewardship Areas.

PLU 1.3 Rural Areas: Rural Areas are generally defined as areas of the County, not generally served by public utilities, where agricultural and rural residential uses are predominant and should be preserved and stabilized. These areas include low density rural residential subdivisions and active agriculture on secondary agricultural soils. Agricultural uses in these areas are often fragmented and subject to encroaching rural residential development.

PLU 1.3.1 Rural Area Land Uses:

- a. The preferred land uses in Rural Areas are rural residential development and agriculture. Rather than promoting new rural residential development in Rural Areas, the County seeks to maintain the rural character of existing rural residential developments. The County also seeks to maintain existing agricultural uses in Rural Areas.
- b. The County will continue to promote farmland retention programs, such as agricultural and forestal districts, in Rural Areas. (9)
- c. New low-density rural residential development will be permitted, but not encouraged, in Rural Areas. Where such development does occur, the County will encourage compact or clustered development to preserve open space and natural resources. (10)
- d. Rezoning to allow higher intensity uses in Rural Areas will be discouraged. (11)
- e. New non-agriculturally based industrial and commercial uses will generally be discouraged in Rural Areas, unless the use is compatible in scale and intensity with agricultural and rural residential uses and poses no threat to public health, safety and welfare. (12)
- f. The County may permit new non-agriculturally related institutional uses by special exception provided the use is comparable in scale and intensity with agricultural and rural residential uses and poses no threat to public health, safety and welfare.

PLU 1.3.2. Rural Area Community Design:

- a. New development in Rural Areas shall not exceed 0.75 dwelling unit per acre.

- b. New residential development proposed in Rural Areas should be clustered, or exhibit other conservation design principles, to preserve on site natural, cultural, historic, scenic, open space or environmental resources. (13)

PLU 1.3.3. Rural Area Community Facilities and Utilities:

- a. Future sewer and water service extensions to Rural Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (14)
- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Rural Areas will not be a preferred location for new community facilities
- c. Transportation access is via existing collector highways. New rural residential subdivisions should be served by internal streets that connect to existing rural roads to avoid strip development and to minimize individual driveway access along existing collector highways. (15)
- d. The use of private roads will generally be discouraged in Rural Areas.

PLU 1.4 Rural Communities: Rural Communities are generally defined as scattered, small scale, stable rural residential communities of local historic significance. These communities, often located at crossroads, have specific place names and have traditionally functioned as community focal points. Some of these communities include areas zoned to higher residential categories than the surrounding the rural community. Some of these communities also have limited public sewer and/or water service. The existing development pattern in these areas should be preserved. (16)

PLU 1.4.1 Rural Communities Land Uses:

- a. The preferred land use in Rural Communities is residential infill in a traditional small lot pattern, consistent with existing residential development. (17)
- b. Small-scale, civic, institutional and employment uses may be permitted in rural communities in locations that enhance the compact nature of these communities, provided they do not pose a threat to public health, safety, or welfare, and provided they are compatible with adjacent land uses.
- c. Rezoning to allow higher intensity uses at the edge of Rural Communities will be discouraged. Rezoning may be considered for residential or non residential infill development that enhances the community fabric by augmenting the core of the Rural Community, provided the proposed development is compatible with adjacent uses and can be supported by existing or improved roads and planned or existing utilities.

PLU 1.4.2 Rural Communities Community Design:

- a. New residential development in Rural Communities should be predominately single family residential. Appropriate development densities in Rural Areas should be determined on a case by case basis, depending on existing zoning. In the case of a rezoning, the proposal must demonstrate that development densities will be of an intensity that is similar to or compatible with surrounding existing development.
- b. New development proposed in Rural Communities should be designed to relate to existing community elements and provide logical connections to existing streets, sidewalks and other features. Design elements should include a generally interconnected street network, defined open spaces that serve as exterior rooms, multiple uses within a single building, multiple uses adjacent to one another, building

fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on street parking, and parking lots and garages located behind buildings.

- c. New structures should be of a scale and type that are consistent with existing structures.
- d. New residential development proposed in Rural Communities should exhibit conservation design principles, to preserve on-site natural, cultural, historic, scenic, open space or environmental resources.

PLU 1.4.3 Rural Communities Community Facilities and Utilities:

- a. Future sewer and water service extensions to Rural Communities will be discouraged except to resolve existing public health threats or to interconnect existing individual systems. (18)
- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Rural Communities will not be a preferred location for new community facilities. However, the County does encourage the maintenance, enhancement and where appropriate, the expansion of existing community facilities that serve a regional need. (19)
- c. Transportation access is via existing collector highways. New development in Rural Communities will be designed to access existing roads. Road improvements may be necessary to ensure safe ingress and egress. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc. (20)

PLU 1.5. Residential Transition Areas: Residential Transition Areas are generally defined as stable, low density residential neighborhoods in close proximity to Municipalities and Urban Expansion or areas of higher density residential development outside of Villages, Village Expansion Areas, and Rural Communities, such as major subdivisions and mobile home parks. These areas include undeveloped land that has been previously zoned for residential development. There is limited public sewer and/or water service in some of these areas.

PLU 1.5.1 Residential Transition Area Land Uses:

- a. The predominant and preferred land use in Residential Transition areas is residential. The type of residential developments depends upon the location of the residential transition area and may include single family detached homes or manufactured home parks.
- b. The County anticipates residential development of infill properties in existing subdivisions and of undeveloped properties with existing residential zoning. Development on in-fill properties should be compatible with adjacent development in terms of scale and density and should provide a seamless transition from existing to new development. (21)
- c. The County should evaluate portions of the Residential Transition areas that have built out at development levels that are lower than what would be permitted by zoning to determine if there is any benefit to rezone these areas to be consistent with actual development.

PLU 1.5.2 Residential Transition Area Community Design:

- a. New development in Residential Transition Areas shall not exceed 1 dwelling unit per acre, with the exception of developments served by both public water and sewer.
- b. New development proposed in Residential Transition Areas should be clustered, or exhibit other conservation design principles to preserve on site natural, cultural, historic, scenic, open space, or environmental resources. (22)
- c. New development in Residential Transition Areas should be designed to be compatible with existing neighborhoods and subdivisions.

PLU 1.5.3 Residential Transition Area Facilities and Utilities: (23)

- a. Future sewer and water service extensions to Residential Transition Areas will be discouraged except to resolve existing public health threats or to interconnect existing individual systems or when provided by private developers
- b. With the exception of public parks, recreation facilities, and solid waste collection facilities, Residential Transition Areas will not be a preferred location for new community facilities. However, the County does encourage the maintenance, enhancement and where appropriate, the expansion of existing community facilities that serve a regional need.
- c. Transportation improvements in these areas will generally be limited to routine maintenance and enhancements needed to improve public safety. Countywide or regional transportation improvements that may affect Residential Transition Areas should be designed to minimize and/or mitigate potential negative impacts on these areas.

PLU 1.6 Village Expansion Areas: These are "areas of interest" associated with the designated Villages. These are natural expansion areas for the Villages that may potentially be served by future public sewer and water extensions. Preliminary boundaries should be set based on utility service areas, physical and natural features that define the "area of interest" and existing zoning. Local community planning efforts should determine final boundaries.

PLU 1.6.1 Village Expansion Areas Planning Process. The County will develop a planning process to work jointly with residents of each village and surrounding area to define a specific village expansion boundary and to prepare a village plan to guide future development. Upon completion, each village plan should be adopted as an amendment to the countywide Comprehensive Plan. (24)

PLU 1.6.2 Village and Village Expansion Zoning Amendments. Review and revise the Zoning Ordinance to create mixed use, "traditional neighborhood design" development options that will facilitate compact traditional design of new projects in Villages and Village Expansion areas. (25)

PLU 1.6.3 Village Expansion Area Land Use:

- a. Village Expansion Areas are intended to provide an alternative to scattered rural residential development and to provide an opportunity to enhance the vitality of existing villages by providing for compatible expansions of residential and employment uses. Village expansion areas are adjacent to existing villages where appropriate new development can be accommodated while retaining the viability and character of the historic village core.

- b. A mix of appropriately scaled residential, non-residential and community uses are anticipated in Village Expansion Areas.
- c. Specific land use recommendations will be developed as Village Plans and Village Expansion Area plans are developed and adopted.

PLU 1.6.4 Village Expansion Area Community Design:

- a. From an area wide or large scale project perspective, gross densities in Village Expansion Areas may range up to 2.0 dwelling units per acre.
- b. Compact development and a range of housing types are encouraged in Village Expansion Areas as long as new development is sensitive to existing village character and design. (26)
- c. Development in Village Expansion Areas should be designed to complement and augment the historic character and development pattern of the adjacent existing village by becoming a natural "extension" of the existing village. New development in the expansion areas should relate closely to the existing village and should be an "organic" continuation of the historic fabric of the village. Design element should include a generally interconnected street network, define open spaces that serve as "exterior rooms," multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on-street parking, and parking lots and garages located behind buildings.
- d. Development in Village Expansion Areas should be designed to preserve critical historic resources. (27)
- e. Development in Village Expansion Areas should be designed to preserve critical natural, open space, scenic landscape resources. (28)
- f. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc.

PLU 1.6.5 Village Expansion Area Facilities and Utilities:

- a. Extensions of sewer and water lines from existing villages into Village Expansion Areas will be permitted in accordance with the adopted Comprehensive Plan Amendment for each village. (29)
- b. Village Expansion Areas are a preferred location for public investments in community facilities. (30)
- c. Roads serving new development in Village Expansion Areas should be designed to tie into and enhance the existing street network serving the adjacent village. New roads and road improvements and should be designed to accommodate pedestrians as well as motor vehicles, rather than allowing motor vehicles to cause and unsafe and unpleasant pedestrian environment. (31)

PLU 1.7. Villages: These are larger rural communities where limited mixed use development activity has historically occurred and public utilities are available. They are separate and distinct from each other and from nearby towns. Villages usually have a higher density, identifiable core that includes a

mix of residential, business, industrial, and institutional use in a traditional development pattern. Villages have served as, and will continue to serve as, focal points for surrounding rural areas. (32) These include: Belview, Elliston, Lafayette, Plum Creek, Prices Fork, Riner and Shawsville. (33)

PLU 1.7.1 Village Planning Process. The County will develop a planning process to work jointly with residents of each village and the surrounding area to define a specific village expansion boundary and to prepare a village plan to guide future development. Upon completion, each village plan should be adopted as an amendment to the countywide Comprehensive Plan. (34)

PLU 1.7.2 Village and Village Expansion Zoning Amendments. The County should review and revise the Zoning Ordinance to create mixed use, "traditional neighborhood" development options (35) that will facilitate compact traditional design of new projects in Villages and Village Expansion areas.

PLU 1.7.3 Village Area Land Use:

- a. Villages should be predominately residential but may include a "downtown" area of business, commercial and institutional uses at densities higher than found in surrounding rural areas. New small-scale business, commercial, and employment uses may be appropriate in villages provided they are small scale buildings with a pedestrian oriented street front.
- b. New small-scale industrial and employment uses may be appropriate in villages provided they are located adjacent to similar uses and are designed to minimize any negative impact on the existing village through limitations in scale, height, bulk and operations, as well as provision of buffers. (36)
- c. Specific land use recommendations will be developed as Village /Village Expansion Area Plans are developed and adopted. (37)

PLU 1.7.4 Village Area Community Design:

- a. The viability and historic character of existing villages shall be maintained by encouraging preservation of historic structures and preservation of the historic pattern of developed and undeveloped areas that define the village and its boundaries. (38)
- b. New infill development may be appropriate provided it maintains the compact traditional design of patterns of existing villages and provided development densities are generally consistent with adjacent properties. mix of housing types may be appropriate in villages provided new development is compatible in scale and character with existing structures. Alternative housing types such as "granny flats" and live-work units shall be encouraged in villages to expand the range of housing options available to County residents. (39)
- c. New development in the Village Areas shall conform to future Village Plans that will be adopted as part of the County's Comprehensive Plan. Until such specific plans are adopted, all new development within the village shall related closely to the existing, historic fabric of the village. Design elements should include a generally interconnected street network, defined opens spaces that serve as "exterior rooms", multiple uses within a single building, multiple uses adjacent to one another, building fronts set close to the street, comfortable and safe pedestrian access between sites and along sidewalks, on street parking, and parking lots and garages located behind buildings.

- d. Street design must be compatible with the historic character of the local roads, in terms of pavement width, building setbacks, etc. (40)

PLU 1.7.5 Village Area Facilities and Utilities:

- a. Villages are served by public sewer and water facilities. The extension of utilities to surrounding areas may be permitted in accordance with individual Village and Village Expansion Plans. (41)
- b. Villages are a preferred location for new community facilities and public investments. Additionally, the County supports the maintenance, enhancement and where appropriate, the expansion of existing community facilities located in villages. (42)
- c. Transportation access to Villages is usually via existing major collector or minor arterial highways, with a network of smaller streets serving the village center. New development in or adjacent to Villages must connect to and reinforce the traditional village road network. (43)
- d. New roads and road improvements within a Village Areas should be designed to accommodate pedestrians as well as motor vehicles, rather than allowing motor vehicles to cause an unsafe and unpleasant pedestrian environment. (44)
- e. Stormwater management plans for new development should consider the impact of the development's storm water on the Village and Village Expansion Area as a whole and provide adequate storm water management facilities which work with the Village's overall stormwater management plan and requirements. (45)

PLU 1.8 Urban Expansion Areas: These are areas adjacent to the Town of Blacksburg, the Town of Christiansburg and the City of Radford that are planned for a broad range and mix of uses at urban development densities and intensities. Urban Expansion areas are served by or planned for central sewer and water service and will serve as natural expansion areas for uses occurring within town and city boundaries.

PLU 1.8.1 Industrial and Business Location Study: The County Planning Department should work with the Department of Economic Development to identify locations for new industrial and businesses parks and/or the expansion of existing parks in Urban Expansion Areas. (46)

PLU 1.8.2 Corridor Planning: The County should identify major transportation corridors within Urban Expansion Areas that possess unique potential for residential and non-residential development and initiate a corridor planning process to develop detailed land use policies and design guidelines to guide development in these key corridors. (47)

PLU 1.8.3 Urban Expansion Area Land Use:

- a. Urban Expansion Areas are the preferred location for new residential and non-residential development occurring in unincorporated areas of Montgomery County.
- b. Urban Expansions Areas will accommodate a full range of residential unit types and densities.
- c. Major employment and commercial uses should be located in Urban Expansion Areas, in proximity to major transportation corridors. The County's major industrial parks located in Urban Expansion Areas should be expanded. (48)

PLU 1.8.4 Urban Expansion Area Community Design: (49)

- a. From an area wide or large-scale project perspective, gross densities in Urban Expansion Areas may range up to 2.5 dwelling units per acre.
- b. The County will encourage high quality residential and non-residential design in Urban Expansion Areas. The County shall evaluate development proposals in Urban Expansion Areas to ensure that proposed development is compatible with existing communities and uses and is designed to minimize any negative impact on these existing neighborhoods. Such new development should be designed to provide a "seamless" transition from the existing development to the new.
- c. The County will encourage development of planned, mixed use, pedestrian and transit friendly communities in Urban Expansion Areas that would combine office, commercial, residential, recreational uses into a single development, with strong connections between all sites and all uses, especially pedestrian access along the public street network.
- d. The County will encourage the use of development options (cluster, compact, mixed use, etc.) that make better use of the land concentrating development away from on-site scenic, natural, historic or open space resources. In particular, the County will encourage residential development designs that provide neighborhood scale open space. Such open space elements should not be "left over" areas, but rather should be key, central focal points of the neighborhood, designed as true community spaces that are well defined by the street network and adjacent buildings.
- e. Development in Urban Expansion Areas will be compatible with and complimentary to development within corporate limits.

PLU 1.8.5 Urban Expansion Area Facilities and Utilities:

- a. Urban Expansion Areas are or will be served by public sewer and water service provided by the County or by the towns and the City, by mutual agreement.
- b. Urban Expansion Areas will be the primary focus for public facility investments occurring outside the towns, the City, or the Villages. Urban Expansion Areas will be the preferred location for new community facilities that cannot be located in towns, the City, or the Villages. (50)
- c. Transportation improvements within the Urban Expansion Area will be designed to tie into the existing street network serving the City and the towns. (51)

PLU 1.8.6 Municipal Coordination/Cooperation.

The County will work with the municipalities (Blacksburg, Christiansburg, Radford) to identify areas of existing development that are accessed by municipal roads, served by municipal utilities and that can best be served by municipal services (law enforcement, trash collection, etc.). Additionally, the County and the municipalities will identify undeveloped areas within the Urban Expansion Area that are likely to have similar characteristics once they are developed. The County will promote the orderly inclusion of such areas into the municipalities through utility agreements and mutually acceptable boundary line adjustments. In turn, the municipalities will use cash proffers or other revenue sharing agreements to insure that new development in such areas pays its "fair share" of the cost of providing county facilities and services associated with new growth. Presently the County cooperates with each municipality in the review of proposed developments located close to municipal boundaries. The County will work with the municipalities to coordinate comprehensive planning for areas located close to municipal boundaries. The County will coordinate with

the City of Radford, the Town of Blacksburg, the Town of Christiansburg and the NRVPLDC on establishing Urban Development Areas (UDAs) and identifying opportunities for regional cooperation on infrastructure improvements, transit and transportation improvements to support development in UDAs as focal points for regional growth... (52)

PLU 1.9 Urban Development Areas: Urban Development Areas are designated areas within the Mid-County and 177 Urban Expansion Areas adjacent to the Town of Blacksburg, the Town of Christiansburg and the City of Radford that are planned for compact, mixed use development at urban development densities and intensities. They are intended to serve as a focal point for growth over the next 10-20 years. Development within the UDA must be compact, using Traditional Neighborhood Design principles, and designed to accommodate pedestrian and vehicular traffic with a full complement of services and amenities. Development in the UDA should also provide for transit facilities or stops. Urban Development Areas are served by or planned for central sewer and water services, and transportation infrastructure.

PLU 1.9.1 Urban Development Area Land Use

Comment [m1]: Is it appropriate that the mid county area will always provide a mix of uses?

- a. Development within the UDA should function as a mixed use activity center with medium scale office, retail, service and civic uses, with higher density housing in the core. Development within the UDA should consist of 2-3 story buildings with minimal views of parking areas from the street.
- b. Overall densities in the UDA should be village-like in terms of scale and intensity, with a mixture of high density and intensity, ranging from 8.0-12.0 du/ac and 0.4 FAR at the core of the development, and 1.0-8.0 du/ac and 0.25 FAR at the edges. The sought after effect being one of a transition away from the taller, denser core area to compact, predominantly residential areas. The built form should be compatible with surrounding, lower density development at the edges.
- c. Development within the Urban Development Area is intended to be efficient, compact, mixed use and pedestrian-oriented with a range of residential densities that support transit. It should further provide active, passive, and natural open space that is fully integrated into the County's rural areas through a network of connected trails and walkways.
- d. The Urban Development Area will provide for a mix of land uses including dwellings, commercial and office uses, personal and household service establishments, institutional uses, public facilities, parks, playgrounds and other similar uses meeting the needs of the adjoining neighborhoods...

PLU 1.9.2 Urban Development Area Community Design:

- a. Areas designated as UDAs are expected to accommodate a range of development densities and intensities including: 4 single family residences, 6 townhouses, or 12 apartments, condominium units, or cooperative units per developable acre, and a floor area ratio of 0.40 per developable acre for commercial development or any proportional combination thereof
- b. The County will encourage traditional neighborhood design in Urban Development Areas. The County shall evaluate development proposals in Urban Development Areas, to ensure that proposed development is compatible with existing communities and uses, and is designed to minimize any negative impact on these existing neighborhoods. Such

new development should be designed to provide a "seamless" transition from the existing development to the new.

- c. The County will encourage development of planned, mixed use, pedestrian and transit friendly communities in Urban Development Areas that would combine office, commercial, residential, recreational uses into a single development, with strong connections between all sites and all uses, especially pedestrian access along the public street network.
- d. The County will encourage the use of development options (cluster, compact, mixed-use, etc.) that make better use of the land concentrating development away from on site scenic, natural, historic or open space resources. In particular, the County will encourage residential development designs that provide neighborhood scale open space. Such open space elements should not be "left over" areas, but rather should be key, central focal points of the neighborhood, designed as true community spaces that are well defined by the street network and adjacent buildings.
- e. Development in Urban Development Areas will be compatible with and complementary to development within corporate limits.
- f. Development in Urban Development Areas should be phased to ensure that an acceptable levels of transportation service is maintained using all available transportation modes. New development projects in UDAs should be required to submit an overall concept plan so that the interrelationship of proposed uses (residential, commercial, office, civic, public open space, and transportation network) can be evaluated.

PLU 4.9.5 Urban Development Area Utilities and Public Facilities:

- a. Urban Development Areas are or will be served by public sewer and water service provided by the County, the Montgomery County Public Service Authority, or by the towns and the City, by mutual agreement.
- b. Urban Development Areas will be the primary focus for public infrastructure facility investments occurring outside the towns, the City, or the Villages. Urban Development Areas will be the preferred location for new community facilities that cannot be located in towns, the City, or the Villages.
- c. Transportation improvements within the Urban Development Area will be designed to tie into the existing street network serving the City and the towns.

PLU 4.9.4 Urban Development Area Incentives: Various incentives are available in the Urban Development Areas to encourage and facilitate compact, mixed use development.

- a. Development applications that employ TND concepts will be eligible for expedited review.
- b. The zoning code will be revised to provide flexibility and encourage innovative, mixed use developments.
- c. Increased density, height allowances, narrower streets, limited parking and smaller setbacks.

PLU 4.9.5 Municipal Coordination/Cooperation. The County will coordinate with the City of Radford, the Town of Blacksburg, the Town of Christiansburg and the NRV PDC on establishing Urban Development Areas (UDAs) and identifying opportunities for regional cooperation on infrastructure improvements, transit and transportation improvements to support development in UDAs as focal points for regional growth.

~~4-9~~ **4.9 L10 Focused Growth Targets:** In order to maintain a balance between urban and rural areas, the County targets 80% or more of future development within the unincorporated areas to occur within the Urban Development Areas, Urban Expansion Areas, Villages, Village Expansion Areas, and the Residential Transition Areas. Conversely, the County targets 20% or less of future development within the unincorporated areas to occur within the Rural Communities, Rural Areas, and the Resource Stewardship Area.

PLU 2.0 New Development: The County will promote sound fiscal planning and good design principles by applying consistent standards to evaluate the design and impact of proposed development.

PLU 2.1 Criteria for Evaluating Rezoning Applications: All residential rezoning requests will be evaluated using the following minimum criteria:

1. **Location.** The property must be located within a Village, Village Expansion Area or Urban Expansion Area, with the exception of Rural Residential zoning.
2. **Public Utilities.** The applicant must demonstrate that the proposed development will be served by public sewer (preferably both public water and public sewer), and that such service is either currently available or is planned and approved by the County and scheduled for construction to the site within a defined time period consistent with the other provisions of the Comprehensive Plan; with any necessary extensions to be funded by the applicant.
3. **Road Access.** The property must have adequate and safe road access, with any necessary improvements provided by the applicant. Entrances onto existing public roads must be adequately spaced to provide safe access and maintain adequate capacity of the existing roadway. The applicant must dedicate any right of way necessary for future widening of such existing road.
4. **Public Facilities and Amenities.** The applicant must provide a concept development plan of the entire property, showing future land uses, roads, walkways and trails, open spaces, public facility sites and the like.
5. **Interparcel Access.** The concept plan must show one or more street connections to all adjoining properties that are not blocked by natural barriers. The applicant must construct these connections at the time such portion of the concept plan is developed. Interparcel access will not be required if the adjacent property is located in a Rural Area or a Rural Stewardship/Conservation area unless such a connection is identified on a Countywide or regional transportation plan.
6. **Pedestrian Access.** The rezoning proposal must include provisions for pedestrian mobility within the site and safe and convenient connections for pedestrian traffic to adjacent sites and adjacent public roadways and trails.
7. **Buffers.** Landscaped buffers must be provided at all edges of the site that abut existing or planned uses of lower intensities.

PLU 2.2. Proffer Guidelines: The County will work with the development community to develop a framework for proffer guidelines to be used in the evaluation of rezoning applications.

PLU 2.2.1 Proffer Guideline Principles: The County will consider the following principles in evaluating and developing capital facility proffer guidelines to be used in conjunction with conditional zoning (rezoning) applications:

- a. **Percentage of Capital Costs:** Proffers for public facilities and amenities will be encouraged for each residential rezoning, and are expected to have a total value that is

sufficient to represent a significant "down payment" on the cost of the various capital facilities that will be constructed to serve the new residents.

- b. Calculation of Capital Costs: At the County's discretion, residential capital facility costs may be estimated on the basis of capital costs for the average unit overall, or on the basis of costs per unit type, differentiating between detached, attached, manufactured ("mobile") and multi family units. School costs may also be estimated separately.
- c. Direct Public Benefit: To qualify as a capital facility proffer the land, facility or fund must be dedicated or deeded to the County or to another regional, state or federal agency which will ensure that it is used for the benefit of County citizens at large and must have a measurable value that can be quantified.
- d. Capital Facilities Proffer Principles: To ensure that the proffer process is reasonable, effective and manageable, any proffer guidelines development by the County should be based on the following principles:
 - i. Consistency of content. Proffers should be negotiated and accepted on a consistent basis from one project to another. Uniform standards for capital facilities, based upon the Comprehensive Plan and CIP should be followed in determining appropriate proffers for a particular project.
 - ii. Consistency of format. The County should develop a consistent format for proffer statements with consistent style and terminology so that proffers are comparable.
 - iii. Rational Nexus. All proffers should have a direct and rational relationship to needs created by the project itself. To the maximum extent feasible, proffers should be built or otherwise allocated so as to directly benefit the particular project.
 - iv. Coordination. Proffers from neighboring or adjacent developments should be coordinated to the maximum extent possible in order to ensure compatibility and consistency, and to avoid redundancy and conflict.
- e. Transportation Proffers: Proffers for roads and road improvements are considered a separate item, not included within the guideline due to the States responsibility for public roads. Road proffers should be based upon the specific needs of the site and its surrounding road network.
- f. Types of Capital Facilities Proffers: The County's proffer guidelines should be comprehensive and may include the following types of proffers as appropriate and as permitted by State law:
 - i. Dedication of land for public facilities;
 - ii. Cash contributions for capital facilities; and
 - iii. Construction of public facilities.
- g. Other Types of Proffers: The County proffer guidelines should also allow for a variety of other types of proffers that will enhance the quality of development in the County including:

- i. Reservation of sites for private, non-profit community facilities;
- ii. Phasing of development;
- iii. Impact mitigation;
- iv. Preservation of special environmental, natural, open space or historic features; and
- v. design criteria and features.

PLU 2.3 Critical Features: All development requests will be evaluated with respect to their impact on the critical, sensitive, special, and historical resources delineated on the Critical Features Map.

PLU 2.4 2232 Review Policy: Develop a policy for the review by the county, in accordance with Section 15.2-2232 of the Code of Virginia, of proposed new community facilities and expansion of existing community facilities. Such construction and expansions require careful consideration by local decision makers to assure that the needs and interests of the community are fulfilled in the most appropriate manner. The policy should include (1) a definition of public facility, (2) a list of what types of facilities are exempt from 2232 review, (3) application requirements for agencies and individuals submitting projects/proposals subject to 2232 applications, and (4) an outline of how the County will process 2232 applications, including how administrative determinations will be made regarding features shown.

PLU Goal 3.0 Community Design: To maintain and enhance quality of life, the County will promote design principles for new development that are based on the traditional development patterns that created many treasured communities in Montgomery County.

PLU 3.1 Traditional Neighborhood Design: The County will develop traditional residential development options to be included in the County's Zoning Ordinance.

PLU 3.1.1 Traditional Neighborhood Design Zoning Ordinance Amendments: The County will develop zoning districts based on the following key principles of Traditional Neighborhood Developments:

a. Organization and Structure:

- i. ~~The organizing framework of a TND is an area of land that constitutes a five-minute walk, or a circle of about one-quarter mile radius (about 150 acres). The organizing framework of a TND is to create a walkable community, centered around a core area encompassing one quarter mile. This is approximately the distance at which studies have shown that a significant percentage of people will leave their cars parked and walk between destinations. Commercial and higher density residential uses should be focused within such a core area with lower densities radiating out from the center.~~
- ii. The neighborhood has a discernible center, often a square or a green, a busy or memorable street corner, and/or a prominent civic building (a transit stop can be located at this center). The center may be surrounded by a mixed use retail/office core area.
- iii. Most of the dwellings are within a five minute walk of the neighborhood center, an average of roughly 1,500 feet, producing a total area of approximately 150 acres.
- iv. Small playgrounds or "pocket parks" are located within 500 feet of every

~~dwelling accessible to all residents.~~

- v. To the extent possible, an elementary school is close enough so that most children can walk from their home.
- vi. Development is located in environmentally suitable areas, designed to preserve important environmental and cultural resources reinforced through a system of parks and public and institutional uses and, a formal neighborhood governance association to decide and/or advise on matters of maintenance, security and physical change (taxation remains the responsibility of the County).

b. Streets

- i. The neighborhood is served by many transportation modes, including motor vehicle, pedestrian, bicycle and transit; motor vehicles and parking lots do not dominate.
- ii. The neighborhood's streets form a connected network, providing a variety of pedestrian and vehicular routes to any destination, which disperses traffic. (The streets are laid out generally in a "grid" pattern, forming blocks of about 1,200 feet in perimeter length each). Cul-de-sacs should be avoided; small "eyebrows" (short road loops with just a few houses) protruding from the main street should be used instead.
- iii. The circulation network includes streets, alleys, sidewalks and paths.
- iv. The streets are relatively narrow and shaded by rows of trees, often with on-street parking, which slows traffic, creating an environment suitable for pedestrians and bicycles.
- v. Buildings in the neighborhood center are placed close to the street, creating a feeling of "human scale" and a strong sense of place.
- vi. vi. Parking lots and garage doors rarely front the street; parking is at the rear of buildings, usually accessed by alleyways.
- vii. Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings that provide sites for community meetings, education, religious or cultural activities.

c. Land Uses

- i. The neighborhood has a mix of uses so that residents have opportunities to live, recreate, learn, worship, and even work and shop in their neighborhood
- ii. There is a variety of dwelling types, densities and costs -- single family houses, townhouses, apartments and accessory units -- for all kinds of people, including younger, older, singles, families, lower income, upper income, etc.
- iii. There are a variety of shops and offices at the core or the edge of the neighborhood to supply the weekly needs of a household.
- iv. A small ancillary building is permitted within the backyard of each house, which may be used as a rental unit, an "in-law" suite, or place to work (e.g. office or craft workshop).

Cross References and Notes: 3. While resource stewardship is a theme which runs throughout this plan, specific references to the resource stewardship areas are also included in the Environmental Resource Chapter, including: ENV 1.0 Natural Environmental Resources; ENV 2.0 Open Space and Natural Resources; ENV 2.1.11 Approaches to Open Space and Agricultural Preservation; ENV 3.0 Streams, Rivers, and Surface Waters; ENV 3.2 Vegetation and Soil; ENV 4.0 Floodplains; and ENV 6.0 Karst. References to Historic Preservation can be found in CRS 1.1.

Cross References and Notes: 4. For approaches to conservation, see also ENV 2.0 Open Space and Natural Resources; ENV 2.1.11 Approaches to Open Space and Agricultural Preservation; and ENV 6.4 Conservation.

Cross References and Notes: 5. The sliding scale was included in the new zoning ordinance, adopted in 1999. Additional references to the sliding scale can be found in ENV 2.0 Open Space and Natural Resources and ENV 2.1.4 Sliding Scale Zoning.

6. Additional references to cluster development can be found in ENV 2.0 Open Space and Natural Resources and ENV 2.1.5 Rural Cluster Zoning.

7. References to Agriculture can be found in ENV 1.2 Resource Management, ENV 2.5 Agriculture; ENV 2.1.3 Agricultural/Forestal Districts; ENV 2.1.7 Rural Development Initiatives, and ENV 2.1.8 Use Value Assessment.

Cross References and Notes: 8. Limits on the expansion of utilities into the resource stewardship areas are addressed in UTL 1.2.5 Growth Boundary.

Cross References and Notes: 9. Farmland retention is also addressed in ENV 2.0 Open Space and Natural Resources; ENV 2.5 Agriculture; and ENV 2.1.3 Agricultural and Forestal Districts.

10. Rural residential cluster development is addressed in ENV 2.1.5 Rural Cluster Development.

11. Controlling rural density is addressed in ENV 2.1.9 Urban Growth Boundaries - Urban and Village Expansion.

Cross References and Notes: 12. Development and growth of sustainable agriculture is addressed in ENV 2.1.7 Rural Development Initiatives.

13. The preservation of open space, agricultural lands, and the rural character are discussed in CRS 1.0 Historic Preservation; ENV 1.4 Wildlife Corridors; ENV 2.0 Open Space and Natural Resources; ENV 2.1 Private Open Space; ENV 2.3 Viewsheds; ENV 2.4 Forest Lands; ENV 2.5 Agriculture; ENV 2.1.5 Rural Cluster Zoning; ENV 3.1.3 Environmental Quality Corridors; ENV 3.2.6 Preservation of Natural Landscapes; ENV 3.2.7 Protection of Riparian Features; and ENV 5.4 Wellhead Protection.

14. Additional references on utilities in rural areas can be found in ENV 2.1.9 Urban Growth Boundaries - Urban and Village Expansion Areas, UTL 1.2.5 Growth Boundaries; and UTL 1.3 Private Systems.

Cross References and Notes: 14. Additional references on utilities in rural areas can be found in ENV 2.1.9 Urban Growth Boundaries - Urban and Village Expansion Areas, UTL 1.2.5 Growth Boundaries; and UTL 1.3 Private Systems.

15. Issues connected to subdivision road systems can be found in TRN 1.3 Subdivisions and TRN 1.3.2 Street Continuation and Connectivity.

Cross References and Notes: 16. Currently, Montgomery County has 18 rural communities: Alleghany Springs, Fronto, Denbill, Piedmont, Oley, Resedale, Ellert, Lusters Gate, McCoy, Wake Forest, Longshop, Vicker, Walton, Graysontown, Childress, Rogers, Pilot, and Sugar Grove. Although some of these communities are primarily crossroads, most have had, at one time a commercial district, many have existing historical structures included in the Montgomery County Survey of Historical Sites, and all have been places people identify themselves as "being from." A few places already have access to limited public water or sewer, such as Alleghany Springs. However, most are not currently served by either.

17. Rural community development is addressed in ENV 2.1.5 Rural Cluster Zoning; PNG 4.0 Village and Rural Communities; and PNG 4.1.3 Planning for Rural Communities.

Cross References and Notes: 18. Private and individual sewerage systems are addressed in UTL 1.3 Private Systems and UTL 1.4 Individual Systems.

19. The placement of park and recreational facilities are discussed in PRC 2.5 Plan Review.

20. See TRN 1.3.2 Street Continuation and Connectivity for a discussion of transportation considerations in subdivisions and developments.

Cross References and Notes: 21. As with rural communities, new development will be evaluated on a case by case basis. Manufactured Housing developments are addressed in HSG 1.2 Manufactured Housing and Housing Parks. Subdivision development is addressed in HSG 1.0 Livable Neighborhoods; HSG 1.3 Safe Neighborhoods; and TRN 1.3 Subdivisions.

Cross References and Notes: 22. The preservation of open space, agricultural lands, and the rural character are discussed in CRS 1.0 Historic Preservation; ENV 2.0 Open Space and Natural Resources; ENV 3.1.3 Environmental Quality Corridors (pg.141); ENV 3.2.6 Preservation of Natural Landscapes; and ENV 3.2.7 Protection of Riparian Features.

23. Information on the location public facilities are included in PRC 2.5 Planning Review, SFV 1.4 New Development, UTL 1.2 Public Systems; and UTL 3.2.1 Consolidated Collection Sites.

Cross References and Notes: 24. Village Planning is addressed in PNG 4.0 Villages and Rural Communities; PNG 4.1.1 Livable Communities; PNG 4.1.2 Planning for Villages; and PNG 4.2 Public Facilities.

25. Mixed use and traditional neighborhood design (TND) options are addressed in PLU 3.0 Community Design; PNG 4.1.1 Livable Communities; HHS 1.0 Livable Communities; HSG 1.0 Livable Neighborhoods; and HSG 1.3 HSG Safe Neighborhoods.

Cross References and Notes: 26. Compact development and Traditional Neighborhood Designs are addressed in PLU 3.0 Community Design; PNG 4.1.1 Livable Communities; HHS 2.4 Affordable Housing; HSG 1.1 Affordable Housing.

Cross References and Notes: 27. Historic preservation is addressed in CRS 1.1 Historic Villages, Districts, and Corridors.

28. Environmental and open space preservation is addressed, more specifically, in ENV 2.0: Open Space and Natural Resources; ENV 2.2 Public Open Space; ENV 3.1.3 Environmental Quality Corridors, ENV 3.2.6 Preservation of Natural Landscapes; ENV 3.2.7: Protection of Riparian Features; and ENV 4.2: Floodplain Programs and Policies.

29. Growth boundaries are addressed in ENV 2.1.9: Urban Growth Boundaries--Urban and Village Expansion Areas; and UTL 1.2.5: Growth Boundaries.

Cross References and Notes: 30. The location of public and community facilities is addressed in PNG 3.1.4 Community-Based Schools and Public Facilities; PNG 4.0: Villages and Small Communities; CRS 2.1.4 Library-Based Community Space; CRS 3.1: Cultural Facilities, Programs, and Events; EDU 1.2.1: Local and Neighborhood Facilities; HHS 2.5 Community Facilities; PRC 2.5: Planning Review; SFY 1.3 Future Capital Facilities; and UTL 3.2.1 Consolidated Collection Sites.

31. Transportation is addressed in TRN 1.3 Subdivisions and TRN 1.4 Connectivity and Access Management.

Cross References and Notes: 32. Maintaining current community assets (schools, fire and rescue stations, parks, and collections facilities) and developing new community assets helps maintain both the sense of community within the Villages and strengthens the Villages' role as a focal point for surrounding communities. The importance of community assets is also addressed in PLU 3.0: Community Design; PNG 3.1.1 Multi-use of Facilities; PNG 3.1.4 Community Based Schools and Public Facilities; PNG 4.0 Villages and Rural Communities; PNG 4.2: Public Facilities; EDU 1.2.1 Local and Neighborhood Facilities; HHS 1.0 Livable Communities; HHS 4.2 Emergency Care Facilities; HHS 4.3 Emergency Response Facilities and Staff; HHS 5.0 Human Services and Facilities; PRC 2.1.4 Village Plans; SFY 1.3 Future Capital Facilities; TRN 3.3 Villages and Transportation Needs; and UTL 2.3: Broadband/Fiber optic Networks.

33. In the focused growth approach, Villages and Village Expansion Areas (PLU 1.6), Urban Expansion Areas (PLU 1.7), and Municipalities (Blacksburg and Christiansburg) represent the primary targeted areas for future development. It should be noted, however, that not all types of growth and development are appropriate for all focused growth areas and projects will continue to be evaluated on a case by case basis in accord with the stated land use policies and subsequent village plans.

34. The Village planning process is also addressed in PNG 4.0: Villages and Rural Communities

Cross References and Notes: 35. Additional information and guidelines for community design and traditional neighborhood designs (TND) are addressed in PLU 3.0: Community Design.

36. Small business development is addressed in CRS 1.3: Historic Preservation and Tourism; ECD 4.1.1 Entrepreneurial Economy; and ENV 2.1.7 Rural Development Initiatives.

37. Village planning is also addressed in PNG 4.0: Villages and Rural Communities.

Cross References and Notes: 38. Historic Preservation is also addressed in CRS 1.1: Historic Villages, Districts, and Corridors and CRS 1.1.3: Villages and Rural Communities.

39. Compact design and other forms of traditional neighborhood design are addressed in PLU 3.0 Community Design.

Cross References and Notes: 40. Context-sensitive street designs and standards is addressed in TRN 1.3.4.

41. The provision of utilities is also discussed in UTL 1.0 Water and Sewer.

42. See footnote 50 for specific community facility references.

43. Street design standards are discussed in PLU 3.1.1(b). See, also, TRN 1.3.4: Context Sensitive Street Design.

Cross References and Notes: 44. Street design standards are discussed in PLU 3.1.1(b). See HSG 1.3: Safe Neighborhoods; TRN 1.3.4: Context Sensitive Street Design; and TRN 1.3.5 Pedestrian Transportation Facilities.

45. Stormwater Management is addressed in ENV 6.5: Stormwater Management, ENV 7.0 Stormwater and Erosion Control; and UTL 4.0 Stormwater Management.

Cross References and Notes: 46. Economic development siting and facility requirements are addressed in ECD 1.3 Future Land Use Requirements (pg.99); ECD 3.0: Location and Land Use.

47. The majority of major corridors, in Montgomery County pass through Villages and/or other jurisdictions: 1) US 460/Rt 11 passes through the Villages of Elliston/Lafayette and Shawsville before entering the eastern end of Christiansburg; 2) US 460, passes through Christiansburg, Blacksburg, and Montgomery County; 3) Rt. 114 passes through Belview; 4) Rt. 11 passes through Plum Creek; and Rt.8 passes through River. Corridor plans are meant to address development along the stretches of road between the two towns and villages and to work, in tandem, with the comprehensive plans of the two towns and the Village Plans. They are not meant to supersede existing town or village plans.

Cross References and Notes: 48. Economic development siting and land use requirements are addressed in ECD 3.0: Location and Land Use.

49. Additional policies governing new development are addressed in PLU 2.0: New Development, and guidelines for community design are addressed in PLU 3.0: Community Design. See, also, footnote #46.

Cross References and Notes: 50. Public facilities include parks and other recreational facilities; schools; solid waste collection facilities; health and human service facilities; fire, rescue, and law enforcement facilities; public water and sewer facilities, and other facilities related to the provision of utilities.

51. See, also, TRN 1.3.2 Street Continuation and Connectivity.

52. Opportunities for cooperation between Montgomery County, Blacksburg, Christiansburg, and the City of Radford are built into many of the subject specific chapters, including PNG 1.0 Local and Regional Cooperation; CRS 1.1 Historic Villages, Districts, and Corridors; ECD 1.1 Montgomery County Regional Indicators Program; ECD 2.1.1 Community Technical Education/ Knowledge Capital Task Force; ECD 3.3 Downtown Revitalization; ENV 3.5: Government Cooperation; ENV 4.1 Floodplains: Partnership and Regional Cooperation; ENV 7.0 Stormwater and Erosion Control; HHS 3.0 Regional Cooperation and Collaboration; HSG 1.1 Affordable Housing; PRC 1.0 Regional Cooperation and Collaboration; SFY 1.5 Regional Opportunities; TRN 1.2 Metropolitan Planning Organization TRN 3.0 Mass Transit; TRN 4.0 Alternative Transportation; UTL 1.1 Water and Sewer: Regional Cooperation

; U11. 2.2 Telecommunications Towers; U11. 2.3 Broadband/Fiber optic Networks; U11. 3.1.1 Solid Waste Management: Regional Cooperation; and U11. 4.0 Stormwater Management.

Route 177 Gateway Area Plan



Prepared for Montgomery County, Virginia

April 4, 2011

Prepared by Renaissance Planning Group

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INTRODUCTION

Background

The Route 177 Corridor has been recognized as an important growth area for Montgomery County, since the early 1990's, when the County and the City of Radford jointly asked the New River Valley Planning District Commission (NRVPCD) to study the VA 177/Tyler Avenue Corridor Area. The Corridor Area Study was completed in June 1992 and since that time the City and County have worked together to ensure that land use and transportation are coordinated in the area.

In 2004, Montgomery County adopted the Joint Comprehensive Plan for the VA 177/Tyler Avenue Corridor Area as part of the County's Comprehensive Plan. The plan recognizes the VA 177/Tyler Avenue Corridor Area as a growth area where the extension of public utilities will provide important economic opportunities. The Joint Plan provides a framework for future development and includes both a Future Land Use Plan and Entrance Plan. The Future Land Use Plan allows existing uses to continue and allows the expansion of residential and commercial uses without encroachment on one another. The plan uses the accessibility and prominence of the Corridor to its advantage while preserving key features and ensuring that buffers are established between incompatible uses. It further incorporates an Entrance Plan, which limits vehicular

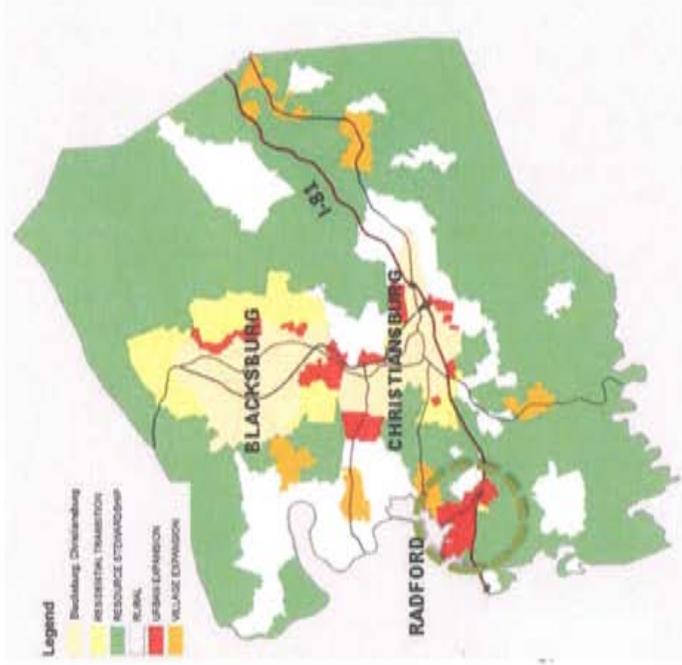


Figure 1. Montgomery County Existing Policy Areas

entrances onto VA 177 to those shown on the plan in order to manage access and preserve safety and throughput on Rt. 177 as parcels develop over time.

Both the Future Land Use Map and the Entrance Plan assume the following:

- Anticipate commercial development at Interchange 109 and along nearby sections of VA 177 and Lovely Mount Drive. This growth should take place through planned developments that

ROUTE 177 GATEWAY AREA PLAN

consist of more than stripping of the existing road frontage.

- Recognize three areas that are suitable for high intensity developments. High intensity uses permitted with a special use permit include light industry, residential development over four (4) dwelling unit per acre, hospitals and health care complexes.
- Incorporate an entrance and intersection plan for the corridor frontage parcels.
- Recognize that residential development in this area should be through the Planned Unit Development (PUD) District and Cluster Development rather than conventional subdivisions.

Today, Route 177 / Tyler Avenue is a highway corridor with steadily growing traffic that passes through pastureland, by single-family homes, and individual business. Ready access to Interstate 81, proximity to industries and institutions in the City of Radford and Carillion Hospital, and regional commuting patterns make the Route 177 / Tyler Avenue Corridor Area a desirable business location. These same qualities, plus the area's scenic appeal make it a desirable location for residences. As the City and County grow, there will be considerable pressure from both residential and commercial development in the Corridor.

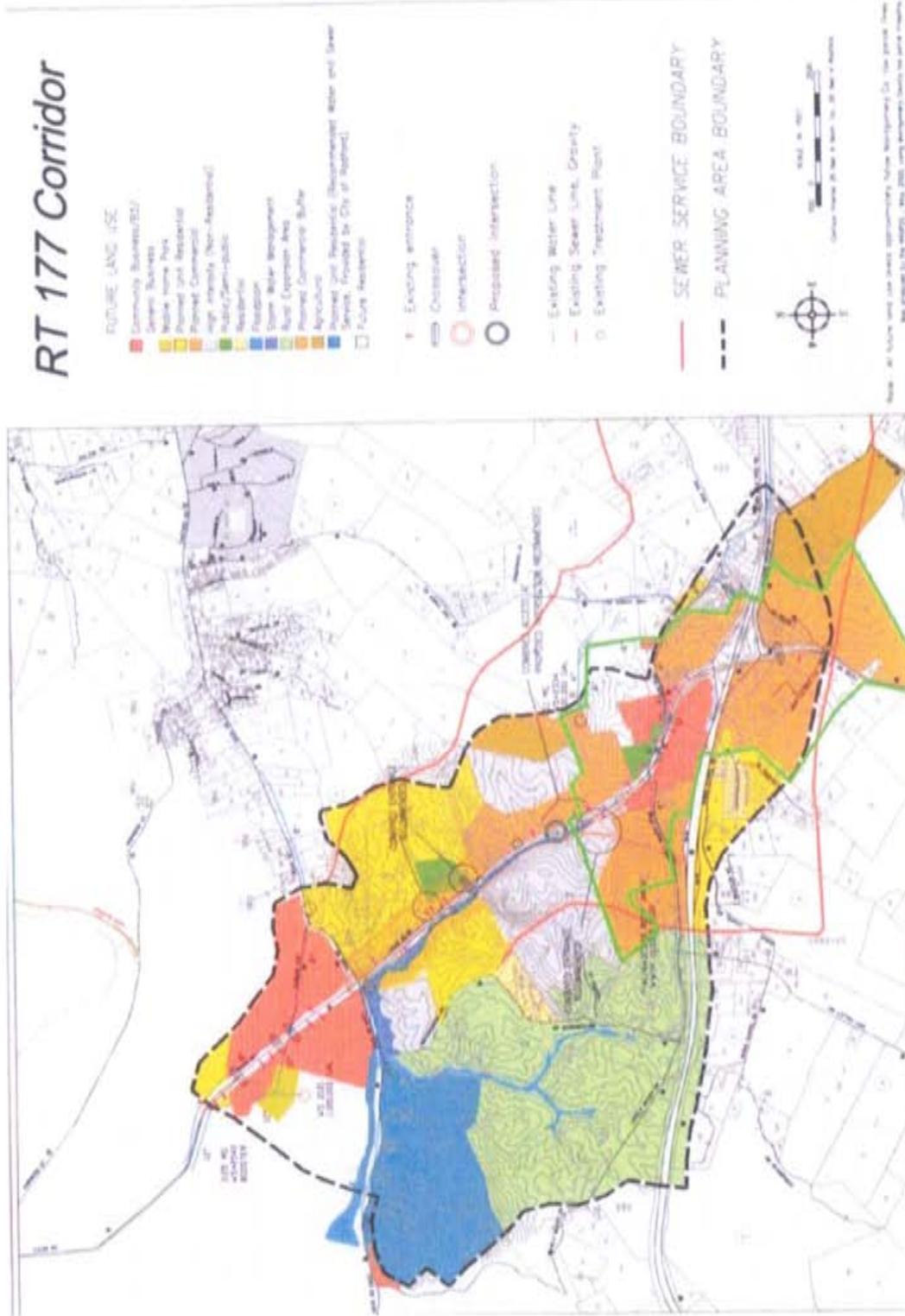


Figure 2. Land Use and Entrance Plan from the Route 177/Tyler Avenue Corridor Area

Planning Context

In 2007, the General Assembly added Section 15.2-2223.1 to the Code of Virginia requiring high growth localities to designate Urban Development Areas in their comprehensive plans by July 1, 2011 (counties) and July 1, 2012 (cities and towns). Designated Urban Development Areas ("UDA") are to be areas of reasonably compact development that can accommodate 10 to 20 years of projected growth. In 2010, the legislation was amended to establish density and design criteria for UDAs and to improve the coordination between transportation and land use. Based on Montgomery County's population growth from 2000 to 2010, the County is required to amend their Comprehensive Plan to incorporate at least one Urban Development Area that will allow for development at a density of at least four single-family residences, six townhouses, or 12 apartments, condominium units, or cooperative units per developable acre, and a floor area ratio of at least 0.4 per acre for commercial development, or any proportional combination thereof.

In 2010, the Virginia Department of Transportation ("VDOT") created the Urban Development Area Local Government Assistance Program, to assist communities in revising their planning and policy frameworks to comply with the legislation. Montgomery County was awarded a Tier II grant within this program. As a participant in the program, the County is expected to revise their comprehensive plan to incorporate at least one urban development area and revise their zoning and



Figure 3. Route 177 Gateway Area Plan Study Area and proposed Urban Development Area.

subdivision ordinances to incorporate the principles of new urbanism and traditional neighborhood design. In addition, the County must create a small area plan for all or a portion of the UDA and analyze the specific traffic impacts of such plan.

Purpose of the Gateway Area Plan

The County has a long history of planning for compact growth in designated areas and has chosen to designate

ROUTE 177 GATEWAY AREA PLAN

one of the County's Urban Development Areas within the existing 177 Corridor Urban Expansion Area as the Rt. 177 Gateway Area Plan. The overall goal of this Gateway Area Plan is to clarify the preferred vision for the future of the Route 177 gateway area and create a conceptual plan for its long-term physical development.

Planning Process

On February 9, 2011, Montgomery County hosted a series of kickoff meetings for the 177 Gateway Area Plan. Staffed and facilitated by a team of professional planners and designers led by Renaissance Planning Group, the meetings included a work session with County, City, MPO, PDC and VDOT staff, a work session with invited property owners along the corridor, and a presentation/work session with the Montgomery County Planning Commission. The overall goal of the meetings was to identify issues and opportunities to inform a conceptual vision for the gateway.

Incorporating the perspectives and priorities of the people who live, work and do business along the corridor was a critical component in the development of the 177 Gateway Area Plan. At the property owner's worksession, held at Montgomery County's Government Center, several dozen property owner's provided suggestions on what they would like to see in the 177 Gateway area in the future.

The workshop results helped shape the ideas and aspirations that ultimately went into the vision concepts

embodied in the 177 Gateway Area Plan. The following section includes a brief description of the guiding principles outlined during the first workshop and in discussions with stakeholders and community leaders.

What we heard

During the February 9 work sessions, several ideas emerged as common themes for what property owners and local officials and staff generally like about the gateway area, what they generally don't like, and what they want for the gateway area in the future.

Following are a few key issues derived from these work sessions - more detailed input summaries from each session are in the appendix to these report.

COUNTY/CITY STAFF:

- Future of I-81 and interchange
- Consider 76 Bike Route
- Opportunity for walkability from hospital to new restaurants, services
- Ensure safety for road crossings, access management
- Regional transportation connections to Radford/Christiansburg
- Potential need for future fire station

ROUTE 177 GATEWAY AREA PLAN

PROPERTY OWNERS:

- Need for funding for infrastructure
 - Need for restaurants, services for 900 hospital workers
 - Sign regulations concerns
 - Liquor by the drink as barrier to some types of development
 - General positive response to developing a unified plan for the area
3. Understanding long term transportation issues
 4. Opportunities for funding future infrastructure

Key Issues

Based on the input received on February 9, a set of key issues emerged. These issues were distilled from the multiple comments and suggestions made, and reflect a broad summary of points from the work sessions as a whole. All of these issues were reviewed by participants at the second series of workshops and were acknowledged as being key considerations which need to be balanced.

Key Issues

1. The value of a coordinated Gateway Plan
2. Supporting property owners initiatives to create a coordinated long range vision

Key Issues

1. *The value of a coordinated Gateway Plan - failing to plan = planning to fail*
2. *Supporting property owners initiatives to create a coordinated long range vision*
3. *Understanding long term transportation issues*
4. *Opportunities for funding future infrastructure*

Existing Conditions Analysis

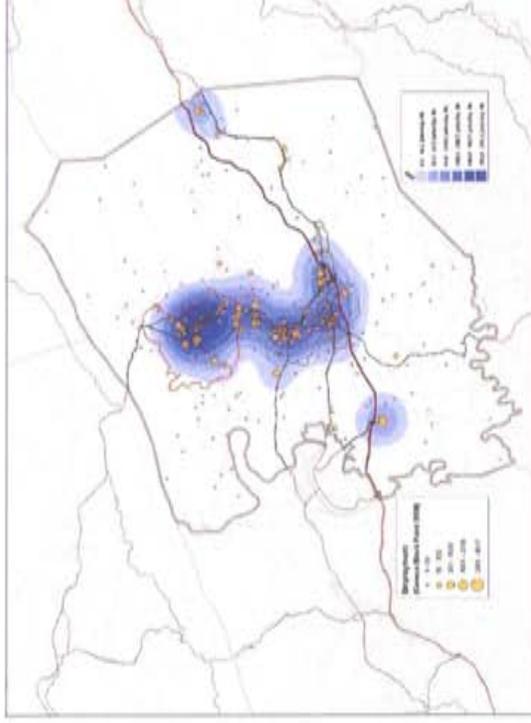
Prior to the February 9 work sessions, the consultant team conducted a brief analysis of regional trends and factors that could influence the future development and evolution of the Route 177 Gateway Area. Some of the results of this analysis are summarized below and in the maps that follow.

Market Analysis

The map at the right shows the existing employment density in Montgomery County according to the US Census (2008). While the vast majority of jobs are concentrated in the Town of Blacksburg and the Town of Christiansburg, the 177 Gateway Area contains the next greatest employment density, which is largely due to the presence of Carillion Hospital.

Existing Transportation Conditions

The Route 177 corridor is classified by VDOT as a rural minor arterial facility north of I-81 and a rural major collector facility south of I-81. Presently, the facility has average daily traffic volumes ranging from 12,500 vehicles per day along the four lane divided section north of Mud Pike to 8,000 vehicles per day along the four lane section south of the interchange, then decreasing to 4,000 vehicles per day south of Barn Road as the road tapers to a two lane undivided roadway. As described in the preceding sections of this document, the abutting uses range from light industrial, commercial, rural residential, and the hospital on the southern end of the corridor.



Employment density within Montgomery County

The Route 177 / I-81 interchange is a standard diamond configuration with single lane ramps leading to the unsignalized ramp intersections. Presently, this configuration provides the necessary capacity for the prevailing traffic volumes. With the exception of the non-standard and somewhat awkward geometry for the southbound right turn movement onto Route 177, the interchange appears to be of an appropriate design with satisfactory traffic operational conditions.

There are no dedicated on-street bicycle or adjacent pedestrian facilities within the project study area along Route 177 or the intersecting roadways, however Bike Route 76, a cross country bicycle route, traverses the gateway area along Lovely Mount Drive and Mud Pike and is a signed, shared roadway for cyclists.

ROUTE 177 GATEWAY AREA PLAN

Walkability

Walkable neighborhoods offer many benefits to the environment, health, finances, and communities including:

Health: Walkable neighborhoods create more freedom of choice for residents and studies have shown that they contribute to overall physical health of residents.

Social: Traditional neighborhoods with walkable access to community facilities and amenities create more opportunity for social interaction for all age groups and can decrease the hours spent commuting to work and activities

Financial: Studies have shown that homes in walkable neighborhoods can be more valuable than those that are not. Controlling for all other values, a study found that in a typical metropolitan area each 1 point increase in Walkscore was associated with a \$700 - \$3,000 increase in home values. Walkscore is an online tool that was developed to help people identify walkable places to live. It computes the "walkability" of any place using distance to destinations such as restaurants, libraries, schools, etc.

As shown in the following maps generated by Walkscore, the 177 Gateway Area has a Walkscore of 12, ranking it as "car-dependent" as compared to a ranking of 91 for a community like the Town of Blacksburg.



Ratings of the 177 Gateway and the Town of Blacksburg illustrated from Walkscore.com

Corridor Growth and Future Traffic

As a growth corridor and as a key arterial corridor for the region, the traffic volumes along Route 177 are expected to increase substantially. Growth in traffic volumes will be the result of continued growth in and around the City of Radford, and new development that will occur adjacent to Route 177 and the I-81 interchange.

South of the I-81 interchange along Route 177 there are three approved development plans, in addition to the potentially growing Carilion Hospital campus. The three development sites, consisting of the S&P, Woody, and Emerald properties may generate another approximately 13,000 new vehicle trips (approximation per prior site traffic studies). This includes cars entering and exiting the sites. Additional growth in traffic volumes will occur as the result of future expansion of the Carilion Hospital campus, and also additional new development in the growth area and other more regional traffic that will utilize Route 177 to access the City of Radford and also points south of the interchange.

Based on the assumption that the area would see significant new growth in the coming 20 to 30 years and beyond, an effort was made to estimate additional new traffic growth that might occur under an estimated scenario where the resulting development occurs at an average gross intensity of approximately 0.1 FAR, over approximately 200 acres, and consisting of a mix of retail, residential, office, and light industrial. Based on this scenario, we might expect another approximately 13,000

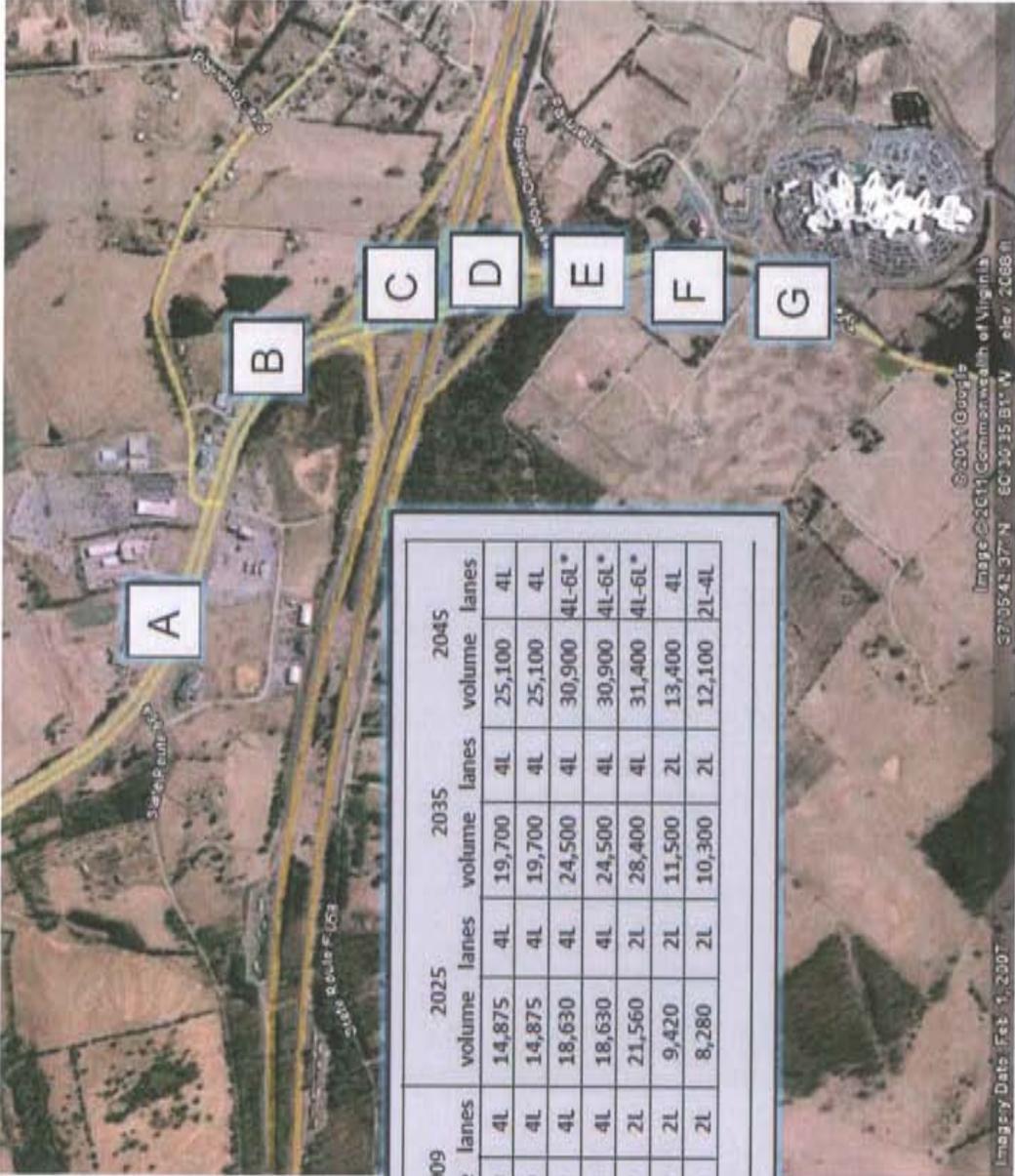
vehicle trips to be generated or attracted to the study area. The graphic on the following page illustrates the resulting traffic projections based on the combined "local" growth area traffic coupled with the growth in regional traffic volumes.



Figure 4. Currently approved development projects in the area

ROUTE 177 GATEWAY AREA PLAN

Planning Level Assumptions	
s.f. / units	Generic Usage
135,254	s.f. of shopping/restaurants
191,610	s.f. general office
191,610	s.f. light industrial
255	residential units
128	total houses
128	total apartments



Link	2009		2025		2035		2045	
	volume	lanes	volume	lanes	volume	lanes	volume	lanes
A	12,500	4L	14,875	4L	19,700	4L	25,100	4L
B	12,500	4L	14,875	4L	19,700	4L	25,100	4L
C	9,000	4L	18,630	4L	24,500	4L	30,900	4L-6L*
D	9,000	4L	18,630	4L	24,500	4L	30,900	4L-6L*
E	8,000	2L	21,560	2L	28,400	4L	31,400	4L-6L*
F	6,000	2L	9,420	2L	11,500	2L	13,400	4L
G	4,000	2L	8,280	2L	10,300	2L	12,100	2L-4L

* or interchange reconfiguration

Figure 5. Potential Future Traffic Growth Scenario

VISION PLAN

Overall Concept

The Vision Plan resulting from the work sessions was based on all of the input that was received from various agency staff, property owners and community stakeholders, both in the initial kickoff meetings in February, and in the follow up work sessions and public meeting in March. The graphic to the right shows a diagram of the overall design concept for future land use and development in the Rt. 177 Gateway area.

The overall concept for the vision for the area includes a variety of mixed use districts that are generally connected to one another via parallel roadways and bicycle and pedestrian facilities. The intent is that these mixed uses develop through a series of planned commercial, light industrial and residential developments. The north end of the corridor maintains a higher speed design character that serves as a landscaped gateway to Radford with mixed use development along both sides of the corridor. The southern portion of the corridor is envisioned as a lower-speed, pedestrian friendly corridor that transitions to a higher speed rural road south of the hospital.



North end of corridor
High speed, landscaped "gateway to Radford"

MIXED USE DISTRICT
Mixture of service, light industry, medical R&D, office, residential & retail uses – gradation of uses & densities away from interchange

South end of corridor
Lower speed, pedestrian-friendly mixed use corridor

Transition
Transition to higher speed rural road south of hospital

Figure 6. Diagram of vision concept for the Route 177 Gateway Area.

Land Use Concept

The Route 177 Gateway Area has great long term potential to grow into a center of economic development for the western portion of Montgomery County. The land use concept, shown on this page, is based on the vision concept diagram and incorporates a combination of mixed uses with gradually decreasing intensity away from the interchange. While each of the districts calls for a mixture of uses, the uses are carefully combined to ensure compatibility with each other and with the distance of each area from the interchange. The following table and corresponding map describe the uses envisioned within the study area:

LAND USE CONCEPT

Service-oriented mixed use

A combination of service related commercial uses including hospitality, lodging, retail and office uses – some high density residential may be included

Light industrial/office-oriented mixed use

A combination of light industry, warehousing and office uses, screened from adjacent areas

Residential-oriented mixed use

A combination of mixed density residential uses, including elderly or age-specific residential communities that incorporate a walkable community design and limited office/retail

Medical/Residential –oriented mixed use

A combination of hospital, medical office and research/development uses, combined with elderly or age-specific residential communities with mixed densities, unit types and a walkable community design.

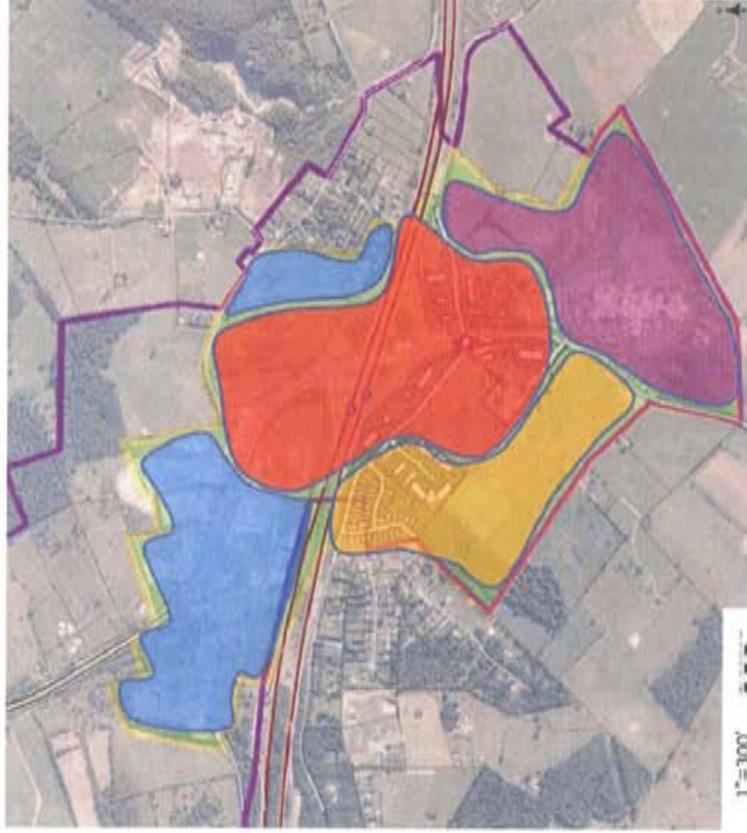


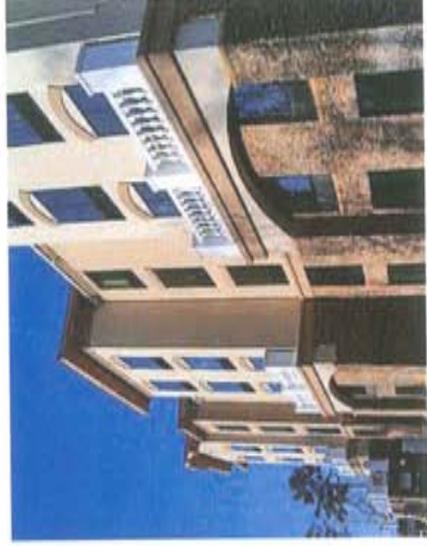
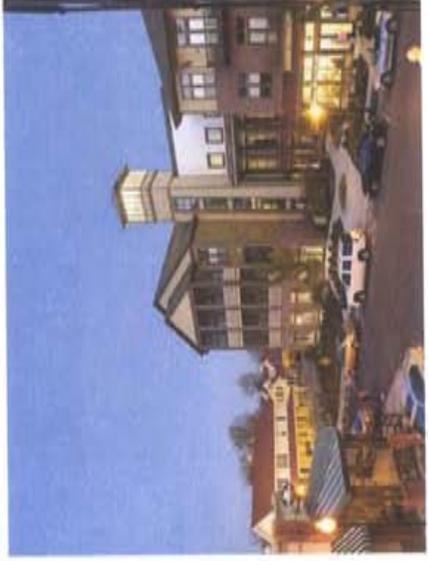
Figure 7. Land Use Concept for the 177 Gateway Area

Design Concepts by Land Use District:

The following diagrams and photographs describe the general development concepts for each land use district in the Gateway area.

Service-Oriented Mixed Use

The preferred uses for the parcels around the I-81 interchange itself are a combination of service related commercial uses including hospitality, lodging, retail and office uses. Some high density residential may be included. These may include compatibly designed hotel, restaurant or service station uses.



ROUTE 177 GATEWAY AREA PLAN

Light Industrial/Office-Oriented Mixed Use

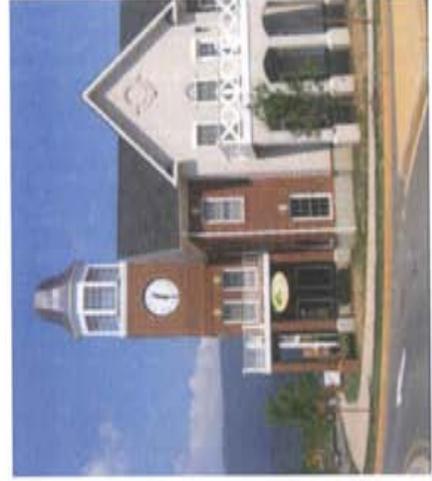
The Light Industrial/Office Oriented Mixed Use district is located generally along Tyler Road to the north of the interchange. The preferred uses are a combination of light industry, warehousing and office uses, screened from adjacent areas – especially residential uses – with extensive landscaping and berms or topography. Light industry should be low rise and campus style, generally located to the rear of the properties, with mid rise office uses generally oriented toward the primary road frontages.



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Residential-Oriented Mixed Use

The quadrant southwest of the interchange is envisioned as a combination of mixed density residential uses, including elderly or age-specific residential communities that incorporate a walkable community design. Limited retail or office uses that are neighborhood scale may be incorporated to serve the immediate area. Pedestrian accommodations should be provided throughout, with sidewalks and a regular system of connected residential blocks, and trail connections to open space and among each neighborhood.



ROUTE 177 GATEWAY AREA PLAN

Medical/Residential-Oriented Mixed Use

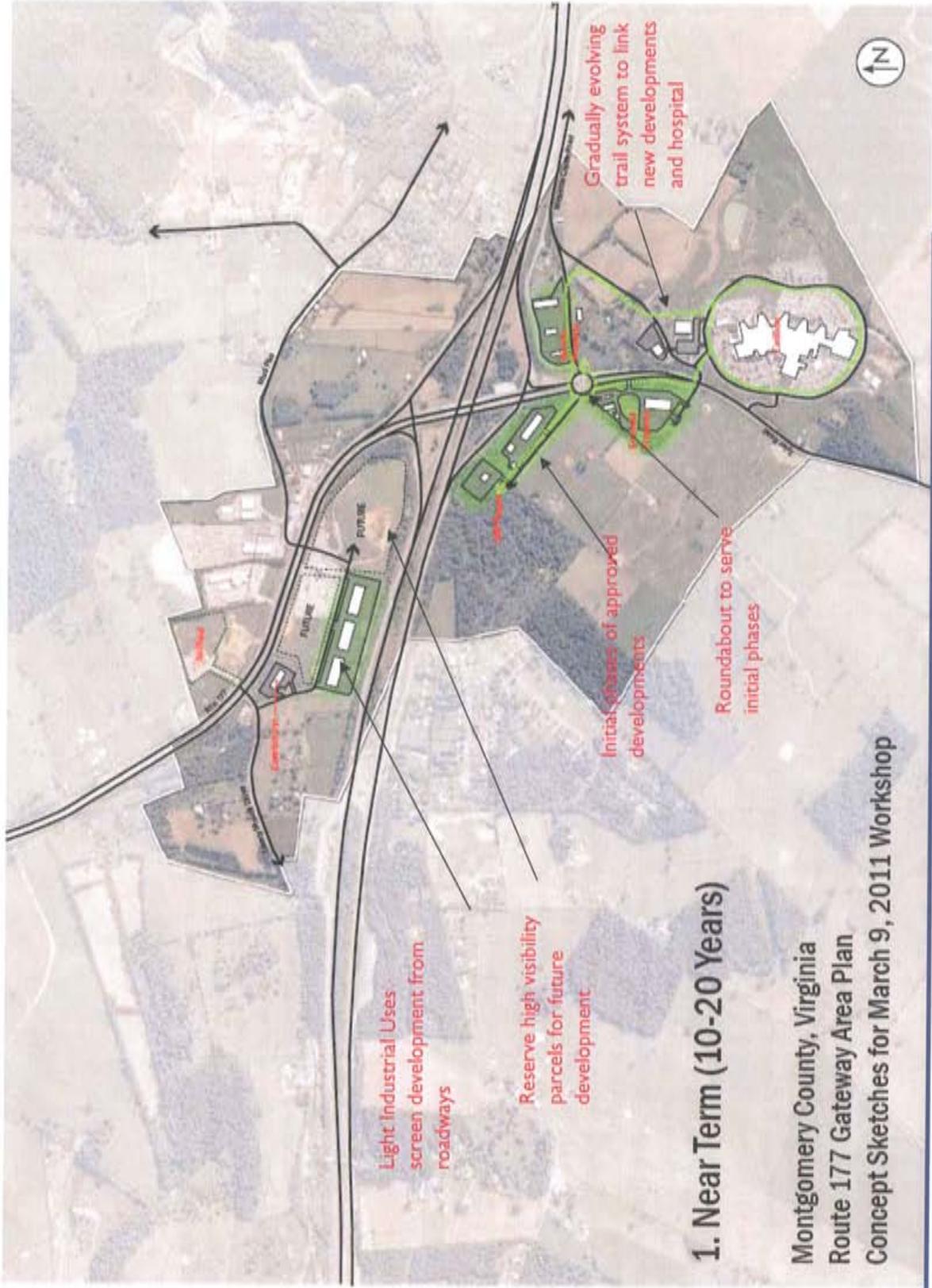
The area around Carillion Hospital is intended to grow as a medical campus with a combination of hospital, medical office and research/development uses. It is also intended that this area have a compatible residential component with elderly or age-specific residential communities with mixed densities, unit types and a walkable community design.



Potential Evolution Over Time

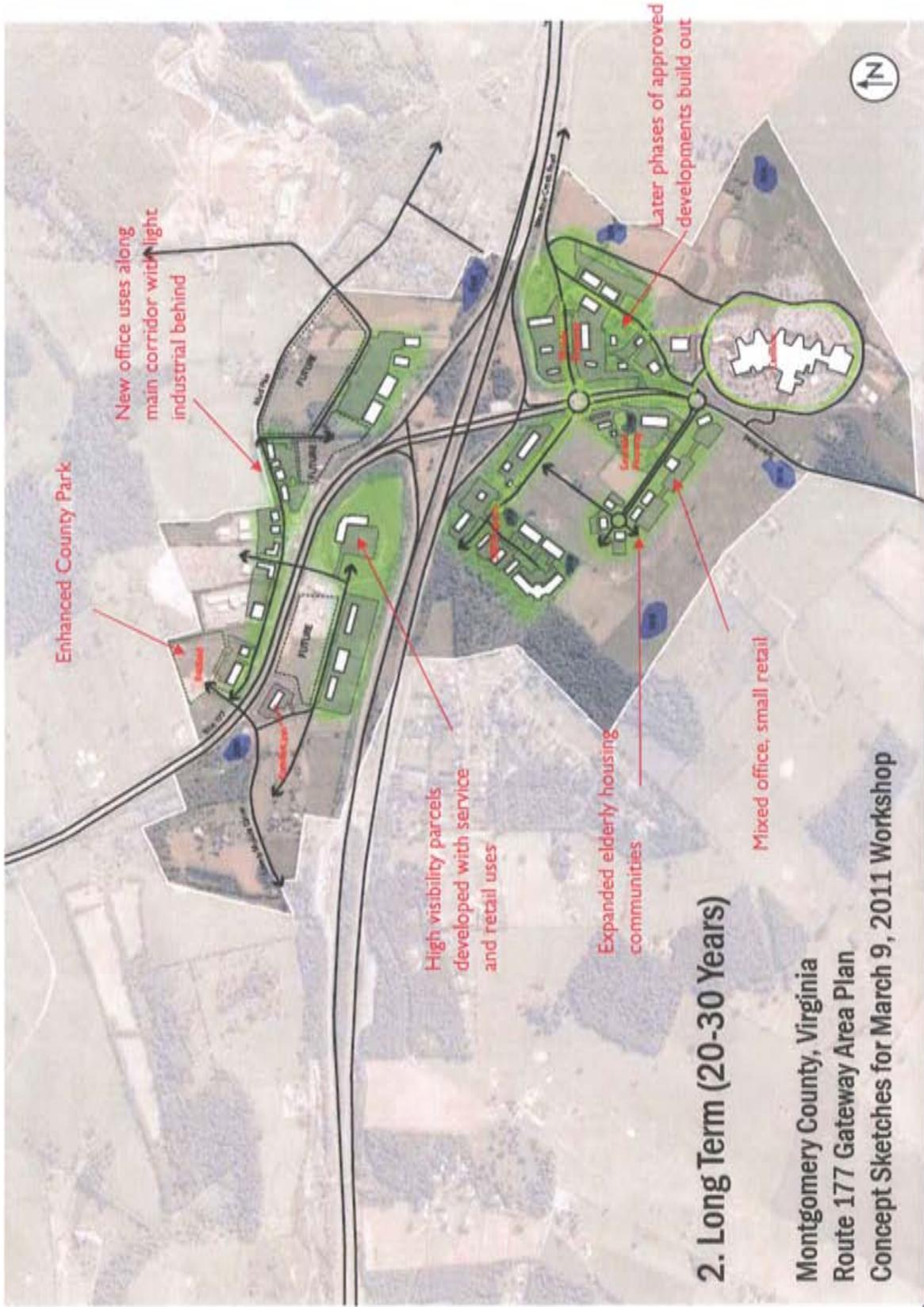
The following pages illustrate a hypothetical build-out of the parcels in the Gateway area over the long term. The Vision Plan shown is the conceptual design expression for the 177 Gateway Area. It is important to note that the Vision Plan is only conceptual in nature and that – while it clearly expresses the policy intent for the 177 Gateway, it is only one possible way that these policies can be expressed in physical design form, and that other expressions are possible as well. Understanding that the complete transformation of the corridor will not happen overnight, the conceptual vision plan for this area is designed to show one potential way that development could occur over a long period of time. It is important to recognize that the concepts on the following pages are guides for potential development, not regulations and should be seen as illustrative concepts only.

Regardless of how long it takes to reach the long term vision for the Gateway area, the conceptual vision plan the ideals and desires of the community for how the corridor should evolve over time should be the primary guide for evaluating future development in the area. The implementation of the vision will ultimately be driven by the initiatives of private property owners, supported by policies and programs that the county adopts over time to encourage the shared vision for the Gateway's future.



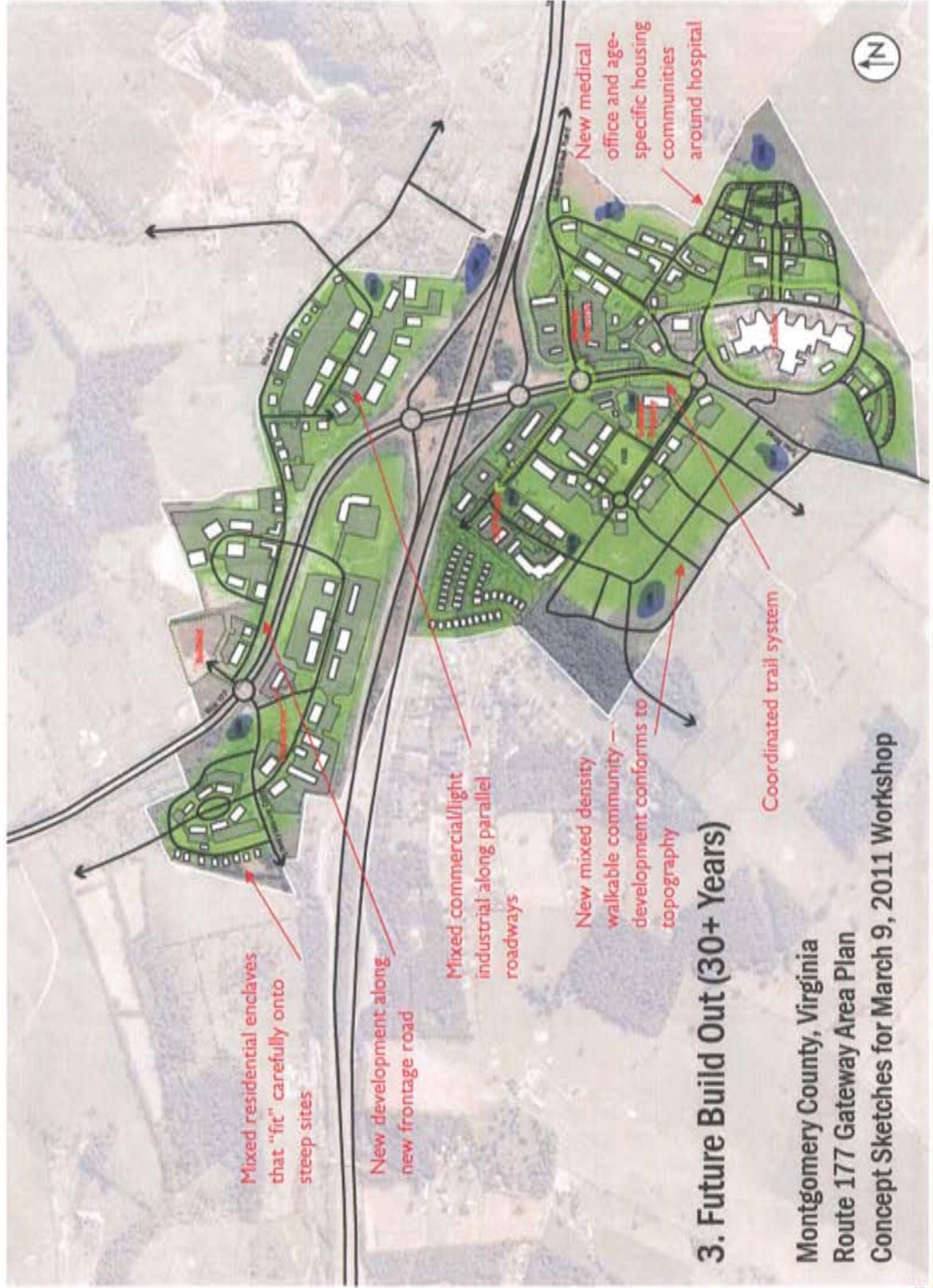
1. Near Term (10-20 Years)

Montgomery County, Virginia
Route 177 Gateway Area Plan
Concept Sketches for March 9, 2011 Workshop



2. Long Term (20-30 Years)

Montgomery County, Virginia
Route 177 Gateway Area Plan
Concept Sketches for March 9, 2011 Workshop



3. Future Build Out (30+ Years)

Montgomery County, Virginia
Route 177 Gateway Area Plan
Concept Sketches for March 9, 2011 Workshop

Benefits of Mixed Use Development

The mixed use concepts called for in this vision for the Gateway area have distinct benefits in terms of diversifying the market potential for the area, creating a high quality of life and potentially reducing overall automobile trip generation. Mixed use developments have been shown to favor local trips within communities resulting in increased internal trip capture opportunities. This means that some site trips can occur within the community without using external roadways. This reduces overall traffic demand on the adjacent roadways. Industry research typically shows up to a 15% reduction in external trips when multiple use types are collocated within one contiguous site. More recent industry research by the Institute of Transportation Engineers has shown that the trip reductions are sometimes higher than the 15% typical. Also, by collocating residential uses in close proximity to office and/or retail, opportunities for walking or bicycling are maximized, especially when the site design standards require connected sidewalks and an overall walkable environment. Finally, when site design densities are increased, the ability to serve a site or area with transit becomes more feasible. The success of a transit route will often depend on the density and design of the location being served. A walkable environment with sufficient density and intensity of uses helps to maximize the potential for serving that location with transit.

Access Management

Access management programs seek to limit and consolidate access along major roadways, while promoting a supporting street system and unified access and circulation systems to access development. The result can be a roadway that functions more safely and efficiently for its useful life, which ultimately results in a more attractive and economically stronger road corridor.

Access management policies have been evolving nationally over the past 15 years. In 2007, the Virginia General Assembly enacted legislation requiring the Virginia Department of Transportation to develop and enforce a statewide policy that provides standards for regulating driveway intersection spacing and median crossover locations along state maintained roadways. The overall goal of the policy is to maximize safety and mobility along Virginia's roadways.

The tables on the following page are excerpted from the VDOT Access Management Policy and Roadway Design Manual and show the current applicable access standards that would apply to new development or redevelopment in the 177 corridor..

ROUTE 177 GATEWAY AREA PLAN

As the Route 177 corridor continues to evolve in terms of new growth, it will be important to find opportunities to consolidate entrances for parcels fronting the roadway, and also develop a roadway network that effectively provides access while conforming to VDOT's access management policy.

The graphic on the following page illustrates the inventory of existing connections and median crossovers relative to the access management criteria.

Type of Area	Spacing Dimension			
	X	Y	Z	M
Urban	750'	26-40'	990'	990'
Rural	1320'	28-50'	1320'	1320'

TABLE 2-3 MINIMUM SPACING STANDARDS FOR COMMERCIAL ENTRANCES AND INTERSECTIONS NEAR INTERSECTIONS NEAR INTERCHANGE AREAS ON MULTILANE CROSSROADS

Source: National Cooperative Highway Research Program (NCHRP) Synthesis 332: Access Management on Crossroads in the Vicinity of Interchanges, 2004. NCHRP Report 420: Impacts of Access Management Techniques, 1999.

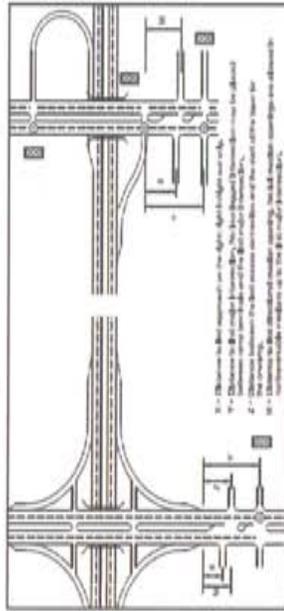


FIGURE 2-9 ACCESS CONTROL ON MULTI LANE HIGHWAYS AT INTERCHANGES

Figure 8. Source: Appendix F. VDOT Roadway Design Manual



Principal Arterial Spacing Standards Appendix F, Table 2-2

Highway Functional Classification	Legal Speed Limit (mph)	Centerline to Centerline Spacing in Feet		
		Signalized Intersections/Crossover	Unsignalized Intersections/Crossover & Full Access Entrances	Partial Access One or Two Way Entrance
Urban Principal Arterial	≤ 30 mph	1,760	1,050	270
	35 – 45 mph	2,640	1,320	325
	> 50 mph	2,640	1,320	510
Rural Principal Arterial	≤ 30 mph	2,640	1,320	270
	35 – 45 mph	2,640	1,320	440
	> 50 mph	2,640	1,760	585

① ½ mile signal spacing ② Half of signalized ③ Length of right turn lane by speed (AASHTO)



Minor Arterial, Collector, Local Street Spacing Standards Appendix G, Table 2-2

Highway Functional Classification	Legal Speed Limit (mph)	Centerline to Centerline Spacing in Feet			
		Signalized Intersections/Crossovers	Unsignalized Intersections/Crossover & Full Access Entrances	Partial Access One or Two Way Entrances	
Urban Minor Arterial	≤ 30 mph	880	660	270	
	35 to 45 mph	1,650	660	305	
	> 50 mph	1,320	1,650	425	
Urban Collector	≤ 30 mph	880	UNDESIGNED	155	
	35 to 45 mph	660	425	250	
	> 50 mph	1,050	425	360	
Rural Minor Arterial	≤ 30 mph	1,050	660	270	
	35 to 45 mph	1,320	1,050	380	
	> 50 mph	1,320	1,320	495	
Rural Collector	≤ 30 mph	880	UNDESIGNED	200	
	35 to 45 mph	1,320	570	305	
	> 50 mph	1,320	570	425	
Local Street		1,320	645	570	

Consistent access spacing. See Figures 4-11.

- Signalized intersection spacing applies to other signals.
- Unsignalized intersection spacing is the minimum distance between such intersections and between unsignalized and signalized intersections
- Partial entrance spacing separates such entrances from each other and from intersections.

Also shown on this graphic is a representation of how the VDOT criteria applies to the corridor relative to spacing of signalized intersections, median crossovers, and entrances. This graphic should guide the decision making process for modification to existing access features and provision of future access features.

The County adopted a corridor plan in year 2004 that included information regarding regulating access along the corridor. Since that document was adopted, VDOT has developed its full set of access management standards as previously referenced. Hence, the information provided herein supersedes the prior access management description and figures as shown in the 2004 Route 177 Corridor Plan.

Going forward into the future, regulating access in accordance with the VDOT access management policy will be critically important towards preserving the capacity and safety of Route 177 while effectively encouraging shared access and an efficient system of adjacent roadways that will form the basis of the local road system. When possible through the site plan review process, access points (entrances) for parcels that currently front of Route 177 should be reduced, combined, or closed and access through adjacent parcels or via a new road network should be encouraged. In the short term, these opportunities will be limited. However, looking out into the mid to distant time frame (15 years+), as the enhanced local road system begins to grow this will provide greater opportunities for reconfiguring the existing site entrances.

The new and enhanced local road network will need to take into consideration the VDOT access management standards, as illustrated on figure 9, relative to providing connections to Route 177. Signal spacing, intersection spacing and crossover spacing are all governed by the VDOT criteria. This criteria provides the guidance for how new roads will connect to Route 177 and where partial and full crossovers may be located.

Projected Roadway Infrastructure Needs

An assessment of likely roadway infrastructure improvements was conducted based on the projected volumes as shown in the conceptual illustrative plans in each phase of the Gateway's evolution. It is important to note that reductions for internal capture and mode shift (i.e. reduction in trips based on mixed use developments for walk, bike, or transit trips) was not applied. Therefore, the planning numbers shown below are be conservatively high and represent a potential worst case scenario in terms of infrastructure needs. The findings of the analysis are presented in the following graphical summaries based on projected time horizons.



Figure 10. Future Road Improvements by 2025



Figure 11. Future Road Improvements by 2035



Figure 12. Future Road Improvements after 2035

Roadway Context

The following graphics show how the Tyler Road corridor north of I-81 could evolve with new development, local connector roads, and landscaping to create an attractive mixed use and multimodal gateway into Montgomery County and the City of Radford.



Figure 13. Tyler Road looking north at Comfort Inn - current condition.

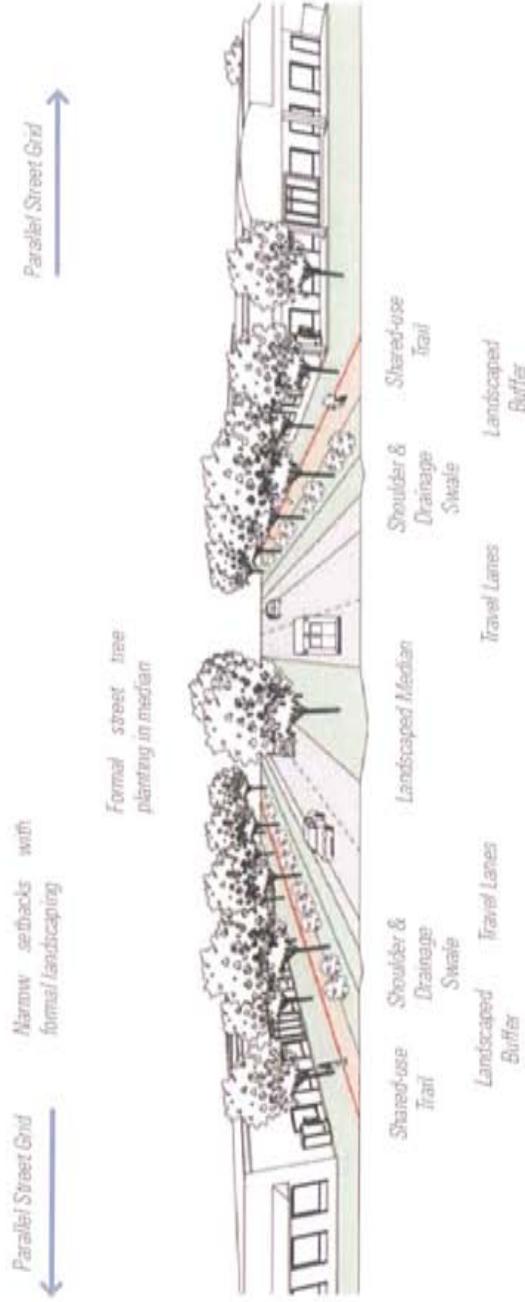


Figure 14. Tyler Road looking north at Comfort Inn - potential future condition.

ROUTE 177 GATEWAY AREA PLAN

Typical Cross Sections: North of I-81 Mixed Use High Speed Corridor

This section of Route 177 north of I-81 is already a four lane divided facility that operates at high speeds (45-55mph). The Vision Concept for this portion of the corridor is to maintain the pastoral, high speed character with mixed commercial uses along a landscaped corridor. The concept also includes bicycle and pedestrian accommodations within a shared use trail separated from the road. New development should be enhanced by generous landscaping.



ROUTE 177 GATEWAY AREA PLAN

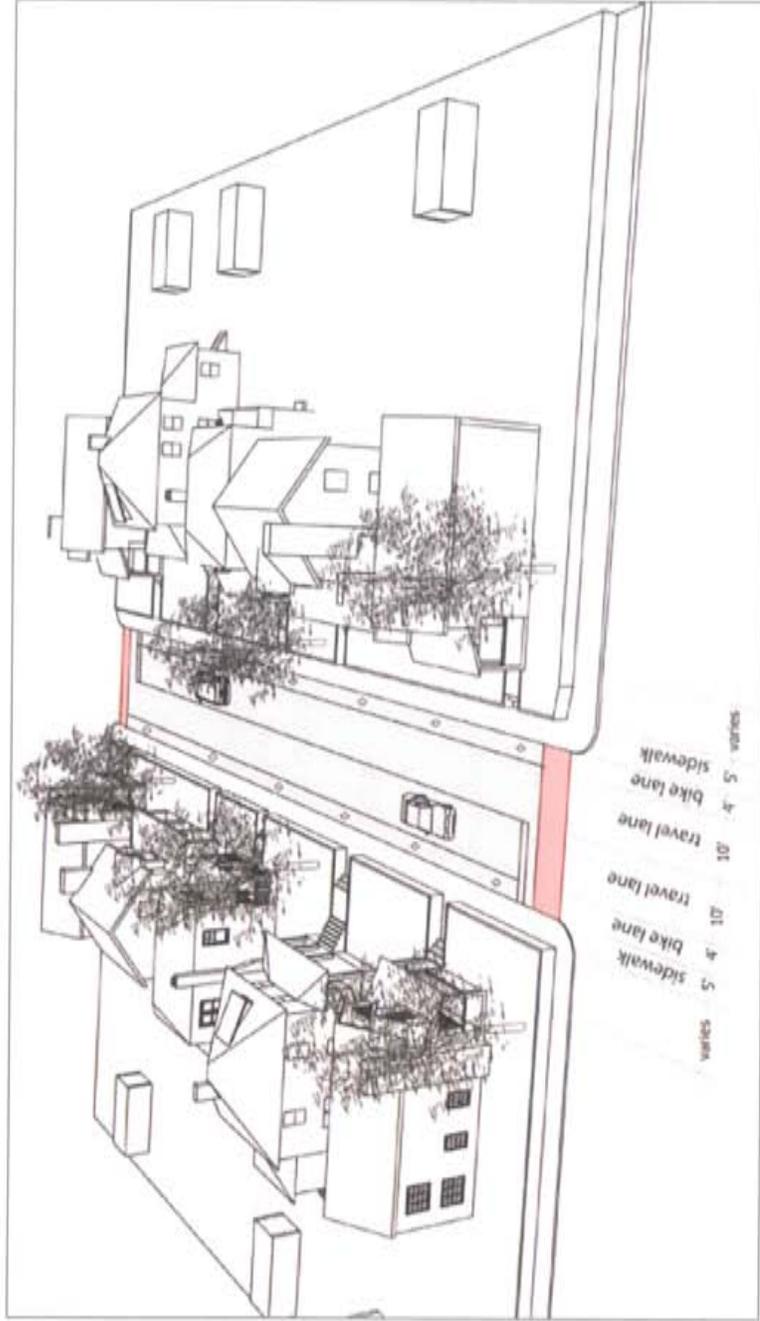
Typical Cross Sections: South of I-81, Mixed Use Low Speed Corridor

The section of roadway to the south of I-81 will also be a four-lane divided facility. It is intended to support future multimodal transportation and mixed use development anchored by Carilion Hospital. New commercial and service uses have the potential to generate significant amounts of pedestrian activity in the next 25 years, and should front directly onto the street with parking located to the rear of buildings. In order to maintain safety for anticipated pedestrian traffic and local vehicular access, the corridor should gradually transition to a lower design speed (35 mph or less) for the portion from the interchange to at least Dairy Road. Sidewalks, street trees and pedestrian-scale street lighting should be provided along both sides of the road. The typical section shown below provides for two lanes of travel in each direction separated by a raised median.



Typical Cross Section: Local Road

This cross section shows the design intent for local roads in the 177 Gateway area, with features such as bike lanes and sidewalks on both sides of the street.



IMPLEMENTATION

During the public input process for this area plan, participants were asked to describe the most important implementation steps needed to achieve the vision. The full results of all public input can be found in the appendix. Two general priorities emerged from this process:

- Funding for major infrastructure improvements
- Coordination of landowners and developers on infrastructure funding opportunities

Funding Options for Infrastructure

The following is a general list of opportunities for funding infrastructure and improvements in the Gateway area, with a description of the requirements and standards for each. Enabling legislation and grant programs are inherently fluid and each legislative session changes the range of opportunities available. Therefore, the county should monitor these opportunities over time and look for those that are most conducive at each phase of evolution of the Gateway area over time.

Grant Programs

Transportation Partnership Opportunity Fund (TPOF) is to be used by the Governor of Virginia through the Design-Build provisions of the Virginia Code (§33.1-12(2)(b)) pursuant to the Public Private

Partnership Act of 1995 (Virginia Code § 56-556 et seq.). The Governor can also use TPOF monies for transportation aspects of economic development projects. Grants can be up to \$5 million, while loans up to \$30 million can be obtained interest free, but require repayment within 7 years. While flexible, TPOF funds are limited to use when the capacity of existing funding mechanisms has been exceeded.

Revenue Leveraging

The Transportation Funding and Reform Act of 2007 (HB 3202) allows counties to raise commercial property taxes as much as \$0.25. For FY 2009, the Fairfax County Board of Supervisors approved a tax rate increase of \$0.11, and is expected to generate approximately \$52 million transportation projects. Funds can be spent on roadway, pedestrian and transit projects.

Revenue Sharing

The Virginia Department of Transportation Revenue-Sharing Program is authorized under Virginia Code §33.1-2305. The program allows for Virginia Department of Transportation funds to match locality funds for improvement, construction or reconstruction on any functional class of roadway. A locality can request funds for projects in other localities. The program is currently funded at a level of \$50 million; each locality may request up to \$1 million.

General Obligation Bond Financing

General obligation bonds provide up-front capital financed through a revenue stream backed by local government tax revenues (primarily property tax). For example, in 2004, Fairfax County issued about \$165 million in transportation bonds. Another \$110 million in bonds for transportation was approved by voters in 2007.

However, there are nearly always competing priorities for the use of general obligation bonds, since they are commonly used for many local capital projects, including schools, parks, libraries, etc. Infrastructure improvements in the Rt. 177 corridor area would need to be put in the County's Capital Improvements Program (CIP) in conjunction with local funding allocations and financing provisions.

Service Districts

Service districts may be created by any locality, by ordinance (Code of Virginia (§ 15.2-2400)). The locality must hold a public hearing prior to the creation of any district. Two localities may jointly act to create such a district located in both localities.

Service districts are created to provide additional, more complete, or more timely services of government than are desired in the locality as a whole. Once an ordinance creating a service district is adopted, the governing body has additional powers pertaining to the district, including:

- to construct, maintain, and operate such facilities and equipment as may be necessary or desirable to provide additional, more complete, or more timely governmental services within a service district.
- to provide construction, maintenance, and general upkeep of streets and roads, public transportation systems serving the district, including the acquisition of real estate necessary to provide such services.
- to levy and collect an annual tax upon any property in the service district subject to local taxation to pay for providing the additional governmental services. Note, however, in contrast with the Community Development Authority provisions, such annual tax shall not be levied for or used to pay for schools, police, or general government services.

In addition to the taxes and assessments provide for by the enabling legislation, a locality may contribute money from its general fund as it deems appropriate to pay for the governmental services authorized within the service district. The proceeds from any annual tax or portion thereof collected for road construction may be accumulated and set aside for such period of time as is necessary to finance such construction.

Community Development Authorities (CDA)

Community Development Authorities may be established by the governing body upon petition from 51% of the land area or assessed value of land in any tract or tracts of land in a proposed district (Code of Virginia (§ 15.2-5152).

The locality may then adopt a resolution or ordinance creating the authority, after a public hearing. The resolution or ordinance is then recorded in the land records of the circuit court for each parcel included in the district. Two localities may jointly act to create such a district located in both localities.

The main powers of a CDA are to finance, fund, plan, construct, operate, and maintain the infrastructure improvements enumerated in the ordinance establishing the district. These can include acquisition of land; construction or improvement of roads, bridges, parking facilities, curbs, gutters, sidewalks, traffic signals, storm water management and retention systems, gas and electric lines and street lights, parks, cultural and educational uses; fencing and landscaping; fire stations, water mains and plugs, fire trucks, rescue vehicles and other vehicles and equipment, and school buildings and related structures.

A CDA may issue revenue bonds, subject to terms and conditions as may be established in the ordinance or resolution establishing the district, for

all costs associated with the improvements. Revenue bonds must be payable solely from revenues received by the development authority. The revenue bonds issued by a CDA do not require the consent of the locality, except where consent is specifically required by the provisions of the authorizing resolution, and such bonds are not deemed to constitute a debt or obligation of the local governing body. The CDA may provide that the locality annually collect a special tax on taxable real property within the CDA's jurisdiction to finance the services and facilities provided by the authority.

The CDA may provide that the locality annually collect a special tax on real property within the CDA's jurisdiction to finance the services and facilities provided by the authority. Unless requested by every property owner within the proposed district, the rate of the special tax can not be more than \$0.25 per \$100 of the assessed fair market value of any taxable real estate.

Tax Increment Financing (TIF)

The governing body of any county, city or town may adopt **tax increment financing** by passing an ordinance designating a development project area and providing that real estate taxes in the development project area shall be assessed, collected and allocated such that the future gains in tax revenues created by the improvements are used to finance the improvements (Virginia Code §58.1-3245.2).

When a public project (e.g., sidewalk improvements) is constructed, surrounding property values generally increase and encourage surrounding development or redevelopment. The increased tax revenues are then dedicated to finance the debt created by the original public improvement project.

The local assessing officer records in the land book both the base assessed value and the current assessed value of the real estate in the development project area. Real estate taxes attributable to the increased value between the current assessed value of any parcel of real estate and the base assessed value of such real estate are allocated by the local treasurer and paid into a special fund entitled the "Tax Increment Financing Fund" to pay the principal and interest on obligations issued or development project cost commitments entered into to finance the development project costs.

Tax Increment Financing typically occurs within designated Urban Renewal Areas (URA) that meet certain economic criteria and approved by a local governing body. To be eligible for this financing, a project (or a portion of it) must be located within the URA.

Conditional Zoning

Conditional zoning was enabled by the Virginia General Assembly to address the shortcomings of traditional zoning methods when competing and incompatible land uses conflict (Virginia Code §15.2-

2296-2203). While it is technically a zoning tool, it is also a tool for funding infrastructure and the financial impacts of growth.

Conditional zoning allows reasonable conditions, known as proffers, to be offered by the applicant during a rezoning process as a way of mitigating the impacts of the proposed rezoning. Proffers may include land, infrastructure, cash or other conditions or constraints on the use of the property. These proffers, if accepted by the governing body as part of the rezoning approval, become part of the zoning ordinance as it applies to that property. In theory, conditional zoning allows land to be rezoned that might not otherwise be rezoned because the proffers will protect the community or area affected by the rezoning.

All proffers must be made voluntarily. Therefore a governing body is not authorized to require a specific proffer as a condition to granting a rezoning.

Many of the properties in the Rt. 177 corridor already have the zoning that the owners desire. Thus, no rezoning would be requested and no proffers for infrastructure would be offered to the County. However, there may be times, in the near or longer-term future, where an owner may indeed wish to rezone his property, in which case proffers could come into play.

Land Development Regulation and Coordination

In order to fully implement the policies of the Gateway Area plan, two important coordination processes are expected and needed: coordination of activities between landowners and the County, City, and State; and coordination of activities among the various landowners (particularly those located contiguous or adjacent to each other).

The County and City have an overall desire to foster a coordinated pattern of land development. In the area Typical mechanisms for implementing this objective could include encouraging landowners to seek the appropriate zoning for their property so as

to allow the type of development envisioned by the plan, and working with developers and VDOT to help coordinate on-site transportation infrastructure between neighboring property owners, providing long-term interparcel access and access consolidation. The policies of the Area Plan establish a guiding framework for such coordination.

Further, the County and City can foster coordination among landowners by facilitating discussions, serving as a clearing house for information of common interest, continuing to invite landowners into policy discussions, and hosting forums for dialogue and joint planning by landowners.

APPENDIX

Work Session Summary Materials

Rt. 177 Area Plan

Staff Work Session

February 9, 2011

- County Board has identified 177 area as:
 - Key growth area for county
 - Need for planned/orderly growth
 - Timing is right to do planning
- Next 20 years of growth is crucial
- 76 Bike Route comes from Mud Pike to Lovely Mount – opportunity to tie into County park?
- Opportunity for walkability from new hotels/restaurants to hospital
- Concern with workers at hospital crossing road to get to restaurants
- What is the future of the interchange if i-81 is widened to 6 lanes?
 - How could it be improved? Look at options
- What about land to southwest of study area for future potential?
- Need for up to 1 million GPD of water and sewer in the future
- This is Radford's face to the interstate so need for a visually attractive gateway
- Potentials for medical office are good
 - Interchange related businesses
 - Residential/Office close to Radford
- In short term, many uses are "topography-dependent"
- City has bikeways/walkways bounding this area to the north
- Industrial/office potential on old Carilion site
- How will new stormwater management regulations affect higher densities?
 - Topo provides opportunities for regional stormwater management
- Currently an informal park and ride lot at Marathon Gas station – look at opportunity for future
- Carilion provides medical services for Radford University students
- Potential need for future fire station in area – where should it go? (next 5 years)
 - Area is currently boundary between Riner, Christiansburg, and Radford
 - Concern with providing sufficient crossovers for emergency access
- Need for shared entrances and connectivity to help emergency access
- Sewer capacity is based on existing transmission line capacity – currently at 400,000 GPD
- Earlier study looked at costs to provide 1,000,000 GPD in future was \$6 million
- Does it make sense to loosen up sign regulations around interstate
- "Liquor by drink" – i.e. dry county has tended to limit chain restaurant development at this interchange as opposed to Blacksburg, for example
- Consider bike/ped accommodation if interchange gets reconfigured in the future
- Note that service stations may be mixed commercial with grocery store, etc.
- Look at making south side more walkable commercial center and north side more of a boulevard/parkway because the major destination is Radford

- Look at working with VDOT to consolidate entrances as properties redevelop
- This process would ideally modify the current access management plan and get approved by VDOT
- Opportunity to include policies that reinforce agricultural preservation outside of UDA.

Rt. 177 Area Plan

Property Owners Work Session

February 9, 2011

- Desire to maintain agricultural status and sell properties for rezoning as market allows
- Potential obstacle will be getting individual property owners to work together
- Consider that all preproperties are investment properties
- Current signage regulations hurt competition because of lack of visibility from I-81
- In favor of long term mixed use for the area, but short term issue is getting good transportation (transit, regional, etc.) to Towns, City and growth areas.
- 900 hospital employees – need convenient restaurants, services in the area
- Need grants or other funding to build utilities in the area
- Would like to see development concepts for specific properties that fits the County vision so that infrastructure can be coordinated
- Constraint of dry county doesn't attract certain businesses
- Look at retail potential based on adjacent centers
- Walkability is a plus, but best potential is adjacent to Carilion
- Wastewater is on a first come-first serve basis and has fixed capacity – important constraint
- Consider more commercial south of I-81 and more residential north of I-81
- Need County to work with property owners on development concepts
- Look at lifestyle center near hospital – retail below with apartments above
- Include City of Radford and County Economic Development in discussions
- Biggest initial step is to fund the roundabout
- Need to consider the opinions of homeowners in the area

177 Small Area Plan
Montgomery County
March 9, 2011

Staff Worksession

- Factor in water and sewer? Yes. Capacity exists ; many need some reconstruction of pipes.
- Screening of businesses – avoid sound barriers. “If people don’t want them, they don’t go up”
- Why more pedestrian orientation on south side and not to the north? Travel speeds and ped crossings. Maybe bike/ped crossings and bain’s Chapel Rd. Bridge to the south.
- Maybe a circle showing potential impact of interchange re-build.
- Mud Pike Intersection – difficult access.
- If VDOT approves this plan it becomes the framework for VDOT’s access decisions.
- Need to get these ideas into MPO plan.
- CDAs need thorough explanation – not used a lot around here. Just Roanoke.
- 1% growth rate for regular traffic may be low (or not – could be less than 1%)
- Radford is interested – Steve might visit and present to City officials
- Any recommendations for ordinance amendments? Yes, we will.

Property Owner’s Worksession

- Fencing for security? Privacy? To separate commercial from residential.
- Elderly housing – one story
- Bldg height limits?
- Need to show connection to Bain’s Chapel Rd.
- Easements, service roads, eminent domain?
- ID conservation easements and AFD’s on basemap.
- Do roundabouts fit in existing ROW?
- Should be 35 mph on north side too.
- Logical and general enough = OK. But how do we get the ball rolling?
- Focus on best sites and owners who are willing to sell.
- Focus on grant \$ - landowners expect and need help
- Impacts from construction blasting?
- Source of natural gas supply?
- Need county and landowners working together – County needs to lead effort.
- Raising taxes will scare people off
- How about low interest loans from County?
- What is the City’s role?



RENAISSANCE PLANNING GROUP

**DRAFT
TECHNICAL MEMORANDUM**

DRAFT Zoning Ordinance Amendments

for Montgomery, County Virginia

Prepared By:

Renaissance Planning Group and Herd Planning & Design

FINAL DRAFT April 12, 2011

PURPOSE

The purpose of this technical memorandum is to document the issues, options and recommendations for Zoning and Subdivision Ordinance amendments to fulfill the VDOT Grant requirements and to implement the intent of the UDA legislation in concert with the County's Comprehensive Plan. Although the UDA section of the Virginia Code does not require local ordinance amendments, the scope of work for the VDOT Local Assistance grant calls for ordinance provisions that will accommodate the UDA provisions.

The memo is organized into the following sections:

Part 1 Summary of Work Process to Date

Part 2 Summary of Recommended Updates to Zoning and Subdivision Ordinances

Attachment: FINAL DRAFT PUD-TND Ordinance with Submission Requirements, FINAL DRAFT TND-Infill Ordinance, Strike through and underline revisions to Compact Option of R2 and R3 Districts

Part 1. Summary of Work Process to Date

In the technical memo dated October 4, 2010, the consultants provided information and recommendations to assist Montgomery County in developing a strategic approach to aligning key land use policies and regulations with the recently adopted Urban Development Area (UDA) legislation. As part of VDOT's Local Assistance for Urban Development Areas Grant Program, Renaissance Planning Group reviewed the County's Zoning Ordinance, Subdivision Regulations, Comprehensive Plan, and materials from other localities, to provide recommendations for amendments that comply with the intent of the UDA legislation and respond to the unique needs and conditions within the County.

Subsequently, the team and staff discussed these and related issues in a conference call. Following the memo and conference call, it was agreed that a completely new TND-PUD Ordinance would be developed to accommodate parcels over 40 acres in size, intended for use in the County's Urban Development Areas, Urban Expansion areas, and Village/Village Expansion Areas. In addition, a TND-Infill District would be created for parcels up to 10 acres to promote TND on smaller lots within the Village Areas. Additional meetings and conference calls have been conducted with staff to discuss various issues and refinements. An updated draft of both ordinances is provided as an attachment to this memo. In addition, the team also identified the need to revise to the Compact Option within the R-2 and R-3 districts to more fully address the design intent of TND.

Part 2. Summary of Recommended Updates to Zoning and Subdivision Ordinances

As previously mentioned, although the UDA section of the Virginia Code does not require local ordinance amendments, the scope of work for the VDOT Local Assistance grant calls for ordinance provisions that will accommodate the UDA legislation. Montgomery County's 2004 Comprehensive Plan provides clear direction on the desire to adopt a zoning ordinance that provides for Traditional Neighborhood Design concepts consistent with the UDA legislation. Based on the strategic assessment of existing policies and ordinances, the team proposes that a new TND-PUD ordinance and a new TND-Infill ordinance would best achieve both the goals of the Comprehensive Plan and the UDA legislation in Montgomery County. The team also proposes revisions to the Compact Option within the R-2 and R-3 districts to more fully address the design intent of TND. In addition to the two new districts, a number of sections within the zoning ordinance will need to be revised to accommodate the provisions of the TND-PUD and TND-Infill districts.

The table below summarizes how the new zoning districts and recommended revisions to existing zoning and subdivision ordinances would accomplish the requirements of VDOT's Grant Program and the intent of the UDA legislation. The full text of the FINAL **DRAFT** TND-PUD District, TND-Infill District and revisions to the Compact Option within the R-2 and R-3 districts are provided as an attachment at the end of this memo. It is anticipated that work on revisions to individual ordinance sections outlined below will take place by staff once the planning commission has reviewed the draft ordinance and provided comments.

UDA Grant Requirement:	Summary of Revision:
<ol style="list-style-type: none"> 1. <i>Revise zoning ordinance to create a classification that allows for the implementation of new urbanism/traditional neighborhood design.</i> 2. <i>Revise subdivision ordinance to include regulations that will accommodate the special characteristics of this design.</i> 	<ul style="list-style-type: none"> • Create two new districts within the zoning ordinance to implement new urbanism/traditional neighborhood design. The PUD-TND District is intended to provide opportunities for the development of new neighborhoods consistent with TND principles for large parcels over 40 acres. The TND-Infill District is intended to enhance and complement existing communities and villages by integrating TND into the existing community fabric on parcels up to 10 acres in size. • Revise R-2 and R-3 Compact Option to more fully address the design intent of TND. • Recommended revisions to subdivision ordinance are discussed below.
UDA Legislative Requirement:	Summary of Ordinance Revisions:
<ol style="list-style-type: none"> 1. <i>Provide for densities of at least four single-family residences, six townhouses, or 12 apartments, condominium units, or cooperative units per gross acre, and an authorized floor area ratio of at least 0.4 per acre for commercial development, or any proportional combination thereof.</i> 	<ul style="list-style-type: none"> • Establish development densities in the PUD-TND and TND-Infill to conform to density guidelines established in the Comprehensive Plan.
<ol style="list-style-type: none"> 2. <i>The comprehensive plan shall incorporate principles of traditional neighborhood design in the urban development area. TND .may include but need not be limited to...</i> 	
<ol style="list-style-type: none"> (i) <i>pedestrian-friendly road design,</i> 	<ul style="list-style-type: none"> • Establish standards that address street design, alleys, sidewalks, street trees, street furnishings and utilities in draft PUD-TND and TND-Infill Districts. • Establish site and building design standards that create a pedestrian-friendly streetscape within the TND-Infill District. • Revise R-2 and R-3 Compact Option to address pedestrian-friendly road design. <ul style="list-style-type: none"> ◦ <u>Sec. 10-41 (17)</u> Private street standards requiring design be in accordance with VDOT subdivision standards will

	<p>need to be evaluated if alleys ways are a feature of the TND districts.</p> <ul style="list-style-type: none"> •
<i>ii) interconnection of new local streets with existing local streets and roads,</i>	<ul style="list-style-type: none"> • Establish standards for a network of interconnected streets within the draft PUD-TND and TND-Infill Districts. This includes provisions for a network of gridded streets and standards for block sizes. • Add private street requirements within R-2 and R-3 Compact Option to promote connectivity.
<i>(iii) connectivity of road and pedestrian networks,</i>	<ul style="list-style-type: none"> • Establish standards for a network of interconnected streets within the draft PUD-TND and TND-Infill Districts. This includes provisions for a network of gridded streets and standards for block sizes. • Establish site design standards that promote pedestrian and vehicular connectivity within the TND-Infill District. • Add lot access standards within R-2 and R-3 Compact Option to promote connectivity.
<i>(iv) preservation of natural areas,</i>	<ul style="list-style-type: none"> • Establish standards for open space requirements in PUD-TND District. • Review minimum required green space requirements within R-2 and R-3 districts. • Sec. 10-61 – Consider removing reference to “green space.” Open space currently references back to green space.
<i>(v) mixed-use neighborhoods, including mixed housing types, with affordable housing to meet the projected family income distributions of "future residential growth,</i>	<ul style="list-style-type: none"> • Establish Neighborhood Center, Residential Neighborhood and Open Space subarea standards and use requirements within the PUD-TND. • Establish permitted uses within the TND-Infill that allow for vertical and horizontal mixed use buildings. • Review permitted use list within R-2 and R-3 districts to allow for a mix of uses within the compact option. • Sec. 10-41 (1) Supplemental district regulations which include limitations on accessory dwellings would need to be revised to allow for the use of accessory structures as dwelling units in the TND. This should include the number, size (600-800 SF)-of accessory dwelling units, as well as standards for whom or how many may occupy such units. • Sec. 10-41 (9) Number of dwelling units per parcel should be reviewed to ensure there is no conflict with final TND district standards that allow for new unit types and accessory dwelling units.
<i>(vi) reduction of front and side yard building setbacks, and</i>	<ul style="list-style-type: none"> • Establish lot and building requirements within the PUD-TND and TND Infill.

	<ul style="list-style-type: none"> • Review lot requirements within R-2 and R-3 districts to allow for reduced setbacks. • Sections 10-3 and Sec. 10-5 will need to be reviewed as the TND districts are developed to determine if there are any conflicts with the way setbacks and yards are measured or established and/or the lot use regulation provisions are structured.
<i>(vii) reduction of subdivision street widths and turning radii at subdivision street intersections.</i>	<ul style="list-style-type: none"> • Sec 8-152 will need to be reviewed to ensure it aligns with private street standards for PUD-TND, TND-Infill and R2/R3 revisions. Private streets for SFD lots now limited to those over 3 acres in size. May additionally need new private street TND standards.
Barriers and Other Considerations not addressed in UDA Legislation:	Summary of Ordinance Revisions:
<i>Parking</i>	<ul style="list-style-type: none"> • Sec. 10-44. Off-street parking and loading standards will need to be revised to address reduced parking standards in TND, parking calculations, use of off-site parking to meet requirements, shared parking provisions, and provisions for mixed use buildings. • Sec. 10-41 – Revise provision for parking in front yard to conform with R2/R3
<i>Landscaping</i>	<ul style="list-style-type: none"> • Sec. 10-43. Landscaping and buffering may need to be revised to include provisions for, or be superseded by, the TND district; the current standards don't address mixed use development or structures in a way that is conducive to TND design.
<i>Signage</i>	<ul style="list-style-type: none"> • Sec. 10-45. Sign regulations will need to include TND districts.
<i>Procedural</i>	<ul style="list-style-type: none"> • Provisions in-Sec. 10-47 relating to non-conformities may need to be revised if the County pursues redevelopment waivers to promote mixed use. • Section 10-54 will need to be revised to include submission requirements for TND-PUD. • Sec. 10-54. Add a new phrase defining the "simpler" concept plan for TND-I and then cross-reference back from the TND-I district. • The definitions section of the Zoning Ordinance will need to be updated to reflect TND terminology.

ATTACHMENT #1

DRAFT PUD-TND DISTRICT for Zoning Ordinance with Submission Requirements

Addition to Article III – Proposed as new section in Division 1. Special Districts

Sec. 10-32. PUD-TND Planned Unit Development-Traditional Neighborhood Development District

(1) Purpose. The purpose of the Planned Unit Development - Traditional Neighborhood Development District (PUD-TND) is to provide opportunities for the development of new neighborhoods that feature a mix of land uses and building types that are closely linked by a network of streets, sidewalks, formal and informal open spaces and trails that create an environment that is both pedestrian and transit friendly, and similar to historic small towns and neighborhoods established in Virginia and Montgomery County. The objective of the PUD-TND is to promote:

- a. Compact development with defined edges and a distinct neighborhood center;
- b. Human scale buildings and streets that are pedestrian and transit oriented;
- c. A mix of uses, including residential, commercial, civic, and open space uses ~~in~~ located close to one another within the neighborhood to reduce traffic congestion, reduce travel demand and dependence on automobiles;
- d. A mix of housing styles, types, and sizes to accommodate households of all ages, sizes, and incomes;
- e. A system of relatively narrow, interconnected streets with sidewalks, bikeways, and transit that offer multiple routes for motorists, pedestrians, and bicyclists and provides for the connection of those streets to existing and future developments;
- f. Public transit as a viable alternative to the automobile by organizing appropriate building densities
- g. Preservation and adaptive use of existing buildings with historical significance or architectural features that enhance the traditional visual character of the community;
- h. Preservation of significant environmental features and incorporation of such features into the design of new neighborhoods;
- i. Design and development consistent with the County's comprehensive plan.

The illustrations below are advisory only and are intended to show general intent of this District. Refer to the Code standards below for the specific standards for this section.



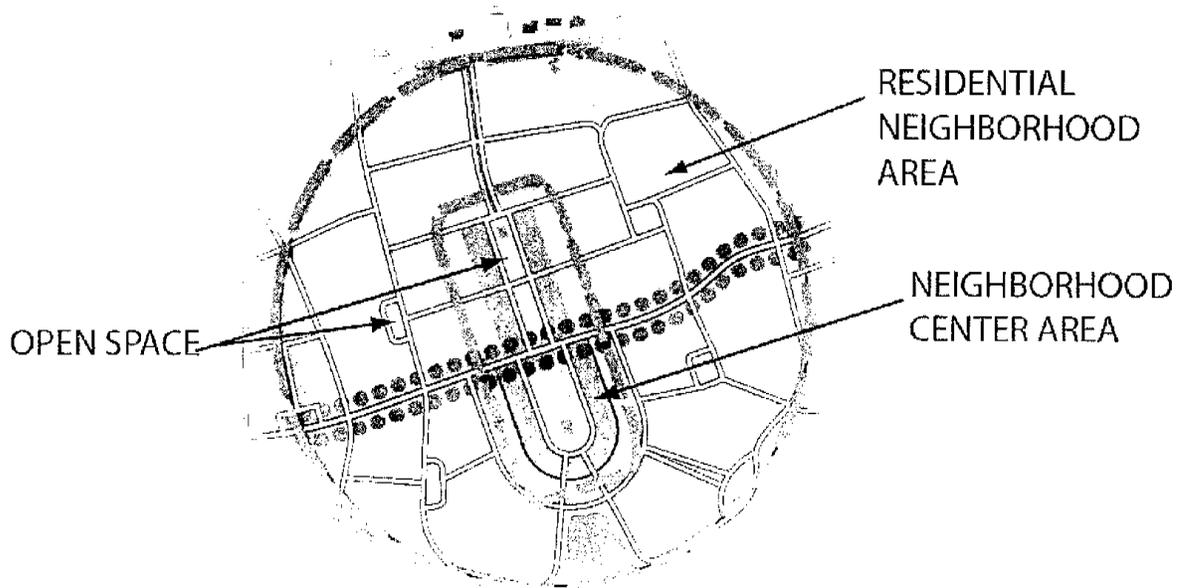
(2) *Qualifying lands.* Lands qualifying for inclusion in the district shall be limited to tracts within areas mapped as Urban Development Areas, Urban Expansion Areas, Villages and Village Expansion Areas as designated in the Comprehensive Plan and that are served by, or planned for, public sewer and water service. Additionally, the applicant must demonstrate to the satisfaction of the Board of Supervisors that there is sufficient available sewer and water capacity to accommodate the proposed development at full build out and/or provide a plan demonstrating that such improvements will be phased to accommodate projected development as it occurs (see also rezoning and submission requirements Sec 10-54).

(3) *Area Requirements.* The minimum area required to qualify for a traditional neighborhood development shall be forty (40) contiguous acres of land (this is an area encompassed within $\frac{1}{4}$ mile and approximately the distance at which studies have shown that a significant percentage of people will leave their cars parked and walk between destinations). The tract of land to be developed shall be under single ownership, or shall be the subject of an application filed jointly in accordance with an approved plan. Parcels over 200 acres shall be developed as multiple neighborhoods with pedestrian and/or transit connections between them. Each neighborhood shall be designed with an individual neighborhood center subject to all the provisions of this subsection.

(4) *Mix of Uses.* A mix of land uses is required to achieve the proximity of activities necessary to create a walkable neighborhood. A PUD-TND shall consist of a mix of residential uses and unit types, a neighborhood center and open space subject to compliance with an approved development plan that shall identify the following required subareas:

- a. Neighborhood Center
- b. Residential Neighborhood
- c. Open Space (which may be located in either Neighborhood Centers or Residential Neighborhoods)

The illustration below is advisory only and is intended to show the intent of the subareas of this District. Refer to the Code standards for the specific standards in this section.



(5) *TND Subarea Standards and Uses.*

(5) (i) *Neighborhood Center:* Each PUD-TND neighborhood shall have a core made up primarily of commercial, residential, civic or institutional, and open space uses.

(a) *Neighborhood Center Requirements*

1. The neighborhood center shall be no less than 10% and no more than 30% of the total PUD-TND district area and shall include the four different categories of land uses set forth in (b) below: Residential, Commercial, Civic or Institutional and Open Space.
2. A minimum of five percent (5%) and a maximum of thirty percent (30%) of the net development area of the Neighborhood Center shall be designated for a combination of office, commercial and/or service uses. Individual buildings shall not exceed 20,000 square feet in total size, or 10,000 square feet per floor without approval of a special use permit. Hard surfaced pedestrian pathways with a minimum of five (5) feet clear zone shall be provided between buildings on the same lot and between buildings on adjacent lots to ensure a continuous pedestrian pathway throughout the center;
3. Crosswalks shall be incorporated within the project, at intersections where new streets are proposed, within parking lots, or other needed pedestrian connections subject to VDOT approval. Crosswalks shall be designed to be an amenity to the development, e.g. heavy painted lines, pavers, edges, and other

methods of emphasizing pedestrian use, including bulb-outs and other pedestrian designs to shorten walking distances across open pavement. Medians may be used in appropriate areas to encourage walking and to act as a refuge for crossing pedestrians;

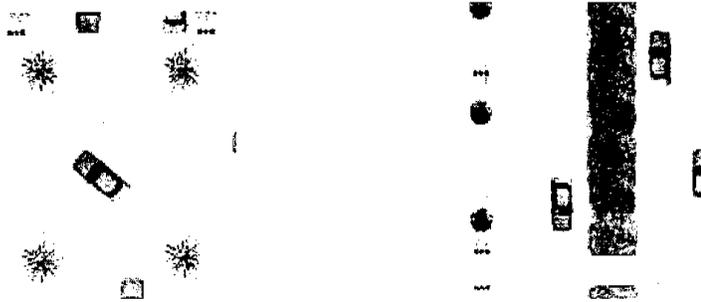


Figure 5. Bulb-outs and crosswalks. Figure 6. Crosswalk and Median Refuge.

4. The timing of construction of the non-residential portions of the Neighborhood Center shall be left to the discretion of the applicant(s) as long as the approved concept plan reserves an area for such uses and provided not more than seventy five (75) percent of the total approved residential units (for the entire PUD-TND) may be built prior to construction of at least fifty (50) percent of the approved non-residential floor area of the Neighborhood Center.

(b). Permitted Neighborhood Center Uses by Category:

1. Commercial uses.

- a. Retail Sales and Services including, convenience stores and general stores without fuel sales
- b. Restaurants and Outdoor seating (see Section 10-32(3)(c))
- c. Financial Institutions
- d. Hotels and Motels
- e. Office, administrative, business or professional.
- f. Medical Care Facility
- g. Day Care Center
- h. Funeral Home
- i. Conference or training center
- j. Public or private parking structures, areas, and lots that are accessory to any permitted or permissible commercial, residential, civic, institutional or open space use.
- k. Church
- l. Laundromat

2. Residential uses.

- a. Single-family attached dwellings, including duplexes, townhouses, row houses;
- b. Multifamily dwellings, including senior housing;
- c. Residential units located on upper floors above commercial uses; Live/work units that combine a residence and the resident's workplace;
- e. Nursing Home, Congregate Care Facility, and assisted living facilities.
- f. Household pets

3. *Civic or institutional uses.*

- a. Municipal offices, fire stations, libraries, museums, community meeting facilities, community centers, and post offices;
- b. Transit shelters;
- c. Church;
- d. School
- e. Civic club

4. *Open Space Uses*

- a. Square
- b. Plaza
- c. Park
- d. Green
- e. Ballfields and playgrounds

(b) Neighborhood Center Uses permitted by special use permit. Any of the following uses may be allowed in conjunction with a permitted commercial use subject to approval of a special use permit filed as part of the initial development plan at the time of rezoning; however, the board of supervisors may impose conditions on such uses even if approved as part of the initial development plan.

1. Drive-through windows serving or associated with permitted uses provided such facilities are located at the rear of the principal structure and do not conflict with pedestrian travel ways. In no case shall the drive through lane or window abut or face a public street.
2. Outdoor storage, display and/or sales serving or associated with a by-right permitted use, if any portion of the use would be visible from a travelway.
3. Individual buildings over 20,000 total square feet in size, or greater than 10,000 square feet floorplate.
4. Fuel sales with pumps located at the rear of the associated retail structure and which do not conflict with pedestrian travel ways or interrupt street frontage. In no case shall the gas pump canopy abut a public street.

(c) Additional Provisions for Neighborhood Center Uses:

1. Ground floor residential is not permitted in Mixed Use Buildings.
2. Notwithstanding other buffer, landscaping and screening requirements of this chapter, outside storage areas for materials, equipment or trash are accessory uses, may not exceed forty (40) percent of ground floor building area, must be located in side or rear yards adjacent to the principal building, and must be screened from view of adjacent streets or adjacent land.
3. Outdoor seating areas must have a minimum sidewalk width of 5 ft. between the limits of the outdoor seating area and the roadway edge of the sidewalk

(5) (ii) *Residential Neighborhood*: The primary Subarea of the PUD-TND shall be a neighborhood or series of neighborhoods that provide a mix of housing types with the majority of such housing units located within walking distance of the Neighborhood Core and public open space.

(a) Residential Neighborhood Requirements

1. No more than 90% of the net development area of a PUD-TND shall be residential (inclusive of any residential portion of the Neighborhood Center).
2. Each PUD-TND Residential Neighborhood shall include a minimum of two different housing types and no more than 70% of the total number of units in a neighborhood shall be any one type (sfd, multi family, townhouses, etc)—see page 6(b).
3. Multi-family and single family attached housing shall generally be located closest to the core of the community and within one-quarter (1/4) mile of the Neighborhood Center, and may be permitted farther from the Neighborhood Center if necessary to provide a transition between the neighborhood and abutting off-site high density housing areas, non-residential areas, or major transportation corridors.

(b). Permitted Residential Neighborhood Uses:

1. Single-family detached dwellings;
2. Single-family attached dwellings, including duplexes, townhouses, row houses;
3. Multifamily dwellings
4. Accessory dwelling units associated with single family dwellings;
5. Home occupation
6. Open Space
7. Accessory parking structures, lots or areas associated with permitted multifamily or open space uses
8. Household pets

(c) *Residential Neighborhood Uses permitted by special use permit.* Any of the following uses may be allowed in conjunction with a permitted Residential Neighborhood use subject to approval of a special use permit filed as part of the initial development plan at the time of rezoning; however, the board of supervisors may impose conditions on such uses even if approved as part of the initial development plan:

1. Home business

(5)(iii) *Open Space:* Open space is one of the central organizing features within a PUD-TND and shall be distributed throughout the development and accessible to all residents. Open space shall include formal squares, plazas, and greens and less formal parks, recreation areas, greenbelts, and natural areas. Large outdoor recreation areas should be located at the periphery of neighborhoods rather than central locations.

(a) *Open Space Requirements*

1. A minimum of thirty (30) percent of the gross site area of the PUD-TND shall be common open space uses, and a minimum of 15% shall be usable open space. Usable open space shall be of usable size, shape, location, and topography for formal parks, plazas, greens or squares; or for active recreational use. This open space requirement may be met by open space areas designated within the Neighborhood Center and Residential Neighborhood subareas.
2. Each Neighborhood Center Subarea shall have a minimum of 2% of the area of the Neighborhood Center in common open space, provided that the total amount of such area shall be no smaller than one (1) acre total. All of the open space area located within the Neighborhood Center must be used for parks, squares, or greens.
3. A minimum of fifty (50) percent of the common open space located in the Residential Neighborhood area must be suitable for active recreational usage such as playgrounds, ballfields, bike paths, and trails. Suitable active open space must be of usable size, shape, location, and topography.
4. A square, green or plaza shall not be less than eight thousand (8,000) square feet in size and should not exceed 1 acre.
5. Common open space shall not include existing and/or proposed street rights-of-way, parking areas as required or established under a county ordinance, or driveways.
6. Common open space shall be designed to allow all residential areas within the PUD-TND development pedestrian access to the open space, and no residential dwelling unit in the PUD-TND shall be located more than eight hundred (800) linear feet from accessible common open space. This requirement may be waived by the zoning administrator, during the site plan approval process in instances where one or more of the following occurs: 1) unusual parcel shapes 2) the

provision of ample private open space, or 3) other mitigating factors as determined by the zoning administrator.

(b) Permitted Open Space Uses:

1. Natural areas including environmental corridors, greenways, protected natural areas and reserves
2. Parks, squares, greens and plazas
3. Streams, ponds, and other water bodies;
4. Stormwater detention/retention facilities.
5. Accessory parking areas or lots located within public parks or publicly accessible natural areas
6. Recreational facilities, such as ballfields, playgrounds

(c) Ownership and Maintenance

1. Membership in a Property Owners Association (POA) established by the Master Developer shall be mandatory for all property owners within the TND, and shall be required as a covenant in all deeds to property in the TND granted after Concept Plan approval. A TND may have a residential Association and a commercial Association.
2. Initially, the Developer shall maintain control of the Association until such time as two-thirds (2/3) of the lots in the TND have been sold, or as otherwise set forth in its Articles or Bylaws.
3. Common elements including, but not limited to, open space, recreation, plazas, roads, parking, sewer, water, and stormwater management facilities which will not be publicly owned, shall be subject to a form of ownership established in private agreements acceptable to the County, upon recommendation of the County's attorney.
4. The Master Developer shall prepare documents which provide at a minimum that the POA shall accept title to any open space or Civic Lots which may be deeded to them, and shall provide for the maintenance of any common area improvements, private streets or sidewalks, rights-of-way, Civic Buildings, utilities, open space or Civic Lots or other property owned by the owners association. The documents shall establish voting and use rights and shall provide for the collection of dues, levies or assessments to cover expenses including, but not limited to, tax liabilities, maintenance, insurance, and municipal or state assessments. The property owner's association shall have the authority to acquire a lien upon the property of any of its members in order to secure collection of any amounts due.
5. The County shall be authorized to maintain the common elements and assess the private ownership accordingly if private ownership fails to function as required in any private agreements.

(6) *Development Density*: The permitted maximum and minimum development densities in the PUD-TND shall conform to density guidelines established in the Comprehensive Plan as follows:

(a) Residential Densities:

1. In areas designated in the Comprehensive Plan as Urban Expansion, village or village expansion areas, gross residential densities shall not exceed three (3) dwelling units per acre.
2. In areas designated in the Comprehensive Plan as Urban Development Areas or urban expansion areas, gross residential densities shall not exceed six (6) dwelling units per acre.
3. Notwithstanding 1 and 2 above, residential densities by housing type shall not exceed four single-family detached dwellings, eight townhouses (duplexes and row houses included), or 15 multi-family units per net residential acre.

(b) Non-Residential Densities:

1. In areas designated in the Comprehensive Plan as Village or Village Expansion areas, non-residential gross floor area ratios shall not exceed 0.25 F.A.R.
2. In areas designated in the Comprehensive Plan as Urban Development Areas or Urban Expansion Areas, non-residential gross floor area ratios shall not exceed 0.40 F.A.R.

(c) Calculating Density for Mixed Use Buildings:

The residential component of mixed use buildings shall not be counted toward the maximum non-residential floor area permitted, but shall be included in overall density totals as residential units. Multi-family residential uses up to 20 units per net acre maximum shall be permitted if included on the upper floors of a building with ground floor commercial use.

(7) Lot and Building Requirements

(7) (i) Residential lot and building standards

(a) Minimum lot area for residential uses.

Single-family detached dwellings: Five thousand (5,000) square feet.

Duplex dwellings: Three thousand (3,000) square feet;

Single-family attached dwellings:

Fifteen hundred (1,500) square feet; Maximum of eight (8.0) single-family attached dwelling units connected together in one (1) group of units.

Multi-family structures:

Eight thousand five hundred (8,500) square feet;

(d) *Minimum lot width for residential uses.*

Single-family detached dwellings: Fifty (50) feet.

Duplex dwellings: Forty five (45) feet.

Single-family attached dwellings: Eighteen (18) feet.

Multi-family structures: Ninety (90) feet

(e) *Maximum lot coverage.* Seventy (70) percent.

(f) *Required yards for residential uses.*

1. Front.

Single-family detached and duplex dwellings:

Minimum: six (6) feet in the Neighborhood Center; ten (10) feet in Residential Neighborhoods

Maximum: Fifteen (15) in the Neighborhood Center; twenty-five (25) feet in Residential Neighborhoods, except no maximum setback for any residential lot of twenty thousand (20,000) square feet or greater.

Single-family attached and multi-family dwellings:

Minimum: six (6) feet in Neighborhood Center; ten (10) feet in the Neighborhood Residential area.

Maximum: Fifteen (15) feet.

2. Side.

Single-family detached and duplex dwellings:

Minimum: Ten (10)

Maximum: None.

Single-family attached and multi-family dwellings:

Minimum: Five (5) feet and not less than fifteen (15) feet for both sides combined.

Maximum: None.

3. Rear.

Single-family detached and duplex dwellings:

Minimum: Twenty-five (25) feet.

Maximum: None.

Single-family attached and multi-family dwellings:

Minimum: Twenty-five (25) feet.

Maximum: None.

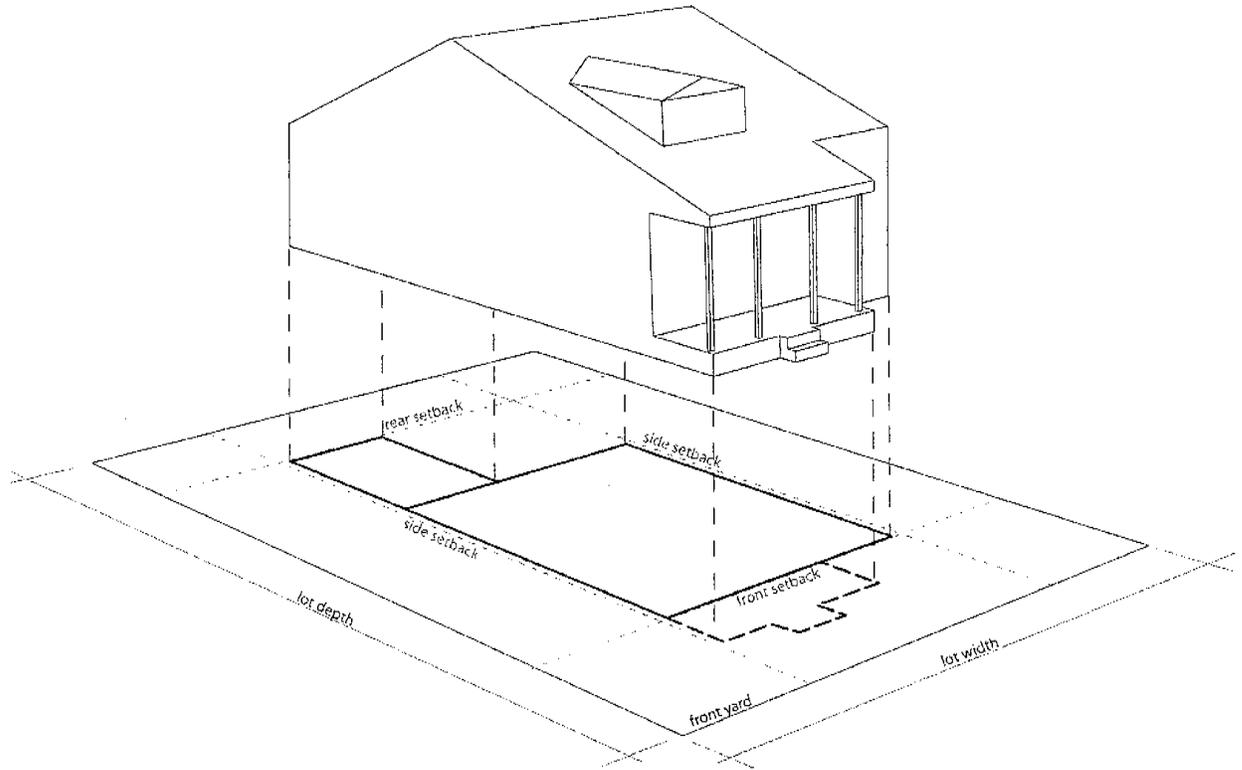
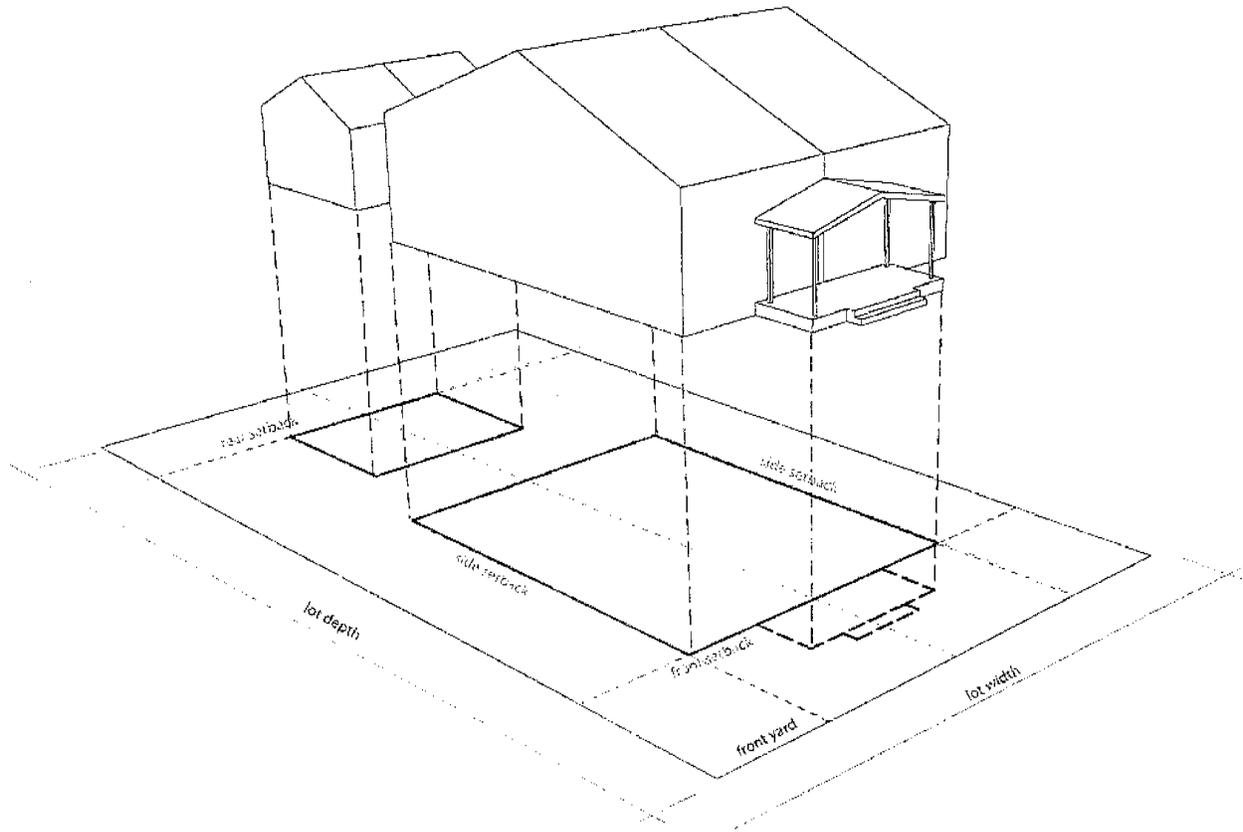


Figure 1. Illustration for Single Family Detached/Duplex

Required Yards for Single Family Detached/Duplex

Front	6' min. - 15' max. Neighborhood Core Areas
	10' min - 25' max Residential Neighborhood Areas*
	No max setback for residential lot 20,000 SF or greater
Side	10' min.
Rear	25' min.

Figure 2. Illustration for Single Family Attached



Required Yards for Single Family Attached/Multifamily

Front	6' min. - 15' max. Neighborhood Core Areas
	10' min - 15' max Residential Neighborhood Areas*
Side	5' min. and not less than 15' for both sides combines
Rear	25' min.

4. Accessory buildings and garages.

Not closer than five (5) feet to a side or rear lot line; not permitted in front yards. Garages serving single-family detached dwellings and accessed

from an alley at the rear of a lot shall be set back a minimum of nine (9) feet from the rear lot line. Garages servicing single-family dwellings and accessed from a street frontage shall be set back a minimum of eighteen (18) feet from the front lot line of the dwelling.

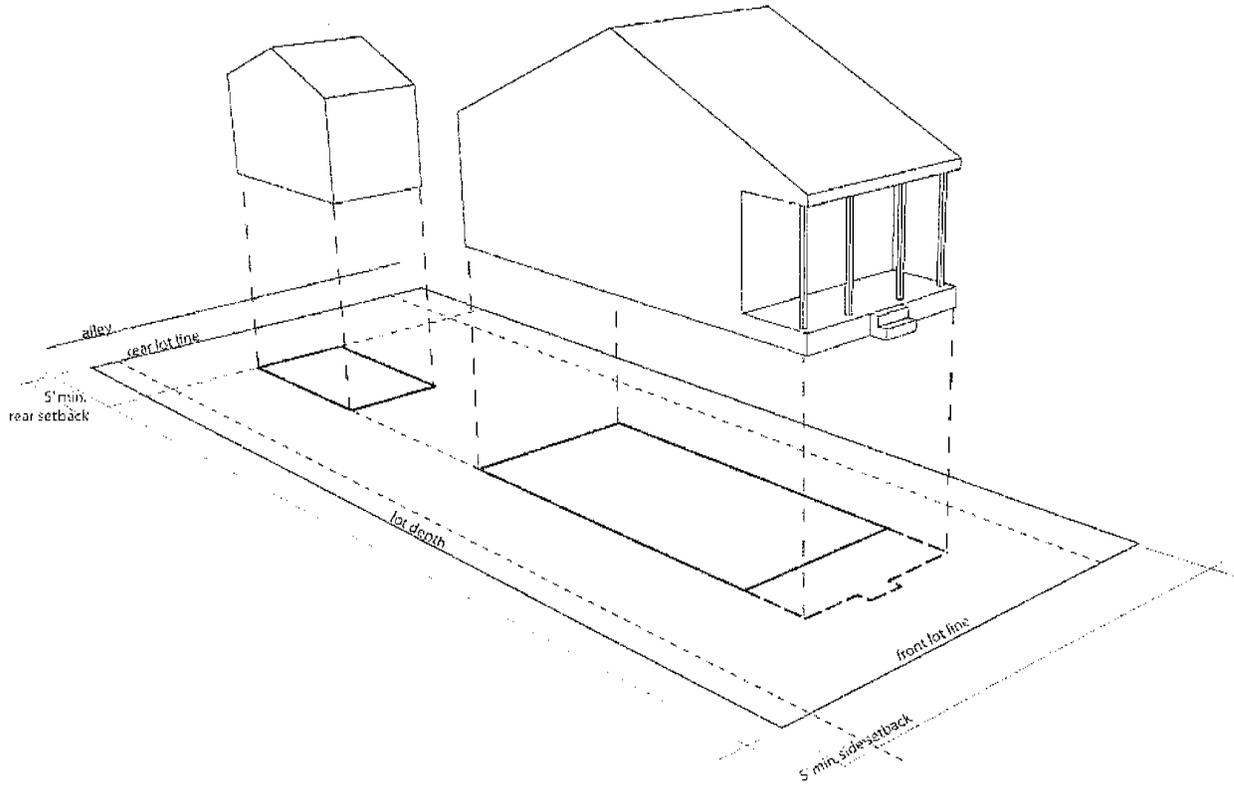


Figure 3. Minimum Setbacks for Accessory Buildings

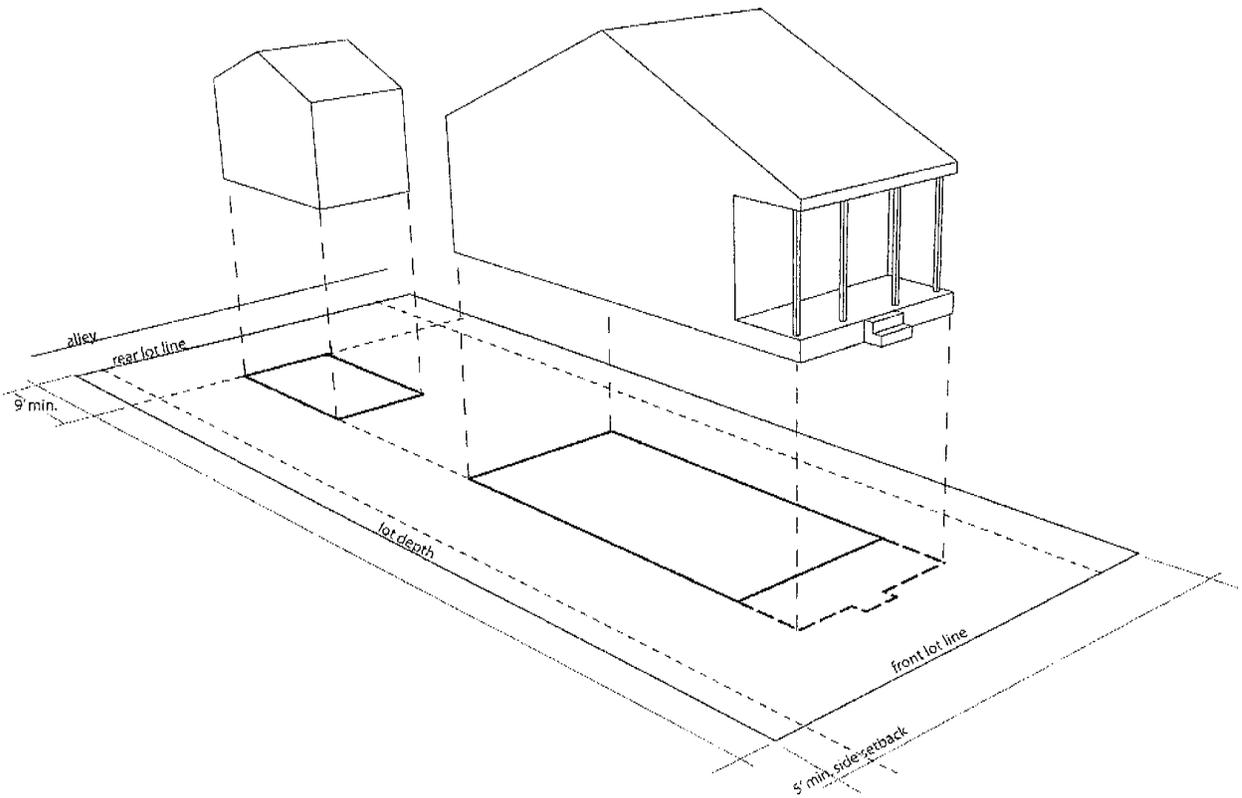


Figure 4. Minimum Setbacks for Garages Accessed from Rear

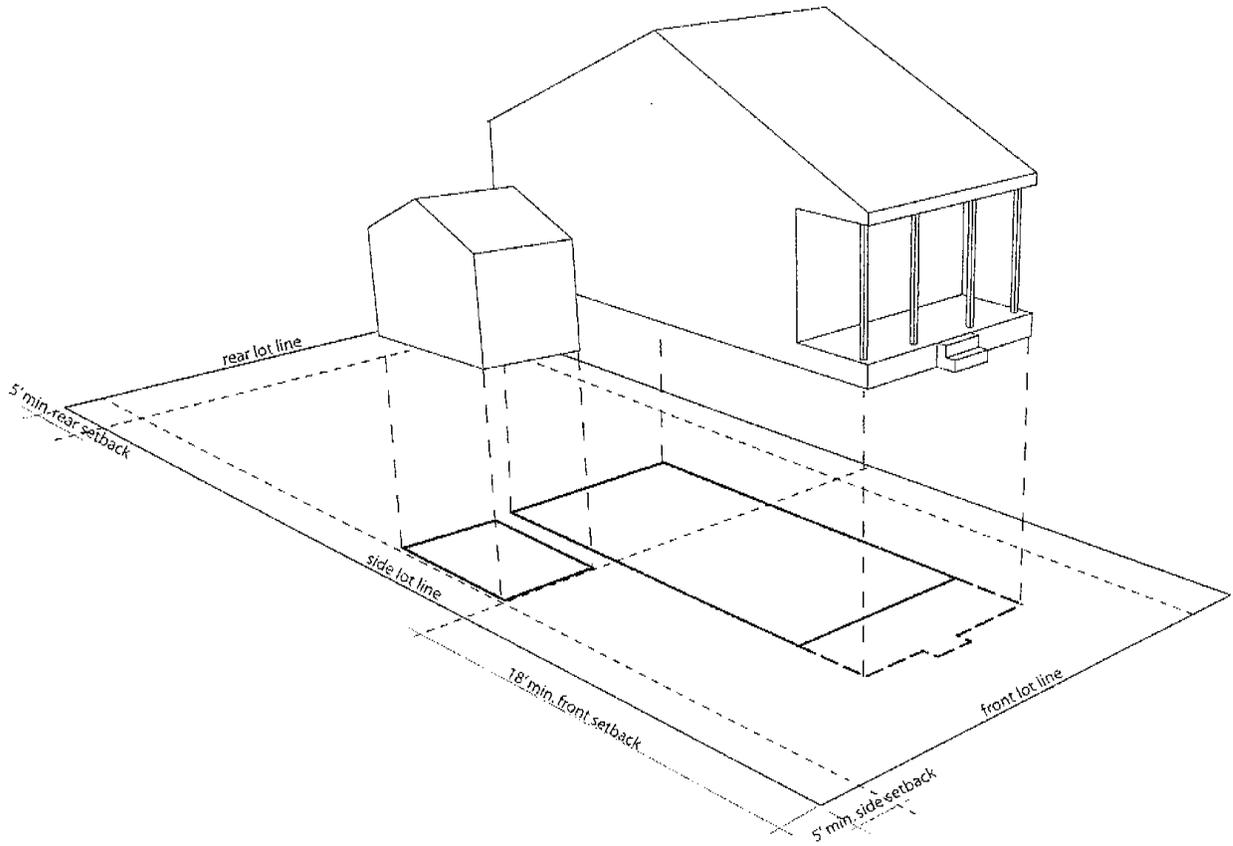


Figure 5. Minimum Setbacks for Garages Accessed from Street Frontage

(g) *Separation of structures.* Groups of single-family attached dwellings and multi-family structures shall be separated from each other by a minimum of fifteen (15) feet.

(7) (ii) *Non-residential and mixed use lot and building standards*

(a) *Minimum lot area for commercial uses:* Eight thousand five hundred (8,500) square feet.

(b) *Minimum lot width for commercial uses.* Forty (40) feet at the minimum front setback line.

(c) *Maximum lot coverage for commercial uses.* Seventy (70) percent. The areas of contiguous lots may be combined for the purpose of calculating impervious surface requirements.

(d) *Required yards for commercial uses.*

1. *Front.*

Minimum: None. A sidewalk of at least eight (8) feet shall be provided along all lot frontages in which the setback is less than fifteen (15) feet.

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

2. *Side.*

Minimum: None.

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

3. *Rear.*

Minimum: Thirty-five (35) feet when served by a rear alley; no rear setback required when the rear of the lot also functions as a primary access point for pedestrian traffic.

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

4. *Accessory buildings.* Not closer than ten (10) feet to a side or rear lot line; not permitted in front yards.

8. *Building Height*

(a) *Maximum building height.* New structures within a PUD-TND shall be no more than 35 feet [3 stories] for single-family residential or duplex uses, or 50 feet [4 stories] for non-residential, multifamily residential, or mixed used structures.

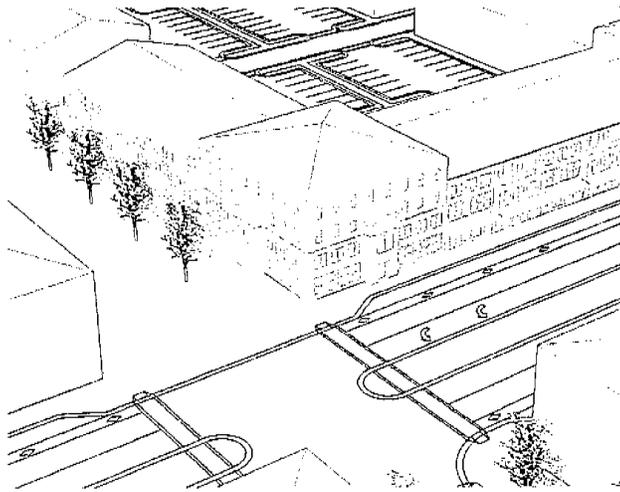
(b) *Minimum Building Heights.* New Structures located in the PUD-TND Neighborhood Center subarea shall not be less than 2 stories in height unless a waiver is granted by the Board of Supervisors at the time of Rezoning approval.

9. *Building Design/Orientation*

The illustrations provided in this section are advisory only. Refer to the Code standards for the specific prescriptions of this section.

(a) The architectural features, materials, and the articulation of a facade of a building shall be continued on all sides visible from a public street.

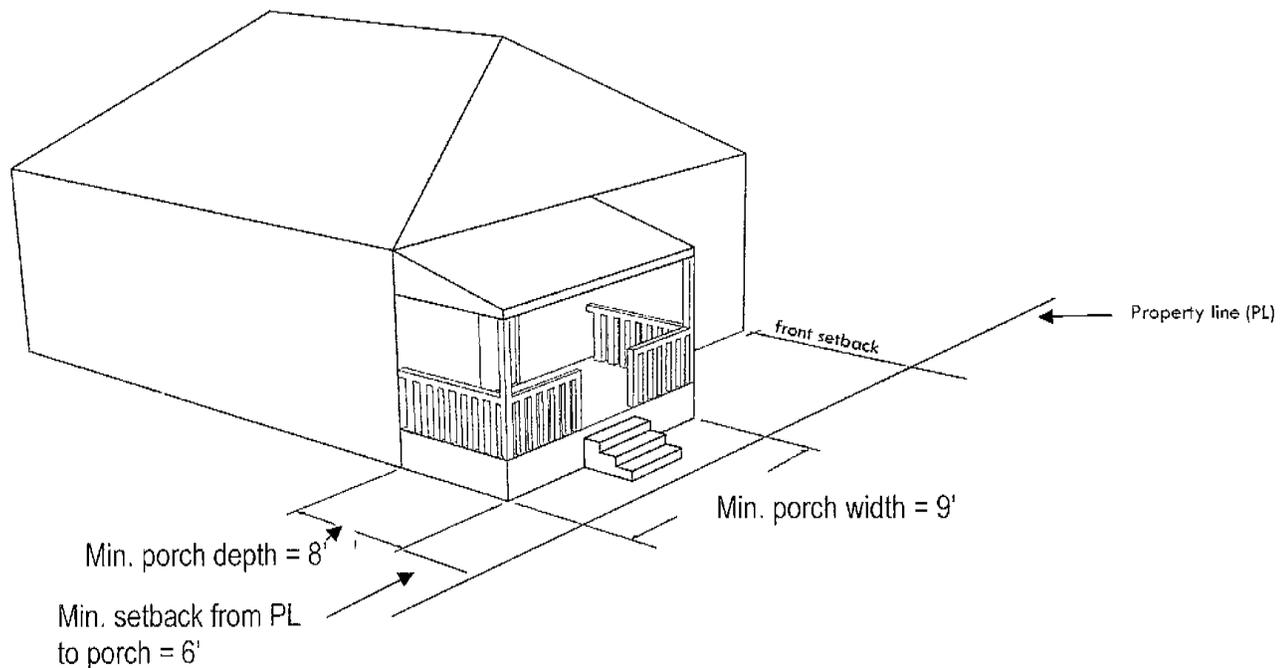
The illustration below is advisory only and is intended to show the intent of the continuation of articulation of a building facade. Refer to the Code standards for the specific standards in this section.



(b) The front facade of the principal building on any lot in a PUD-TND Traditional Neighborhood Development shall face onto a public or private street, plaza, square or green.

(c) Unless a waiver is granted by the Board of Supervisors at the time of rezoning, the front facade of any building shall not be oriented toward a parking lot.

(d) Porches, roof overhangs, hooded front doors or other similar architectural elements shall define the front entrance to all residences structures in the Residential Neighborhood subarea. Front or sideyard porches of at least eight (8) feet in depth and nine (9) feet in width shall be provided on all single family dwelling units within the Residential Neighborhood subarea. All lots with porches shall be denoted on the preliminary plat sufficiently to meet the standards specified herein. Such features may intrude into required setback areas. Notwithstanding any other provisions (Sec. 10-41), the minimum setback from the front property line to the porch shall be no less than 6 feet.



(e) For non-residential buildings, a minimum of 50 percent of the front facade on the ground floor shall be transparent, consisting of window or door openings allowing views into and out of the habitable interior space.

(f) New structures on opposite sides of the same street shall be of similar mass, scale and general architectural character. This provision shall not apply to buildings opposite civic uses.

10. Streets, Alleys, Sidewalks, Street Trees, Street Furnishing and Utilities.

(a) *Grid network.* The transportation system in the PUD-TND districts shall be generally in the form of a grid of interconnected streets, alleys and paths, modified as necessary to accommodate topography and parcel shape. Cul-de-sacs shall not exceed ten (10) percent of the total length of streets in the traditional neighborhood district. Alleys are exempt from this calculation.

(b) *Block size.* Street layouts must provide for rectilinear or curvilinear blocks that are in the range of 200-400 feet deep by 300-600 feet long, measured along the interior edge of the street right-of-way, except in locations where a street must cross areas of steep slopes in excess of ten (10) percent natural grade. In such cases, the Board of Supervisors may approve block perimeter that exceed one of these dimensions so as to reduce the number of streets constructed perpendicular to the steep slopes, and may be curved to follow the topography.

(c) *Street design.* Street sections in PUD-TND districts shall be designed to serve multiple purposes, including movement of motor vehicle traffic, public transit, pedestrian and bicycle movement, areas for public interaction, definition of public space and sense of place, and areas for placement of street trees, street furniture and landscaping. Streets shall be designed to balance the needs of all users and promote efficient and safe movement of all modes of transportation.

1. Sidewalks shall be provided on both sides of the street in Neighborhood Center and Residential Neighborhood Subareas and separated from the roadway by a planting strip and/or designated parallel parking. In the Neighborhood Center, sidewalks along the public right-of-way shall be a minimum of 10 feet in width. Where outdoor restaurant seating or similar uses are provided on the sidewalk, sidewalks shall be a minimum of 16 feet in width. In all cases, a minimum of five (5) feet clear zone shall be provided. If a planting strip is provided, it shall be a minimum of 6 feet in width.

2. Pedestrian and/or bicycle routes, lanes, or paths shall be provided to connect all uses and reduce motor vehicle use. Street design shall provide for the safety of pedestrians and bicyclists. Separate bicycle lanes shall be a minimum of four (4) feet in width.

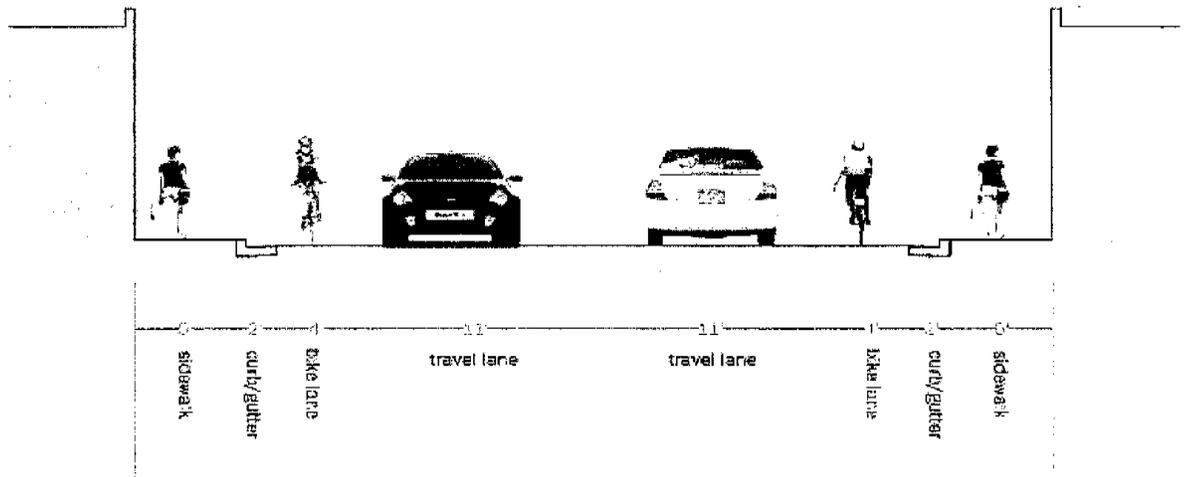


Figure 6. Illustrative diagram showing how bicycle and pedestrian facilities can be accommodated safely within a roadway.

3. Streetscape or pedestrian amenities, such as street trees, bulb-outs, benches, landscape elements, and public art shall be provided to contribute to the area's streetscape environment.

(d) Lot Access. All lots shall front on a public or private street or on a square or plaza. Alleys shall serve only the rear or sides of lots or uses.

(e) Private Street/Alleys. Privately owned and maintained streets or alleys may be permitted in a PUD-TND district if approved by the Board of Supervisors. Such private streets and alleys are permitted to serve multiple lots and uses. Private streets and alleys shall be maintained by the property owners association. Approval will be based upon review of an access plan that shall include construction specifications, as well as a maintenance plan or agreement. In addition, privately owned and maintained streets may be approved provided:

- 1) All parking is off-street and designated areas of off-street parking are provided that are in excess of and complementary to private driveways;

- 2) A plan is submitted and approved for school bus pick up and drop off areas for property owners abutting the private street;
- 3) A plan is submitted and approved for emergency access, snow clearance and postal delivery for all property owners abutting the private street;
- 4) The private streets are developed to a pavement section equal to VDOT standard for the projected traffic volume and to a geometric standard meeting county requirements.
- 5) The minimum width of the streets is eighteen (18) feet or wider exclusive of any on-street parking based on the projected vehicle trips per day for the streets. Dead end alleys are not permitted unless approved by the Board of Supervisors through a waiver approved at the time of rezoning, but in no circumstances shall an alley have a dead end length of over 100'. Dead-end alleys shall have hammerhead turnarounds.
- 6) The right-of-way for all private streets shall be dedicated to the PUD-TND homeowners association; and
- 7) Deeds for property abutting the private street must state that the street is private and will not be maintained by the state or county. If the property owners association officially petitions to dedicate the necessary right-of-way to the state or county it must be at no cost to the state or county and the association shall pay the full cost to bring the street up to state standards.

(f) Street Trees: Canopy Street trees shall be planted on both sides of the street and shall be spaced according to species and to the standards established in the landscape section of this ordinance (10-43). Where applicable, street trees shall be placed within the roadway median according to the standards established in Sec. 10-43 unless VDOT standards would prohibit otherwise. No understory trees shall be used as street trees. A consistent variety and species of street tree shall be maintained by street, but adjacent streets shall diversify species as a precaution against blight. Street trees planted within the Neighborhood Center area and other areas subject to heavy foot traffic, shall be protected using design measures (such as tree grates) to protect the tree root system. Street trees shall be planted along all streets at an average center to center spacing based on the mature spread of the particular street tree.

(g) Pedestrian scale lighting. Pedestrian scale decorative street lights (10' to 15' in height) shall be installed with a maximum average spacing of 75 feet on center on each side of the street and travel lanes within all areas of the district.

1. In order to minimize light pollution, light shall be directed downward to the immediate area being lighted and away from any living quarters.
2. Street lights shall be dark sky compatible. Lighting shall be designed and installed to be fully shielded (full cutoff) and shall have a maximum lamp wattage of 250 watts HID (or lumen equivalent) for commercial lighting, 100 watts incandescent, and 26 watts compact fluorescent for residential lighting (or approximately 1,600 lumens). In residential areas,

light should be shielded such that the lamp itself or the lamp image is not directly visible outside the property perimeter.

3. Floodlights or directional lights (maximum 100-watt metal halide bulbs) may be used to illuminate alleys, parking garages and working (maintenance) areas, but must be shielded or aimed in such a way that they do not shine into other lots, the street, or direct light out of the TND.
4. Floodlighting shall not be used to illuminate building walls (i.e. lights should not be placed on the ground so that a beam of light is directed upward).
5. Site lighting shall be of a design and height and shall be located so as to illuminate only the lot.
6. No flashing, traveling, animated, or intermittent lighting shall be visible from the exterior of any building whether such lighting is of temporary or long-term duration.

(h) *Street furnishings* shall include but not be limited to decorative street signs, benches, trash receptacles, water fountain and other appropriate decorative pedestrian oriented features in the Neighborhood Center subarea

(i) *Utilities.* –Unless a waiver is granted by the Board of Supervisors at the time of rezoning, underground utilities (and associated pedestals, cabinets, junction boxes and transformers) including electric, cable TV, telephone and natural gas service shall be located to the rear of properties in alley ROWs or the ROW of minor streets and not along the streetscape frontage.

11. *Parking.* Except as otherwise provided by this subsection, parking requirements for all uses shall be in accordance with the Parking Standards of this Ordinance.

(a) On street parking is required where a particular land use will generate regular guest or customer parking use. Occasional on-street parking (such as within a single family area) can be accommodated without additional pavement width or delineation.

(b) On-street parking shall be provided on streets abutting squares, small parks or other open spaces in the Neighborhood Center.

(c) Parking lots with over 24 spaces and parking garages shall be located to the rear of buildings and shall not abut any public street.

(d) Adjacent parking lots shall have vehicular connections from an alley or private street.

(e) Parking for retail and service uses in the Neighborhood Center shall not require on-site parking provided that: (1) the required parking, in accordance with the Parking Standards of this Ordinance, is available within a six-hundred-foot radius of the activity; (2) the total floor space for the individual uses does not exceed twenty-five hundred (2500) square feet of gross floor area; and (3) such uses are restricted to Retail and multi-family areas. On-street parking located within 600 feet may count toward any minimum parking requirements.

(f) Parking areas for shared or community use should be encouraged and shared parking reductions will be considered in accordance with section 10-44.

(g) Loading areas shall adjoin alleys or parking areas to the rear of the Principal Building unless otherwise approved on the TND plan.

12. Landscaping and Buffering. Except as otherwise provided by this subsection, landscaping requirements for all uses shall be in accordance with the Landscaping and Screening Standards of this Ordinance.

Additional Definitions for possible inclusion either in this section or in the definitions section of the Ordinance:

Definitions. For purposes of this section, the following special definitions are provided:

(1) Alley: A private right-of-way, not less than eighteen (18) feet nor that provides secondary and/or service access for vehicles to the side or rear of abutting properties having principal frontage on another street or on a plaza, square or green.

(2) Natural Area/Preserve: Preserve means open space that preserves or protects endangered species, a critical environmental feature, or, other natural feature. Access to a Preserve may be controlled to limit impacts on the environment. Development of the Preserve is generally limited to trails, educational signs, and similar improvements.

(3) Square/Plaza: Square/Plaza means open space usually at the intersection of important streets, set aside for civic purposes and commercial activity, including parking, its landscape consisting of durable pavement and formal tree plantings. A Square/Plaza is usually bordered by civic or private buildings. Plazas may range from very active places with adjacent complimentary uses such as restaurants and cafes, to quiet areas with only seating, formal landscape plantings, and amenities such as fountains or public art.

(4) Park: Park means an open space, available for recreation, its landscape consisting of paved paths and trails, open lawn, trees, open shelters, or recreational facilities. Facilities may range from simple picnic tables, benches, or a playground in a small park, to a recreation center, swimming pool, or sport field in a larger park. Other facilities may include playgrounds, shelters, sport courts, drinking fountains, parking lots, or restrooms. Park grounds are usually grassy and maintained on a regular basis for recreational activity, but may include some natural, or formally landscaped areas.

(5) Green: Green means an open space available for unstructured recreation, its landscaping consisting of grassy areas and trees. A Green should be designed for passive and unstructured active recreation. Improvements to the green may consist of paths, benches, landscaping, and other improvements.

Additional PUD-TND Submission Requirements - this would go in section 10-54

Additional Development Plan Information required for PUD-TND applications.

The applicant shall submit a development plan of sufficient detail to demonstrate to the county that the proposal meets all size and dimensional requirements, which shall show:

- (a) The location and extent of and allocation of land to the following areas:
1. The Neighborhood Center Subarea
 2. Residential Neighborhood Subareas
 3. Open Space Areas
- (b) The general location of all streets, alleys and parking areas in each sub-area.
- (c) The maximum gross and net densities, as defined herein, including dwelling unit types and lot sizes, of residential uses in each area of the development and for the entire development.
- (d) The maximum gross square feet of non-residential uses in each area of the development and for the entire development along with an indication of the location of mixed use structures.
- (e) The minimum area of civic uses, including parks, greens, squares and other public sites.
- (f) The general design and layout of streets, utilities, and stormwater management facilities, including:
1. Drawings of typical street cross-sections
 2. Schematic sections through the buildings that front the streets
 3. Detailed concept plan at 1 inch = 200 feet showing the general configuration of building footprints (residential buildings can be shown with typical prototypes and lot configurations for each dwelling type and street condition)
 4. Conceptual design for parking areas and streetscape features
 5. Conceptual design of the stormwater management system
 6. Conceptual layout of proposed lot pattern for subdivision
 7. Conceptual layout of streets, sidewalks, trails, bicycle facilities
 8. A survey of the overall project perimeter boundary.
- (g) Natural and other open space areas.
- (h) Design guidelines for typical lots, buildings and structures; including and indication of which residential structures will have porches.
- (i) Adjacent land uses and adjacent zoning.
- (j) Vicinity maps at no less than 1 inch = 2,000 feet scale.
- (k) A conceptual phasing plan showing the location, sequence, and relative timing of development of land uses, streets and utilities, including:

1. Location, acreage, number, and unit type of residential dwellings for each phase
2. Location, number and type of non-residential acreage and building square feet for each phase
3. Location, amount and type of streets for each phase
4. Location and size of pedestrian and bicycle pathways
5. Location, amount of sewer and water facilities for each phase
6. Location, size and type of stormwater management facilities for each phase
7. And, if the property is located in the for Expansion Area Overlay District (177 Corridor) Route 177 corridor, an assessment of Level of Service Standards and Adequate Public facilities as outlined in the Comprehensive Plan.
8. Proposed landscaping

All of the above features may be adjusted by the applicant during the course of site plan and subdivision approvals, and construction, but must be in substantial conformance to the approved conceptual phasing plan, unless a zoning map amendment is requested and approved, subject to the procedures of section ___ of this chapter.

FINAL DRAFT TND-Infill Zoning District

Addition to Article III

Sec. 10-33. Traditional Neighborhood Development Infill District

Purpose: The Traditional Neighborhood Development Infill (TND-I) district is intended to enhance and complement existing communities and villages by integrating new uses and structures into the existing community fabric, encouraging reuse and revitalization of existing structures, strengthening connections within communities to improve walkability and expand traditional, human scale, pedestrian oriented neighborhoods, and provide a strong orientation to transit service. This district provides flexible development standards for infill parcels so that properties can be developed in a way that is compatible with adjacent properties in historic communities, to help create a "complete" walkable and transit-friendly community with housing, jobs, services, civic uses and open space. The district is intended to implement specific comprehensive plan recommendations for the County's Villages, Village Expansion Areas, and Urban Expansion Areas and Urban Development Areas to promote the redevelopment of older, historic areas.

(1) The objectives of the TND-Infill District are to:

- a. Build upon the historic development patterns in existing village and community centers to create attractive, walkable neighborhoods;
- b. Encourage adaptive reuse of abandoned, vacant or underutilized buildings or structures where appropriate;
- c. Allow for a mix of new land uses that are appropriate to both the needs of the community and the scale of surrounding neighborhoods so that residents can walk, ride a bicycle, or take transit for many trips between home, work, shopping, and school;
- d. Provide incentives to develop larger parcels at higher densities and to consolidate smaller parcels to encourage coordinated development and fewer access points on public roads.
- e. Make public transit a viable alternative to the automobile by organizing appropriate building densities
- f. Encourage a high level of design quality throughout the district
- g. Stimulate economic investment in older established communities.

The illustration below is advisory only and is intended to show the intent of infill development for this District. Refer to the Code standards for the specific standards in this section.

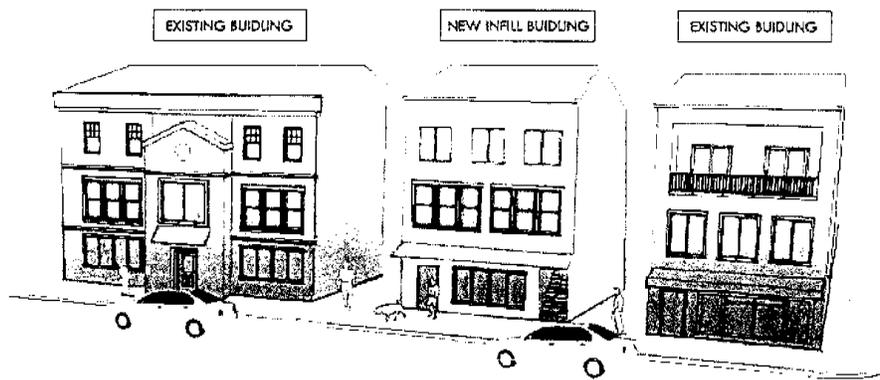


Figure 1. Example showing how intent of infill development in the TND-I District.

(2) *Qualifying lands.* Lands qualifying for inclusion in the TND-I district shall be tracts located in areas mapped as Urban Development Areas, Urban Expansion Areas, Villages and Village Expansion Areas in the Comprehensive Plan and that are generally served by, or planned for, public sewer and water service. If the proposed development will require public sewer and water service, the applicant must demonstrate to the satisfaction of the Board of Supervisors that there is sufficient available sewer and water capacity to accommodate the proposed development at full build out and/or provide a plan demonstrating that such improvements will be phased to accommodate projected development as it occurs (see also rezoning and submission requirements Sec 10-54).

(3) *Area Requirements.* The area required for a Traditional Neighborhood Infill TND-I district shall not be more than ten (10) acres since this district is targeted at undeveloped or underdeveloped lots in established communities rather than creating new communities. The tract of land to be developed shall be under single ownership, or shall be the subject of an application filed jointly and subject to a single concept plan.

(4) *Mix of Uses.* A mix of uses is encouraged in Villages, Village Expansion Areas, Urban Development Areas and Urban Expansion Areas. However, the land uses proposed for any individual tract subject to development under the provisions of the TND-I district shall be evaluated to ensure that the proposed use(s) are in substantial conformance with specific Comprehensive Plan policies and recommendations applicable to the site. Mixed Use structures or sites are permitted but only for a combination of neighborhood commercial uses and residential uses.

The illustration below is advisory only and is intended to show the intent of a Mixed Use Structure in this District. Refer to the Code standards for the specific standards in this section.



Figure 7. Example showing how uses can be mixed vertically within an individual structure.

(5) Development Density: The permitted maximum and minimum development densities in the TND-I district shall conform to density guidelines established in the Comprehensive Plan as follows:

1. In areas designated in the Comprehensive Plan as, Village, or Village Expansion areas, gross residential densities shall not exceed three (3) dwelling units per acre. In areas designated in the Comprehensive Plan as Urban Expansion Areas, and Urban Development Areas gross residential densities shall not exceed twelve (12) dwelling units per acre.
2. In areas designated in the Comprehensive Plan as, Village, or Village expansion areas, non-residential gross floor area ratios shall not exceed 0.25 F.A.R. In areas designated in the Comprehensive Plan as Urban Expansion Areas, Urban Development Areas non-residential gross floor area ratios shall not exceed 0.40 F.A.R.
3. For non-residential or mixed use development less than 1 acre, higher densities may be approved by the Board of Supervisors to promote redevelopment.
3. Accessory dwelling units (as defined in Sec. 10-41) shall not be included in the calculation of residential density.

(6) Permitted Traditional Neighborhood Infill District Uses by Category:

1. Commercial uses.

- a. Retail Sales and Services, no larger than 10,000 square feet in size

- b. Convenience stores and general stores without fuel sales
- c. Restaurants and outdoor seating associated with Restaurants subject to the provisions of Sec. 11.d, below
- d. Financial Services
- e. Office, administrative, business or professional, less than 20,000 square feet in size, and no more than 10,000 square feet per floor plate.
- f. Day Care Center
- g. Parking areas that are accessory to any permitted or permissible commercial, residential, civic, institutional or open space use.
- h. Funeral Home
- i. Medical Care Facility
- j. Mixed Use Buildings (integrated horizontally or vertically) which include residential and commercial uses.
- k. Laundromat
- l. Printing Services

2. Residential uses.

- a. Single-family detached and attached dwellings, including duplexes, townhouses, row houses;
- b. Accessory dwelling units (as defined in Sec. 10-41) associated with single family dwellings;
- d. Live/work units that combine a residence and the resident's workplace
- e. Home occupation

3. Civic or institutional uses.

- a. Municipal offices, fire stations, libraries, museums, community meeting facilities, community centers, and post offices;
- b. Transit shelters;
- c. Civic club

d. Church

d. Open Space

(7) Uses permitted by special use permit. Any of the following uses permitted by special exception may be approved as part of the initial development plan at the time of rezoning; however, the board of supervisors may impose conditions on such uses even if approved as part of the initial development plan.

a. Retail Sales and Services, above 10,000 square feet and no larger than 20,000 square feet in size

a. Multifamily dwellings, including senior housing;

b. Nursing Home, Congregate Care Facility, and assisted living facilities.

c. Farm Market

d. Hotels and Motels

e. Conference or training center

f. Home Business

g. School

h. Drive-through windows serving or associated with permitted uses provided such facilities are located at the rear or side of the structure and do not conflict with pedestrian travel ways. In no case shall the drive through lane or window abut or face a public street.

i. Transition House

(8) Lot and Setback Standards:

(8)(i) Residential lot and building standards

(a) Lot standards for residential uses.

Single-family detached dwellings: Minimum Five thousand (5,000) square feet, Maximum Ten Thousand (10,000) square feet.

Single-family attached dwellings:
Minimum Fifteen hundred (1,500) square feet; Maximum of eight (8) single-family attached dwelling units connected together in one (1) group of units

Duplex dwellings: Minimum three thousand (3,000) square feet

Multi-family structures:

Eight thousand five hundred (8,500) square feet;

(b) Minimum lot width for residential uses.

Single-family detached dwellings: Forty (40) feet.

Duplex dwellings: Eighty (80) feet.

Single-family attached dwellings: Eighteen (18) feet.

Multi-family structures: Eighty (80) feet

(c) Maximum lot coverage. Eighty-five (85) percent.

(d) Required yards for residential uses.

1. Front: Front yard setbacks for new residential uses shall be established based on the setbacks of existing residential uses on the same block as follows:

a. The average of the front yard setbacks of new residential dwellings shall not vary more than three (3) feet from the average front yard setbacks of the existing residential dwellings located on either side of the proposed lot.

b. The average front setback of existing residential dwellings shall be established based on the 3 existing lots on each side of the lot in question, along the same block face as the lot in question. In cases where the 3 existing lots extend more than 300 feet from the proposed lot, the average setbacks shall only be calculated within 300 feet of the proposed lot.

c. If any of the 3 existing lots on each side of the proposed lot are more than twice the size of the proposed lot, they shall not be used to calculate average existing setbacks

d. In cases where there are no existing residential dwellings on each side of the proposed lot, the front setback shall be no less than ten (10) feet and no more than twenty (20) feet.

e. In no case shall the front setback less than ten (10) feet. Notwithstanding any other provisions (Sec 10-41), the minimum setback from the front property line to the porch shall be no less than six (6) feet.

f. In the case of a corner lot, the required front yard will be determined by the prevailing building pattern, and shall be established using the average setbacks of 3 existing lots located directly adjacent to and along the same block face from the lot in question following the provisions outlined above.

2. Side: Side yard setbacks for new residential uses shall be established based on the setbacks of existing residential uses on the same block as follows:

a. The average of the side yard setbacks of new residential dwellings shall not vary more than two (2) feet from the average side yard setbacks of the existing residential dwellings located on either side of the proposed lot.

b. The average side setback of existing residential dwellings shall be established based on the 3 existing lots on each side of the lot in question, along the same block face as the lot in question. In cases where the 3 existing lots extend more than 300 feet from the proposed lot, the average setbacks shall only be calculated within 300 feet of the proposed lot.

c. If any of the 3 existing lots on each side of the proposed lot are more than twice the size of the proposed lot, they shall not be used to calculate average existing setbacks

d. In cases where there are no existing residential dwellings on each side of the proposed lot, the side setback shall be no less than eight (8) feet.

e. In no case shall the side setback less than eight (8) feet.

3. Rear. The Rear Yard Setback shall be not less than 20% of the total lot depth, except that the rear yard shall in no case be no less than fifteen (15) feet.

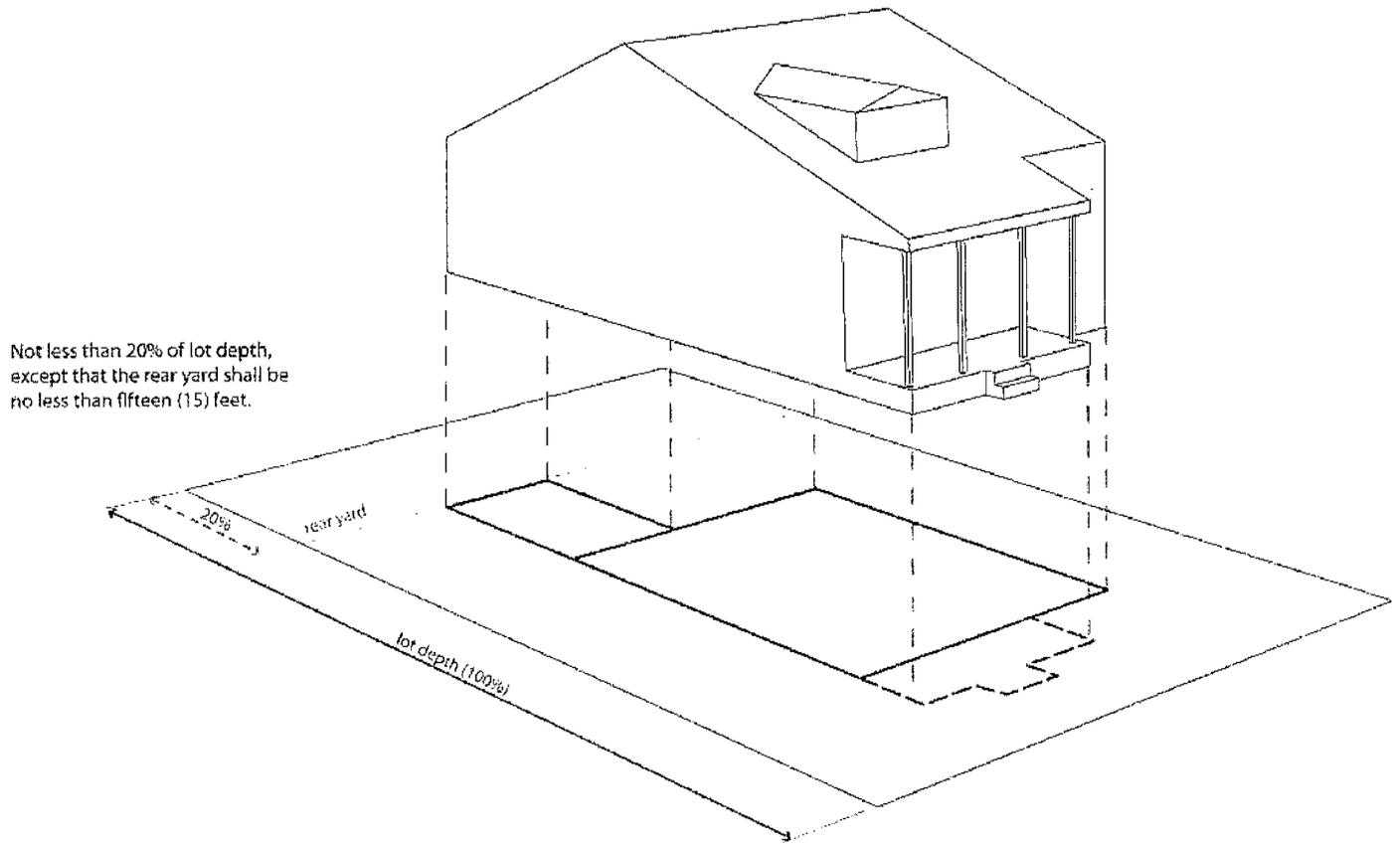


Figure 3. Calculating Rear Yard Setbacks.

4. Required Setback for accessory buildings and garages shall be not closer than five (5) feet to a side or rear lot line; accessory buildings and garages shall not permitted in front yards.

8(ii). Lot standards for Non-Residential Uses and Mixed Use Buildings.

(a) Lot standards for Non-residential Uses and Mixed Use Buildings.

Minimum Lot Size: Five thousand (5,000) square feet.

(b) Minimum Lot Width for Non-residential Uses and Mixed Use Buildings: forty (40) feet.

(c) Maximum lot coverage. Ninety (90) percent.

(d) Required yards for commercial uses.

1. Front.

Minimum: None. A minimum eight (8) foot wide sidewalk shall be provided along all lot frontages in which the setback is less than fifteen (15) feet.

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

2. *Side.*

Minimum: None, unless adjacent to a residential structure in which case a minimum setback of ten (10) feet' shall be required.

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

3. *Rear.*

Minimum: None

Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

4. *Accessory buildings.* Required Setback for accessory buildings and garages shall be not closer than five (5) feet to a side or rear lot line; accessory buildings and garages are not permitted in front yards.

8(iii). *Modification of lot size, lot width standards, setbacks, and yard requirements.* Minimum requirements for lot size, setbacks, yards and other lot standards shall conform with subsection 8 of the TND- I districts, unless otherwise specifically modified by the approved concept development plan at the time of zoning approval. Modifications may be approved by the Board of Supervisors at the time of concept plan approval, provided that they do not:

1. Impair safety from the standpoint of fire and rescue access to properties;
2. Increase danger or probability of accidents involving vehicles and/or pedestrians;
3. Be done with the major purpose to decrease development costs;
4. Be done when the effect is to decrease privacy, adequacy of light and air, or buffering beyond base district regulations' effects; and
5. Result in a modification greater than 20% of the existing requirement.

(9) *Lot Access.* Lots shall be accessed from a road in the Virginia Department of Transportation (VDOT) system or from a hard-surfaced private street designed by a professional engineer to meet current VDOT subdivision street requirements (Sec. 8-152 of the County Code). Where parking is located to the rear of a building, parking areas may be accessed via an alley.

(10) Building Height

(a) Maximum Building Height. New single family and single family attached (including duplexes and townhouses) shall be no more than 35 feet [3 stories], or 45 feet [4 stories] for non-residential, multifamily residential, or mixed used structures.

(b) Minimum Building Heights. New Non-Residential, Multi-Family and Mixed Use Buildings shall not be less than 2 stories unless a waiver is granted by the Board of Supervisors at the time of rezoning approval.

(11) Additional Provisions for Non-Residential Uses:

(a) Ground floor residential is not permitted in Mixed Use Buildings.

(b) The footprint of the ground floor of a non-residential building, mixed use or multi-family building shall not exceed 10,000 square feet.

(c) Notwithstanding other buffer, landscaping and screening requirements of this chapter, outside storage areas for materials, equipment or trash are accessory uses, may not exceed forty (40) percent of building area, must be located in side or rear yards adjacent to building, and must be screened from view of adjacent streets or adjacent land.

(d) Where outdoor seating areas are proposed, a minimum sidewalk width of five (5) feet must be maintained between the limits of the outdoor seating area and the roadway edge of the sidewalk.

(12) Site and Building Design:

(a) Architectural Standards

All development (residential and non-residential) shall be of a compatible design with residences located on the same block and shall follow these design standards:

1. Building materials shall be of siding, brick, stone or other materials that are similar in color and otherwise in common with other buildings located on the same block face.

2. Buildings shall provide offsets, projections, and or recessed entries located at least every 30 feet along a facade facing a public street.

3. Building size, height, bulk, mass, scale shall be similar in height and size or articulated and subdivided into massing that is more or less proportional to other structures in the area, and maintains the existing architectural rhythm along the same block face as the proposed development.

4. Buildings shall use at least three of the following design elements along the facades facing public streets, provided that the design elements do not conflict with the provisions of Section 10-41(7):

- a) dormers
- b) gables (pitch not less than 4:12)
- c) recessed entries
- d) covered porch entries
- e) cupolas
- f) pillars or posts
- g) bay or bow window (minimum 12 - inch projection)
- h) eaves (minimum 6 - inch projection)
- i) off-sets in building face or roof (minimum 16-inches)

(b) Site Design – Non-Residential, Mixed Use and Multi-Family Units

- 1) Parking areas shall be located to the rear of non-residential, mixed use or multifamily buildings;

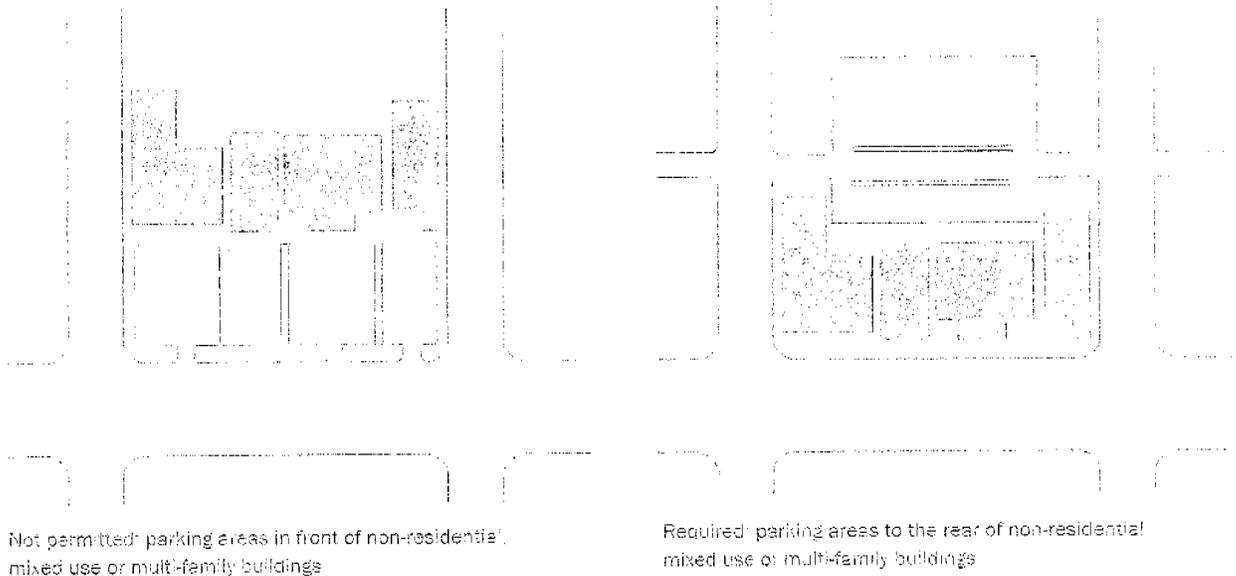


Figure 4. Location of Parking Areas.

- 2) Street level frontage of commercial buildings shall be devoted to entrances, shop windows or other displays;
- 3) Clear pedestrian pathways shall be provided between buildings on the same lot and between buildings on adjacent lots to ensure a continuous pedestrian pathway throughout the district;
- 4) Crosswalks shall be incorporated within the project, at intersections where new streets are proposed, within parking lots, or other needed pedestrian connections as approved by the County, VDOT or the County's designee. Crosswalks shall be designed to be an amenity to the development, e.g. heavy painted lines, pavers, edges, and other methods of emphasizing pedestrian use. Bulb-outs and other pedestrian designs may be used to shorten walking distances across open pavement. Medians may be used in appropriate areas to encourage walking and to act as a refuge for crossing pedestrians;

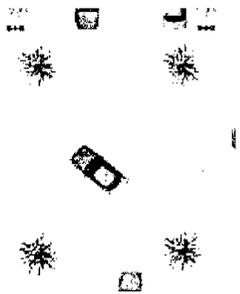


Figure 5. Bulb-outs and crosswalks.

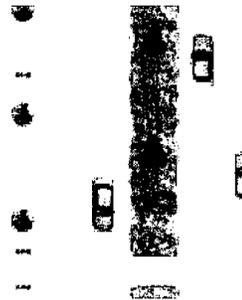


Figure 6. Crosswalk and Median Refuge.

- 5) Where residential neighborhoods abut commercial, office or mixed use developments, appropriate transitional features shall be used and may include landscaping, open space or parks, or streets with clearly designed pedestrian features;



Figure 7. Example of landscaping as a transitional feature between residential and commercial developments.

- 6) Primary entrances to proposed and existing buildings are situated on pedestrian amenities (e.g., sidewalks, plazas or open space) with a minimum width of 10 feet;
- 7) Adequate access for loading and emergency vehicles is maintained on one side of the building; and
- 8) For corner lots, the front of the lot will be determined by the prevailing building pattern, and the front façade of proposed development shall be located along the street frontage that has the majority of front facades within the block on which the subject property is located.

(c) Parking Standards

- 1) Parking and loading spaces shall be provided as required in section 10-44 except that on-street as well as off-street parking spaces may be counted toward satisfying the requirements.
- 2) On-street parking spaces assigned to a building or use shall be those spaces that abut the lot containing that building or use. All required handicapped parking spaces shall be provided off-street.
- 3) Parking requirements provided in section 10-44 may further be reduced upon approval by the zoning administrator of an acceptable mass transportation or alternative transportation plan that adequately documents a reduced need for parking by demonstrating that potential visitors to the site, including residents, employees and customers will be using mass transportation or alternative transportation to visit the site.
- 4) Required off-street parking spaces may be provided cooperatively for two (2) or more uses, subject to arrangements that will assure the permanent availability of such spaces to the satisfaction of the administrator. The amount of such combined space shall equal the sum of the amounts required for the separate uses, provided, however, that the administrator may reduce the total number of spaces if the administrator determines that some or all of the spaces may serve two (2) or more uses by reason of the daily hours of operation or seasonal activity of such uses. Shared parking shall be permitted upon approval by the zoning administrator of a shared parking plan prepared and submitted by the applicant. Upon approval, such a shared parking plan shall result in a reduction in the total amount of required parking, in an amount determined at the time of approval of the rezoning application or by the zoning administrator.
- 5) Off-street parking and loading spaces shall be located behind principal structures and may be served directly or indirectly by alleys.
- 6) Parking lots or garages must provide not less than one bicycle parking space for every ten (10) motor vehicle parking spaces.

(13) Additional Submittal Requirements:

(a). In addition to all county submittal requirements outlined in this ordinance, an applicant wishing to rezone to this district will be required to submit a property survey, as prepared by a Licensed Surveyor, showing clearly and accurately all property lines, easements, encumbrances and all existing structures on the property. The survey must have been completed within five (5) years of the time of the application for rezoning, or since any modification to the property, whichever is sooner. If no such survey exists, the required fees for the rezoning application may be reduced by the Zoning Administrator to offset a portion of the cost of the property survey.

Sec. 10-25. R-2 Residential District.

(1) *Purpose.* The R-2 Residential District is intended to accommodate moderate density, suburban residential uses to be served by public water and sewer facilities. It includes areas currently zoned R-2 and planned for urban or rural expansion in the comprehensive plan. The regulations for this district are designed to stabilize and protect the essential characteristics of the district, to promote and encourage, insofar as compatible with the intensity of land use, a suitable environment for family life and to permit certain limited commercial and institutional uses of a scale and character that will not create concentrations of traffic, crowds of customers, general outdoor advertising or other conflicts with the neighboring residential uses.

To these ends, retail activity is sharply limited, and this district is protected against encroachment of general commercial or industrial uses. Residential uses are limited to single-family and two-family structures. Although this district is basically residential in character, certain compatible public and semipublic uses are permitted in the district.

(2) *Qualifying lands.* Lands qualifying for inclusion in the R-2 zoning district shall be R-2 residential on the date of adoption of this chapter and other lands within areas mapped as residential transition, village, village expansion, or urban expansion in the comprehensive plan. The minimum area required to create a district shall be three (3) acres of total contiguous land.

(3) *Uses permitted by right.* The following uses are permitted by right, subject to compliance with all approved plans and permits, development standards and performance standards contained in this chapter, and with all other applicable regulations:

- (a) Bed and breakfast homestay.
- (b) Church.
- (c) Dwelling, single-family.
- (d) Dwelling, two-family.
- (e) Home occupation.
- (f) Library.
- (g) Pet, household.
- (h) Public utility lines, other.
- (i) Public utility lines, water or sewer.
- (j) School.
- (k) Telecommunications tower, attached.

(4)(i) Uses permissible by special use permit. The following uses may be permitted by the board of supervisors as special uses, subject to the requirements of this chapter and to all applicable regulations:

- (a) Accessory structures greater than twelve hundred (1,200) square feet in area and/or eighteen (18) feet in height when part of an application requesting a rezoning or other use permitted by a special use permit from the board of supervisors.
- (b) Bed and breakfast inn.
- (c) Boarding house.
- (d) Cemetery.
- (e) Civic club.
- (f) Country club.

- (g) Day care center.
- (h) Fire, police and rescue stations.
- (i) Funeral home.
- (j) Golf course.
- (k) Home business.
- (l) Nursing home.
- (m) Park, lighted or unlighted.
- (n) Playground, lighted or unlighted.
- (o) Private club.
- (p) Public utility plant, other.
- (q) Public utility plant, water or sewer.
- (r) Transition house.

(4)(ii) The following uses may be permitted by the board of zoning appeals as special uses, subject to the requirements of this chapter and all other applicable regulations:

(a) Accessory structures greater than twelve hundred (1,200) square feet in area and/or eighteen (18) feet in height.

(5) *Lot requirements.*

(a) *Minimum lot area.* Fifteen thousand (15,000) square feet.

(b) *Lot access.* Lots shall be accessed from a road in the Virginia Department of Transportation (VDOT) system.

(c) *Maximum lot coverage.* Building coverage shall not exceed thirty (30) percent of gross site area. Impervious surfaces shall not exceed fifty (50) percent of gross site area.

(d) *Minimum width.* Ninety (90) feet at the setback line of front yard.

(e) *Maximum length/width ratio.* Five to one (5:1).

(6) *Building requirements.*

(a) *Minimum yards.*

1. *Front.* Forty (40) feet (also refer to section 10-41(16) for setbacks from existing intensive agriculture operations).

2. *Side.* Fifteen (15) feet for each principal structure.

3. *Rear.* Forty (40) [feet].

4. *Accessory buildings.* Ten (10) feet to any side or rear lot line.

(b) *Maximum building height.* Buildings may be erected up to thirty-five (35) feet in height from grade, except that:

1. The height limit for dwellings may be increased up to ten (10) feet, provided that there, is one (1) additional foot or more of side yard in each side yard for each additional foot of building height over thirty-five (35) feet.

2. A public or semipublic building such as a school, church, library or hospital may be erected to a height of sixty (60) feet from grade, provided that required front, side and rear yards shall be increased one (1) foot for each foot in height over thirty-five (35) feet.

3. No accessory building which is within ten (10) feet of any party lot line shall be more than one (1) story high. All accessory buildings shall be less than the main building in height.

(7) *Use limitations.*

(a) *Public water and wastewater service.* Public water and wastewater services are required for all development in any R-2 district established after the date of adoption of this chapter.

(b) *Keeping and raising horses and ponies.*

1. Horses and ponies may only be kept for personal enjoyment and not for commercial purposes;
2. A minimum of five (5) acres of open or forestal land is available for the horses and ponies; and
3. No more than two (2) horses and ponies collectively (being one (1) horse and one (1) pony, two (2) horses, or two (2) ponies) shall be permitted per each five (5) acres with a maximum of four (4) horses and ponies collectively for parcels of land of ten (10) acres or more.

(8) *Compact development option.* The purpose of the compact development option is to provide flexibility in site design in order to encourage:

- Natural resource preservation.
- Pedestrian-friendly streetscapes.
- Cost-efficiency in providing infrastructure.
- Appropriate design solutions for unique site conditions.
- Transit-supportive design.

Use of the compact development option is voluntary on the part of applicants. The compact development option permits smaller lot sizes in return for providing permanent green open space within the development, and a more compact, cost-effective network of streets and utilities. ~~Except for modifications to the lot and building requirements defined below, all other provisions of the R-2 district pertain to the compact development option.~~

(a) *Lot requirements for compact option.*

1. *Minimum lot size.* ~~Eleven thousand (11,000)~~ eight thousand (8,000) square feet, provided that no less than twenty-five (25) percent of the gross area parent tract is preserved in permanent green open space, as defined herein.

2. *Maximum density.* The density of development under the compact development option shall be no greater than 4 dwelling units per gross acre.

3. *Minimum required green open space.*

a. ~~Minimum lot area.~~ A minimum of Twenty-five (25) percent of the gross area parent tract shall be set aside as open space. ~~At least No one (1) lot area of such required green~~ open space in any compact development shall be less than ~~fourteen thousand (14,000)~~ eight thousand (8,000) square feet.

b. For the purposes of this article, the following items shall qualify as Open Space:

Natural areas including environmental corridors, greenways, protected natural areas and reserves; Parks, squares, greens and plazas; Streams, ponds, and other water bodies; Stormwater detention/retention facilities; Accessory parking

areas or lots located within public parks or publicly accessible natural areas;
Recreational facilities, such as ballfields, playgrounds

- c. The subdivision plat shall establish, where applicable, a buffer at least 100 feet wide from the center of all streams and a buffer of at least 50 feet from all lakes, ponds, springs, and other surface waters. This shall be set aside as open space.
- d. Lots, buildings, structures, streets, and parking areas shall be situated to minimize the alteration of natural features, natural vegetation, and topography.
- e. The subdivision plat shall accommodate and preserve any features of historic, cultural, or archaeological value.
- f. Floodplains, wetlands, and areas with slopes in excess of 25% shall be protected from development.
- g. Green Open space may include active or passive recreational uses, and may be held in either public or private ownership. If held in private ownership, the green open space should be held by a homeowner's association or other form of common interest private ownership comparable to a homeowner's association acceptable to the zoning administration. Green Open space established for purposes of meeting the requirements of this provision shall be restricted from any future development by the establishment of permanent conservation easements held in perpetuity by a public or private entity acceptable to the county. Accessory structures such as picnic shelters, ball fields, nature trails and other similar recreational amenities shall be permitted within the green open space and maintained by the appropriate owner. Parking areas and enclosed buildings are prohibited on the green open space.

~~b. Maximum length/width ratio. Five to one (5:1).~~

~~c. Minimum width. Seventy (70) feet at the setback line of front yard.~~

(b) *Building requirements for compact option.*

Minimum yards:

~~1. Front. Thirty (30) feet.~~

~~2. Side. Fifteen (15) feet for each principal structure.~~

~~3. Rear. Thirty (30) feet.~~

~~4. Accessory buildings. No less than ten (10) feet to side or rear lot line.~~

1. Front:

a. Minimum: 10 feet

b. Maximum: 25 feet

2. Side:

a. Minimum: 10 feet

b. Maximum: None

3. Rear:

a. Minimum: 25 feet

b. Maximum: None

4. Accessory buildings: Not less than 10 feet to side or rear lot line.

(c) Streets.

1. Public streets: New streets as part of the compact development option shall be public and designed and constructed in accordance with the minimum standards of the Virginia Department of Transportation, except that the surface pavement layer shall be asphalt concrete.
2. Private streets. The board of supervisors may permit construction of private streets so long as such streets are not likely to inhibit future development of adjacent land consistent with the standards set forth in Sec 8-152.
3. Street patterns shall form a broadly rectilinear network, with variations as needed for topographic, environmental and other design considerations, in accordance with the minimum standards required by VDOT.
4. Streets shall be designed to:
 - a. Parallel and preserve existing fence lines, tree lines, hedgerows, stone walls and watercourses; and
 - b. Minimize alteration of natural, cultural or historic site features; and
 - c. Promote pedestrian movement.
6. All streets shall be designed to promote pedestrian circulation. Pedestrian circulation shall be designed with respect to topography, integration with surrounding streets, connection to existing or future pedestrian ways and transit stops, interior circulation and the separation of pedestrians from vehicles. Sidewalks, informal walkways and footpaths shall be no less than five (5) feet wide. Paths in open space shall be constructed using mulch or stone. The compact development option shall create a completely linked neighborhood of walkways connecting all uses with parks and other open space areas.

Sec. 10-26. R-3 Residential District.

(1) *Purpose.* The R-3 Residential District is intended to accommodate moderate density suburban residential uses to be served by public water and sewer facilities. The regulations for this district are designed to stabilize and protect the essential characteristics of the district, to promote and encourage, insofar as compatible with the intensity of land use, a suitable environment for family life, and to permit certain compatible commercial uses of a character unlikely to develop general concentration of traffic, crowds of customers and general outdoor advertising.

To these ends, retail activity is sharply limited and this district is protected against encroachment of general commercial or industrial uses. Although this district is basically residential in character, certain compatible public and semipublic uses are permitted in the district.

(2) *Qualifying lands.* Lands qualifying for inclusion in the R-3 zoning district shall be R-3 Residential on the date of adoption of this chapter and other lands within areas mapped as residential transition, village, village expansion, or urban expansion in the comprehensive plan. The minimum area required to create a district shall be two (2) acres of total contiguous land.

(3) *Uses permitted by right.* The following uses are permitted by right in the R-3 district, subject to compliance with all approved plans and permits, development standards and performance standards contained in this chapter, and with all other applicable regulations:

- (a) Church.
- (b) Dwelling, single-family.
- (c) Dwelling, two-family.
- (d) Home occupation.
- (e) Library.
- (f) Pet, household.
- (g) Public utility lines, other.
- (h) Public utility lines, water or sewer.
- (i) School.
- (j) Telecommunications tower, attached.

(4)(i) *Uses permissible by special use permit.* The following uses may be permitted by the board of supervisors as special uses, subject to the requirements of this chapter and to all other applicable regulations:

- (a) Accessory structures greater than twelve hundred (1,200) square feet in area and/or eighteen (18) feet in height when part of an application requesting a rezoning or other use permitted by a special use permit from the board of supervisors.
- (b) Bed and breakfast homestay.
- (c) Boarding house.
- (d) Cemetery.
- (e) Civic club.
- (f) Country club.
- (g) Day care center.
- (h) Fire, police and rescue stations.
- (i) Funeral home.
- (j) Golf course.

- (k) Home business.
 - (l) Manufactured home, Class A and Class B.
 - (m) Medical care facility.
 - (n) Nursing home.
 - (o) Park, lighted or unlighted.
 - (p) Playground, lighted or unlighted.
 - (q) Public utility plant, other.
 - (r) Public utility substations.
 - (s) Transition house.
- (4)(ii) The following uses may be permitted by the board of zoning appeals as special uses, subject to the requirements of this chapter and all other applicable regulations:
- (a) Accessory structures greater than twelve hundred (1,200) square feet in area and/or eighteen (18) feet in height.
- (5) *Lot requirements.*
- (a) *Minimum lot area* (also refer to "lot coverage"). Ten thousand (10,000) square feet.
 - (b) *Lot access.* Lots shall be accessed from a road in the Virginia Department of Transportation (VDOT) system.
 - (c) *Maximum lot coverage.* Lot coverage shall not exceed thirty (30) percent of gross site area. Impervious surfaces shall not exceed fifty (50) percent of gross site area.
 - (d) *Minimum width.* Eighty (80) feet at the setback line of front yard.
 - (e) *Maximum length/width ratio.* Five to one (5:1) for any lot less than two (2) acres.
- (6) *Building requirements.*
- (a) *Minimum yards.*
 1. *Front.* Twenty-five (25) feet (also refer to section 10-41(16) for setbacks from existing intensive agriculture operations).
 2. *Side.* Ten (10) feet for each principal structure.
 3. *Rear.* Twenty-five (25) feet.
 4. *Accessory buildings.* Ten (10) feet to any side or rear lot line.
 - (b) *Maximum building height.* Up to thirty-five (35) feet in height from grade, except that:
 1. The height limit for dwellings may be increased up to ten (10) feet, provided that there are two (2) side yards for each permitted use, each of which is fifteen (15) feet or more, plus one (1) foot or more of side yard for each additional foot of building height over thirty-five (35) feet.
 2. A public or semipublic building such as a school, church, library or hospital may be erected to a height of sixty (60) feet from grade, provided that required front, side and rear yards shall be increased one (1) foot for each foot in height over thirty-five (35) feet.
 3. No accessory building which is within ten (10) feet of any party lot line shall be more than one (1) story high. All accessory buildings shall be less than the main building in height.
- (7) *Use limitations.*
- (a) *Public water and wastewater service.* Public water and wastewater services are required for all development in any R-3 district established after the date of adoption of this chapter.
 - (b) *Keeping and raising horses and ponies.*

1. Horses and ponies may only be kept for personal enjoyment and not for commercial purposes;
2. A minimum of five (5) acres of open or forestal land is available for the horses and ponies; and
3. No more than two (2) horses and ponies collectively (being one (1) horse and one (1) pony, two (2) horses, or two (2) ponies) shall be permitted per each five (5) acres with a maximum of four (4) horses and ponies collectively for parcels of land of ten (10) acres or more.

(8) *Compact development option.* The purpose of the compact development option is to provide flexibility in site design in order to encourage:

- Natural resource preservation.
- Pedestrian-friendly streetscapes.
- Cost-efficiency in providing infrastructure.
- Appropriate design solutions for unique site conditions.
- Transit-supportive design.

Use of the compact development option is voluntary on the part of applicants. The compact development option permits smaller lot sizes in return for providing permanent green open space within the development, and a more compact, cost-effective network of streets and utilities. Except for modifications to the lot and building requirements defined below, all other provisions of the R-3 district pertain to the compact development option.

(a) *Lot requirements for compact option.*

1. *Minimum lot size.* ~~Seven thousand (7,000)~~ Five thousand (5,000) square feet, provided that no less than twenty-five (25) percent of the gross area parent tract is preserved in permanent green open space, as defined herein.

3. *Maximum density.* The density of development under the compact development option shall be no greater than 5 dwelling units per gross acre.

4. *Minimum required green-open space.*

- a. ~~Minimum lot area~~ A minimum of Twenty-five (25) percent of the gross area parent tract shall be set aside as open space. ~~At least one (1) lot area~~ of such required green open space in any compact development shall be ~~less than seven thousand (7,000)~~ five thousand (5,000) square feet.

~~a.~~

- b. For the purposes of this article, the following items shall qualify as Open Space: Natural areas including environmental corridors, greenways, protected natural areas and reserves; Parks, squares, greens and plazas; Streams, ponds, and other water bodies; Stormwater detention/retention facilities; Accessory parking areas or lots located within public parks or publicly accessible natural areas; Recreational facilities, such as ballfields, playgrounds

- c. The subdivision plat shall establish, where applicable, a buffer at least 100 feet wide from the center of all streams and a buffer of at least 50 feet from all lakes, ponds, springs, and other surface waters. This shall be set aside as open space.
- d. Lots, buildings, structures, streets, and parking areas shall be situated to minimize the alteration of natural features, natural vegetation, and topography.
- e. The subdivision plat shall accommodate and preserve any features of historic, cultural, or archaeological value.
- f. Floodplains, wetlands, and areas with slopes in excess of 25% shall be protected from development.
- g. Green Open space may include active or passive recreational uses, and may be held in either public or private ownership. If held in private ownership the green open space shall be held by a homeowner's association or other form of common interest private ownership comparable to a homeowner's association acceptable to the zoning administrator. Green Open space established for purposes of meeting the requirements of this provision shall be restricted from any future development by the establishment of permanent conservation easements held in perpetuity by a public or private entity acceptable to the county. Accessory structures such as picnic shelters, ball fields, nature trails and other similar recreational amenities shall be permitted within the green open space and maintained by the appropriate owner. Parking areas and enclosed buildings are prohibited on the green open space.

- ~~b. Maximum length/width ratio. No one (1) lot of such required green space in any compact development shall have a length to width ratio greater than five to one (5:1).~~
- ~~c. Minimum width. Sixty (60) feet at the setback line of front yard.~~

(b) Building requirements for compact option. Minimum yards:

- ~~1. Front. Twenty (20) feet.~~
- ~~2. Side. Ten (10) feet for each principal structure.~~
- ~~3. Rear. Twenty five (25) feet or more.~~
- ~~4. Accessory buildings. No less than five (5) feet to side or rear lot line.~~

- 1. Front:
 - a. Minimum: 10 feet
 - b. Maximum: 25 feet
- 2. Side:
 - a. Minimum: 10 feet
 - b. Maximum: None
- 3. Rear:
 - a. Minimum: 25 feet
 - b. Maximum: None
- 4. Accessory buildings: Not less than 10 feet to side or rear lot line.

(d) Streets.

- 1. Public streets: New streets as part of the compact development option shall be public and designed and constructed in accordance with the minimum standards

- of the Virginia Department of Transportation, except that the surface pavement layer shall be asphalt concrete.
2. Private streets. The board of supervisors may permit construction of private streets so long as such streets are not likely to inhibit future development of adjacent land consistent with the standards set forth in Sec 8-152.
 3. Street patterns shall form a broadly rectilinear network, with variations as needed for topographic, environmental and other design considerations, in accordance with the minimum standards required by VDOT.
 4. Streets shall be designed to:
 - a. Parallel and preserve existing fence lines, tree lines, hedgerows, stone walls and watercourses; and
 - b. Minimize alteration of natural, cultural or historic site features; and
 - c. Promote pedestrian movement.
 6. All streets shall be designed to promote pedestrian circulation. Pedestrian circulation shall be designed with respect to topography, integration with surrounding streets, connection to existing or future pedestrian ways and transit stops, interior circulation and the separation of pedestrians from vehicles. Sidewalks, informal walkways and footpaths shall be no less than five (5) feet wide. Paths in open space shall be constructed using mulch or stone. The compact development option shall create a completely linked neighborhood of walkways connecting all uses with parks and other open space areas.

(Ord. No. 1999-12, §§ 2-600--2-608, 12-13-99; Ord. No. 2001-11, 9-24-01; Ord. No. 2003-14, 7-28-03; ORD-FY-05-19, 12-13-04; ORD-FY-08-08, 9-10-07; ORD-FY-08-16, 11-14-07; ORD-FY-09-11, 2-9-09)

