ROANOKE COUNTY
419 TOWN CENTER
DESIGN GUIDELINES

ROANOKE COUNTY VA

Prepared for Roanoke County

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ROANOKE COUNTY

ACKNOWLEDGMENTS

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ABOUT GAP-TA

The following study was conducted under a Growth and Accessibility Planning (GAP) technical assistance grant. Administered by Virginia's Office of Intermodal Planning and Investment (OIPI), GAP technical assistance projects seek to align infrastructure development with designated and emerging growth areas to improve efficiency and effectiveness. Visit vtrans.org/about/GAP-TA for information about the Growth and Accessibility Planning Technical Assistance program.

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GLOSSARY OR LIST OF ACRONYMS

CPTED	Crime Prevention Through Environmental Design
GAP	Growth and Accessibility Planning
GIS	Geographic information systems
LID	Low impact development
OIPI	Office of Intermodal Planning and Investment
VDOT	Virginia Department of Transportation

INTRODUCTION

GAP Technical Assistance

The following study was conducted under a Growth and Accessibility Planning (GAP) technical assistance grant. Administered by Virginia's Office of Intermodal Planning and Investment (OIPI), GAP technical assistance projects seek to align infrastructure development with designated and emerging growth areas to improve efficiency and effectiveness. Organized under four program components, Roanoke County applied for planning assistance to explore improvements necessary to further the implementation of the *419 Town Center Plan*.

Purpose and Intent

These design guidelines are proposed as an accompaniment to the *419 Town Center Plan* to provide further guidance on the design of both public and private investments and improvements in the study area to help shape the built environment, meet community expectations, provide a vibrant public realm, and maintain a consistent character and high quality of design and aesthetic over the long-term future.

Relationship to *419 Town Center Plan*

The *419 Town Center Plan* provides a basic framework for the planning and development of the study area. In addition to laying out a foundation for land use, transportation, and sustainability, the Plan also presents a vision for the study area in terms of design character. However, that vision is necessarily broad, as it relates to different catalyst development areas, as well as existing neighborhoods and businesses, and the transitions from one to the other. As developers, investors, companies, institutions, and other stakeholders begin to participate in the study area's evolution, they will be looking for the additional guidance provided by the design guidelines to execute projects that advance the *419 Town Center Plan* vision.

Guiding Principles

While the creation and evolution of mixed-use development over time can involve many unknowns, there are several overarching guiding principles that should be followed as a basis for successful projects:

Placemaking

Natural topography and landscaping, as well as the context of the surrounding built form, should be considered during site design. Every site should be thought of as an opportunity to enhance the character and quality of the study area through thoughtful and appropriate design.

Diversity of Uses and Densities

Increasing the diversity and density of uses and facilities provides opportunities for activities and street presence at different times of the day and housing options for a wide range of individuals.

Pedestrian Orientation

Create pedestrian-friendly site design with direct walking and biking connections within the study area and to surrounding areas with pedestrian-oriented buildings, well-defined streetscapes, active ground floor uses and an interesting public realm.

Flexible Transportation Network

Creative solutions, such as shared parking, reduced parking requirements, and multimodal transportation facilities and opportunities, should be explored to reflect the less car-dependent nature of mixed-use development in the study area.

Environmental Sustainability

Reduce the environmental impacts of site design, building design, construction, and operation wherever possible by incorporating state-of-the-art "best practices", green building techniques, recycling, and upcycling (creative reuse).

419 Town Center Plan (source: www.roanokecountyva.gov)

EXISTING ZONING

Existing Zoning

Currently, the study area is a mix of both commercial and residential zoning districts. Approximately two-thirds (63 percent) of the land is zoned C-2 (High Intensity Commercial), which includes a majority of the Electric Road corridor and the land along US 220 on the east side of the study area. The other commercial zone found in the study area is C-1 (Low Intensity Commercial), which accounts for only four percent of the zoning and is found just north of Hunting Hills Drive.

The remaining zoning in the district is residential, with R-3 (Medium Density Multifamily Residential) accounting for 25 percent of the zoning in the study area and R-4 (High Density Multifamily Residential) accounting for another eight percent. The R-3 zoning is found entirely on the south side the study area on mostly undeveloped land in an area with significant topographical limitations. The R-4 zoning is found in three spots: the South Peak development, Copper Croft Apartments, and the Windy Hill Key Apartments.

Commercial Zoning Districts

The **C-1 Low-Intensity Commercial** district aims to support the development of office and commercial spaces within the urban service area that will meet the needs of the community and county. They are located along arterial thoroughfares where there is existing commercial or residential development. They also serve as a buffer between different land-use types. The **C-2 High-Intensity Commercial** district provides for the development of commercial and service-related uses in the urban service area for multiple neighborhoods or larger regions in the county. This district allows for a broad range of retail and service activities. The land uses of both the C-1 and C-2 districts are consistent with the land use recommendations in the comprehensive plan. Site development regulations are established so that adjacent land uses are compatible.

Residential Zoning Districts

The purpose of the **R-3 Medium Density Multifamily Residential** district is to support the development of middle-high density residential areas of 6 to 12 units per acre in areas where this development is already existing and in areas that seem appropriate for this activity. The **R-4 High-Density Multifamily Residential District** similarly supports the development of residential areas but for high densities of 12 to 24 units per acre. Both districts act as a buffer between less dense residential regions and more dense office, commercial, and industrial areas. The R-3 and R-4 districts promote different housing styles and densities to create a diverse design and layout. More dense developments in both districts have additional standards established for providing the appropriate amenities. The districts are appointed according to proximity to major streets, sewer systems, water systems, and schools that allow for development at a specified density.

The site development regulations for these districts include four categories: minimum lot requirements, minimum setback requirements, maximum height, and maximum coverage. The minimum lot requirements specify the minimum lot area and public road frontage length needed to create a new lot based on the number of public utilities (water and sewer) available. Setbacks are required for both principal and accessory structures in the front yard, side yard, and rear yard. These distances are included in the minimum setback requirements. Height limitations also exist for both the principal and accessory structures. Finally, the maximum coverage requirements include building coverage and lot coverage requirements. Maximum building coverage is 50 percent for the C-1 and C-2 districts and 35 percent for the R-3 and R-4 districts. With regard to lot coverage, the maximum is 80 percent in the C-1 district and 90 percent in the C-2 district; in the R-3 and R-4 districts, maximum lot coverage is 60 percent (R-3) and 75 percent (R-4).

An aerial view of the Route 419 corridor at the Bernard Drive intersection

FRAMEWORK PLAN

General

The Framework Plan for the 419 Town Center study area (see Figure 1) is organized around an interwoven and loosely gridded street network that runs both parallel and perpendicular to Route 419. This proposed network, in conjunction with existing streets such as Ogden Road and Starkey Road, will form the nexus of the public realm and provide connectivity for residents, workers, and visitors alike. New streets will be narrower than those currently existing in the study area and more pedestrian-oriented, designed to slow vehicular traffic and encourage safe and efficient travel for all modes of movement.

The Framework Plan reflects the vision of the *419 Town Center Plan*; it represents desired locations and design for the street network with a goal of creating a more connected and walkable place. However, implementation of the Plan will occur over time and these design guidelines provide flexibility so that development proposals can respond to opportunities from both the public and private in terms of capital improvements, funding, and project design.

Circulation and Connectivity

The streets and blocks of the Framework Plan form a network that organizes activity within the public realm. Frequent intersections and mid-block pass-throughs provide numerous travel options and alternative routes, creating the basis for easy and efficient movement throughout the 419 Town Center study area.

To encourage the development of a comfortable, walkable environment for visitors, pedestrian-oriented design should be encouraged. Block lengths should be around 300-400' and any blocks over 500' should provide mid-block crossings. To help break up larger blocks, street-front public spaces can be incorporated where possible. Larger blocks will also include pedestrian-only pass-throughs for increased access and parking will be located in the rear with vehicle access from alleys and service roads.

Street Types

Arterial Thoroughfares

Thoroughfares support longer distance trips and connect the 419 Town Center study area to the goods, services, recreation, and destinations of the larger region.

Main Streets

Main streets feature buildings oriented to the sidewalk or other public spaces such as plazas. They have a wide mix of land uses that prioritize ground floor retail with prominent entryways and windows, wide sidewalks, pedestrian activity, and open spaces that support gatherings and community events.

General Urban Streets

General urban streets support a wide mix of land uses and provide multimodal connections within the transportation network.

Access/Service Streets

Access/service streets provide access to parking areas, as well as the loading and service areas associated with business activities.

Residential Streets

Residential streets are flanked with single- and multi-family uses of varying sizes and densities, along with smaller scale neighborhood uses such as parks and churches.

Public vs. Private Streets

Public streets are preferred in the 419 Town Center study area. However, private streets built to the standards described in these design guidelines may be appropriate, particularly on large parcels with a master plan for redevelopment or where specific site conditions dictate that public standards may not be able to be met.

Character Districts

General

The *419 Town Center Plan* proposes different development types and form within the study area based on the location, setting, and existing land uses. These different areas, called Character Districts, are described in more detail below.

Mixed-Use District

The Mixed-Use District (see Figure 2) includes customer-oriented retail and service uses, office, and residential uses in a pedestrian-priority environment. Mixed use development can be either vertical or horizontal. This district is primarily west of Route 419, with a small portion to the south on either side of Starkey Road.

Town Center Core District

The Town Center Core District (see Figure 3) is the most intense mixed-use area with the highest pedestrian-priority and most expansive public realm. This district is centered on the intersection of Starkey Road and Fallowater Lane.

Arterial Infill District

The Arterial Infill District (see Figure 4) provides smaller-scale commercial development and redevelopment opportunities along Route 419. This development will likely remain more auto-oriented given the frontage onto Route 419.

Residential District

The Residential District (see Figure 5) includes primarily housing, which may consist of single-family and/or multi-family development, along with adjacent open spaces for use by the residents.

Green Spaces

While not specifically a district, green spaces (including plazas, shared use paths, and other recreation or leisure uses) are integral elements of the Framework Plan. Specific locations have not been identified for green spaces, but the Plan does identify general locations (subject to change) where they would be most impactful to the development of the character districts.

Figure 1. 419 Town Center Framework Plan

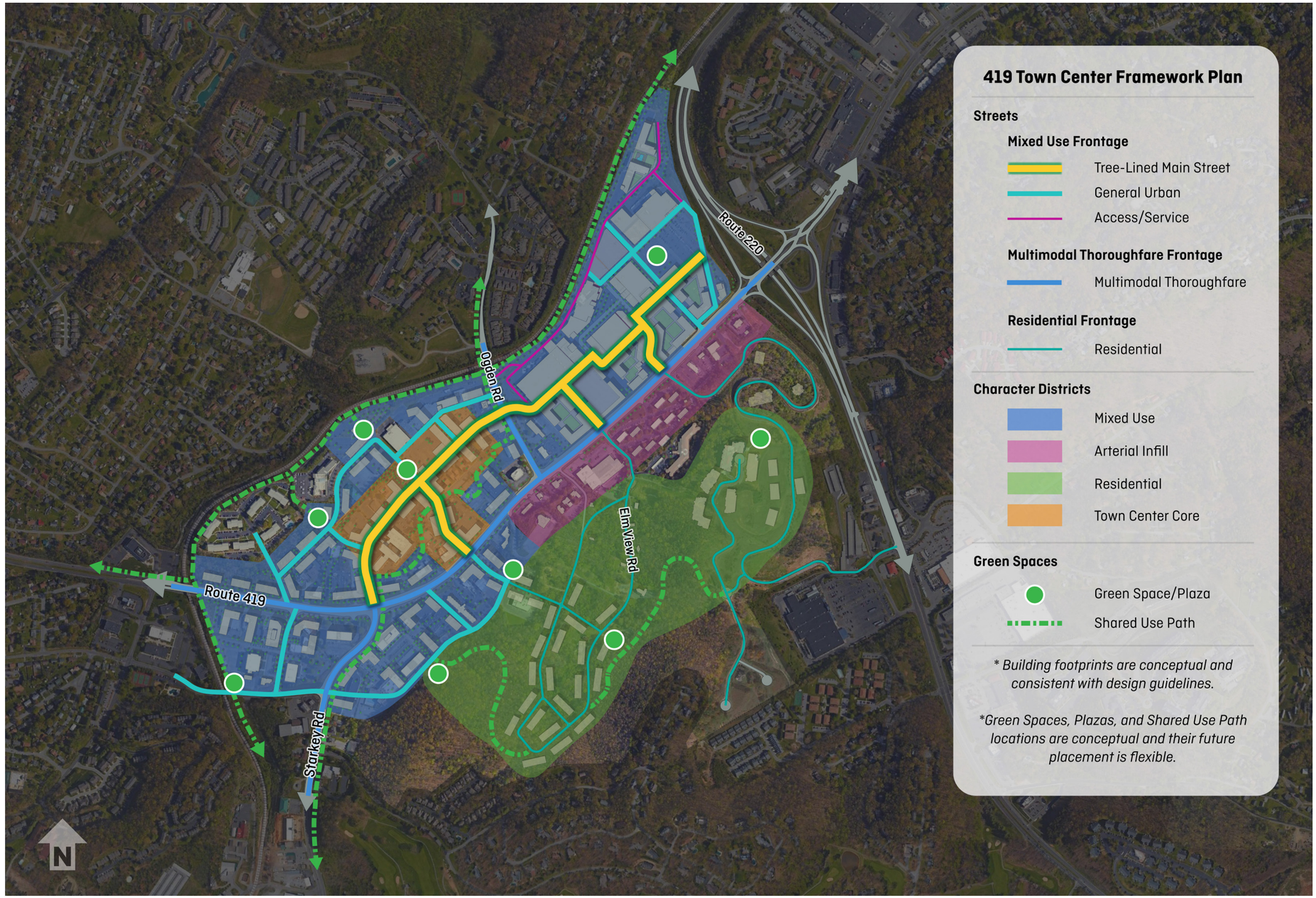
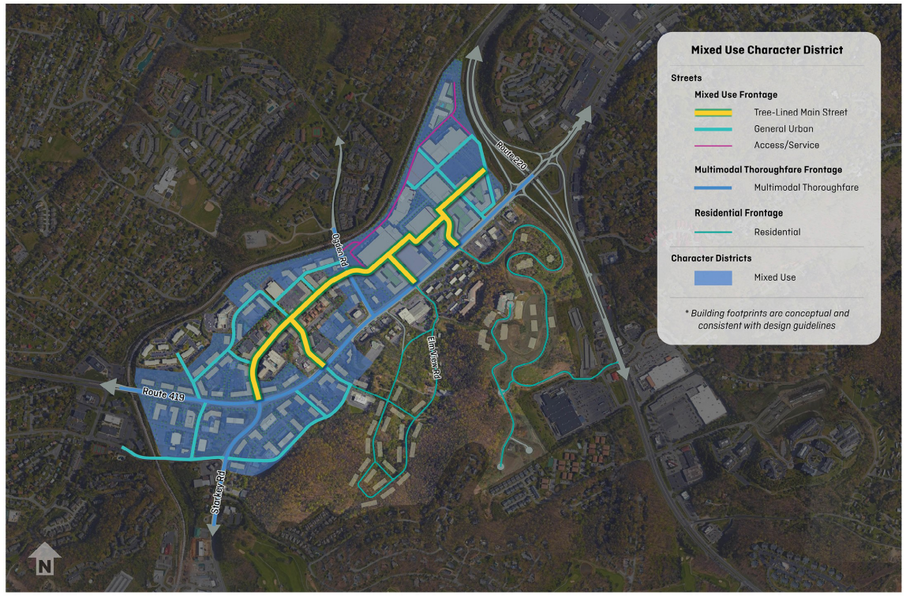


Figure 2. Character District: Mixed Use



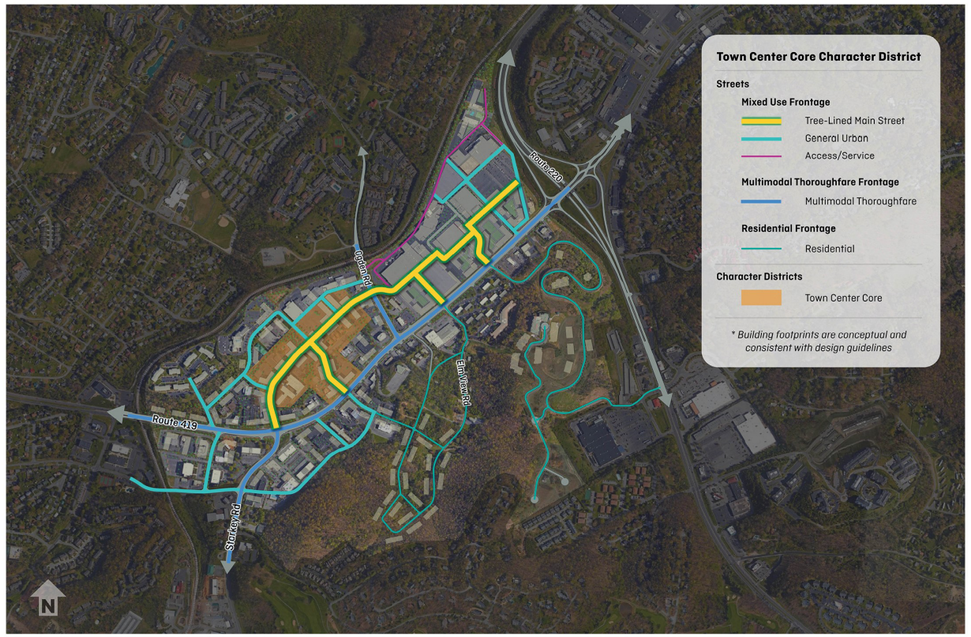
Mixed Use	
Minimum Height	2 stories
Maximum Height	5 stories
Build-to Line	0 to 10 feet from front lot line
Step Backs*	Above 3 stories
Block Length	500 feet or less
Parking Location	Behind
Open Space	Plaza, small parks, and pocket parks

*Step Backs set the floors above a certain story back to prevent a canyon-like environment and to allow sunlight to filter down.

CHARACTER DISTRICT: MIXED USE

The mixed-use district includes customer-oriented retail, services, and residential uses in a pedestrian-priority environment. The various uses may be mixed horizontally or vertically.

Figure 3. Character District: Town Center Core

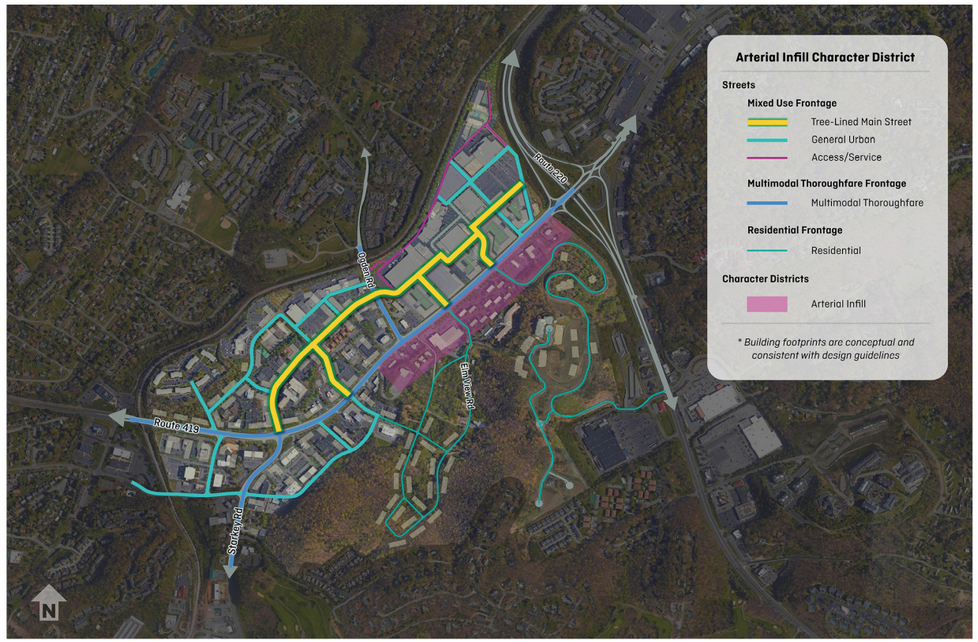


Town Center Core	
Minimum Height	2 stories
Maximum Height	8 stories
Build-to Line	0 to 5 feet from front lot line
Step Backs	Above 3 stories
Block Length	250 feet - 400 feet
Parking Location	Behind
Open Space	Plaza and central civic green

CHARACTER DISTRICT: TOWN CENTER CORE

The Town Center Core is intended to have the highest intensity development and the most urban and walkable form within the area. The Town Center Core should have a diverse mix of uses and active ground floors to promote pedestrian activity, wide sidewalks with space for activities such as outdoor dining, and the highest levels of pedestrian and bicycle facilities.

Figure 4. Character District: Arterial Infill

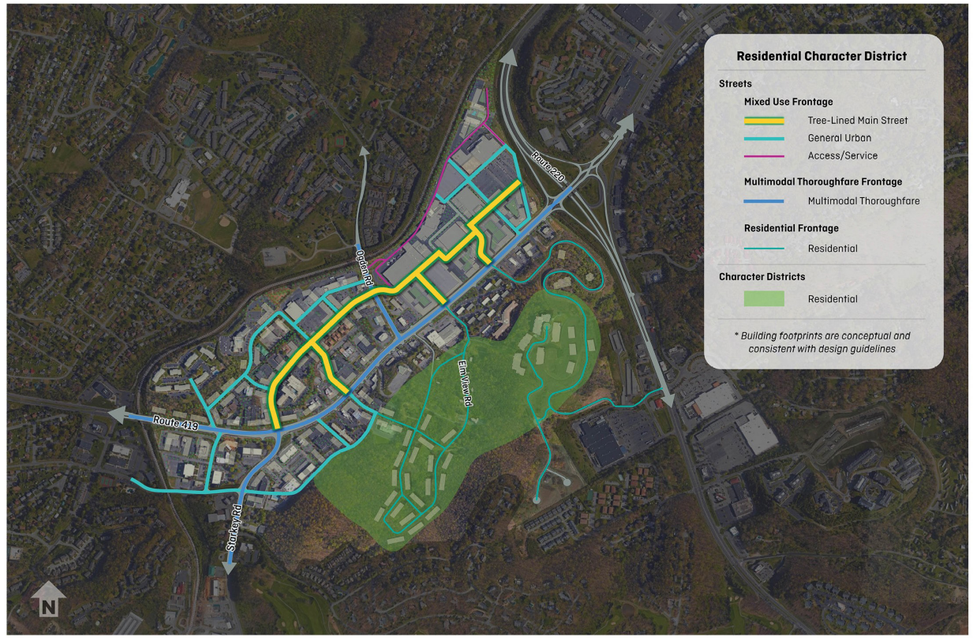


Arterial Infill	
Minimum Height	1 story
Maximum Height	3 stories
Setbacks	25 feet minimum from front lot line
Step Backs	None
Block Length	Not applicable
Parking Location	Flexible
Open Space	On-site green infrastructure and landscaping

CHARACTER DISTRICT: ARTERIAL INFILL

The arterial infill district provides smaller-scale redevelopment along Route 419.

Figure 5. Character District: Residential



Residential	
Minimum Height	1 story
Maximum Height	5 stories
Setbacks	10 feet minimum from front lot line
Step Backs	None
Block Length	500 feet or less
Parking Location (for multi-family only)	Beside or behind buildings
Open Space	Parks and on-site green infrastructure and landscaping

CHARACTER DISTRICT: RESIDENTIAL

The residential district includes primarily housing, which may consist of single-family and/or multi-family development with adjacent open spaces for use by residents.

Land Uses

General

Land uses for any parcel shall come from those indicated in Section 2.5.2 for the District applied to that parcel on the Framework Plan. A parcel located in more than one District may utilize the land uses allowed in the applicable Districts, provided the uses are compatible with surrounding development. Multiple uses may be appropriate within a single parcel, as described and/or shown on development plans. Similar and compatible uses not specifically listed in Section 2.5.2 may be allowed by staff upon review. Use and design standards may be associated with certain uses.

Table 1. Recommended Allowable Land Uses by District Type

Land Use	District			
	Town Center Core	Mixed-Use	Arterial Infill	Residential
RESIDENTIAL USES				
Home occupation	x	x		x
Multi-family dwelling	x	x		x
Single-family dwelling				x
Townhouse		x		x
CIVIC USES				
Clubs (meeting facility)	x	x	x	x
Community recreation	x	x		x
Cultural services	x	x		
Day care center	x	x	x	x
Educational facilities, college/ university	x	x	x	
Public parks and recreational areas (parks/plaza)	x	x		x
Public parks and recreational areas (playground)	x	x		x
Safety services	x	x	x	
OFFICE USES				
Financial institutions	x	x	x	
General office	x	x	x	
Laboratories	x	x	x	
Medical office	x	x	x	
COMMERCIAL USES				
Bar/Nightclub	x	x	x	
Bussiness support services	x	x	x	
Business or trade school	x	x	x	
Commercial indoor entertainment	x	x		
Communication services	x	x	x	
Convenience store	x	x	x	
Hospital	x	x	x	
Hotel/Motel/Motor lodge	x	x	x	
Personal improvement services	x	x	x	
Personal services	x	x	x	
Restaurant, drive-in, or fast food	x	x	x	
Restaurant, general	x	x	x	
Retail Sales	x	x	x	
Studio, fine arts	x	x	x	
MISCELLANEOUS USES				
Parking facility (deck/garage), primary use	x	x		
Parking facility (surface lot), primary use	x	x	x	

Open Space Network

Open spaces should be located and designed to frame views and create a network of accessible public places that engage people in multiple ways. Trees will enhance the visual character of the urban environment and provide a streetscape that enhances walkability, buffers pedestrians from vehicular traffic, enriches the public realm, and visually frames architectural elements and entrances. Elements of the open space network are illustrated on the Framework Plan (see Figure 1). Open space should be a key social and gathering place element within the Town Center Core District and should be located within a ¼ mile radius walkshed of residential and office areas in other Districts.

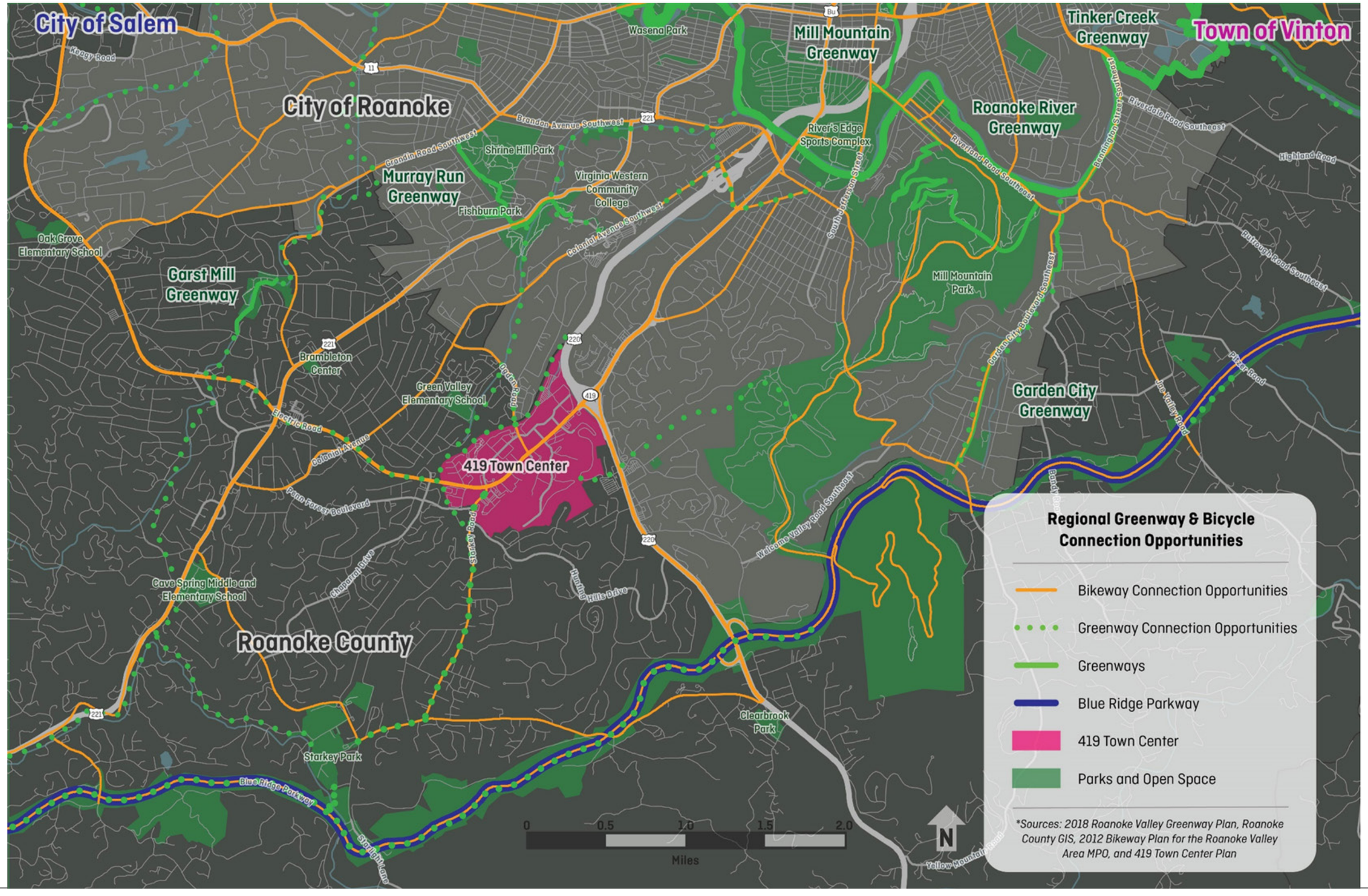
Stormwater Management

Wherever possible, use stormwater capture, storage, and conveyance systems as an opportunity to provide additional design value to the landscape - facilities and ponds should have public access, be integrated as open space, and be connected to green spaces and trails where possible. Low Impact Development (LID) features for stormwater management are encouraged to use water as a resource.

Multimodal Network Connectivity

The 419 Town Center study area is centrally located to several notable outdoor recreation assets within the Roanoke Valley. Strengthening the connections to these areas can help increase the attractiveness of the 419 Town Center over time as a place to live, work, and play. Development projects should work with the County to include design provisions that provide, extend or encourage pedestrian and bicycle connections and access to existing trails, parks, and urban spaces such as the Blue Ridge Parkway, Roanoke River Greenway, Garst Mill Greenway, Tinker Creek Greenway, Mill Mountain Park and Greenway, River's Edge Sports Complex, Starkey Park, Clearbrook Park, Explore Park, and other local parks and recreation centers. Figure 6 provides context for the study area within the larger region and its major multimodal networks.

Figure 6. Regional Greenway and Bicycle Connection Opportunities



SITE PLANNING

Block Configuration

A well-designed block network promotes pedestrian activity and encourages walking in place of driving for local trips by making connections between destinations accessible and convenient. Compact blocks facilitate an interconnected street network and provide the framework for mixed-use development and a greater diversity of building types within proximity. Increased street connectivity also disperses traffic flows, subsequently helping to transform the street into a comfortable space for pedestrians. Interconnected transportation networks provide advantages such as enhanced vehicular and pedestrian access, reduced traffic congestion, and more timely response for emergency vehicles.

Smaller blocks provide greater connection opportunities (source: https://www.princegeorgescountymd.gov/)

Shorter block lengths are encouraged, with a length of 250 feet to 400 feet in all directions where possible in the Town Center Core and 500 feet or less in other Districts. This provides opportunities for multiple circulation routes and creates a finer-scaled and diverse pedestrian experience. Mid-block pass-throughs or plazas should be provided to facilitate pedestrian access to parking areas and surrounding uses and to create pedestrian gathering spaces, especially in areas where existing development creates larger blocks. This helps promote pedestrian activity and provide access to a variety of destinations. Use pedestrian amenities, such as curb extensions and textured paving to delineate key pedestrian crossing locations.

Building Location and Street Orientation

Proper building location and orientation can reduce walking distances from the sidewalk and make streets more accessible for pedestrians, bicyclists, and transit riders. Main building entries should border the primary streets that the building façade fronts to foster a vibrant, walkable environment. Buildings on corner lots may have a primary entrance facing the intersection. Secondary and residential entrances can be connected to interior courtyards and parking areas.

Within the Town Center Core, the site development review process can encourage the orientation of building frontage along a gridded network of internal streets, rather than the main roadways. For instance, in Mashpee, Massachusetts, one way walkability was achieved in the Commons was through orienting the building frontage along a gridded network of internal streets, rather than the main roadways. Streets were required to have wide roadways and setbacks. To work around this, the landowner labeled the new internal roadway network, which brought walkability, as driveways and alleyways to design a more appropriate width that would accommodate pedestrians. Roanoke County can consider implementing a similar internal roadway network for increased walkability.

Example of the street design in Mashpee Commons (source: Mashpee Commons Facebook)

In the mixed-use character district, buildings should help activate the sidewalk and the building frontage should contribute to the street's character. Buildings are important in outlining the edge of the sidewalk. When sidewalks are narrow, Roanoke can consider setting back buildings to allow for sufficient pedestrian space.

Building Entries

Building entries should be clearly demarcated and accessible from the street and pedestrian corridors. They should be open, inviting, and highly visible. Entries should engage and activate the public realm. In mixed-use buildings, there should be a clear separation and hierarchy between retail storefronts and secondary entries for upper floor uses.

Roanoke County can consider requiring main building entries to border the primary streets that the building facade fronts to foster a walkable environment. For residential districts, entrances can be connected to interior courtyards and parking areas. The building's entries should activate the edge of the street. For the mixed-use character district, requirements should encourage a clear distinction between entries to retail and secondary entries to the upper floors.

Building entries along sidewalks are easily accessible (source: https://i.pinimg.com)

Loading and Service Areas

Loading and service areas should be concealed from view within the building envelope or should be located to the rear of the site and designed for minimal visual impacts and circulation conflicts. When trash enclosures, loading docks, utility equipment, or similar uses are visible from a side street or neighboring property, they should be screened using materials, colors, and landscaping that complement the site design and building architecture.

Utilities

Utilities and equipment should be contained within buildings or located to minimize the visual and functional impact of systems and equipment on streets, sidewalks, and the public realm. Infrastructure should be consolidated where possible and integrated into adjacent development to be as inconspicuous as possible.

On-street parking enhances pedestrian-priority streets (source: https://arlingtonva.s3.amazonaws.com)

Parking

Parking can be a major factor limiting the walkability of a place. Providing an overabundance of parking encourages driving and, if located in front of buildings, may serve as a barrier between pedestrians and their destinations. Parking requirements should be reduced where possible and appropriate to reflect the walkable nature of mixed-use development proposed in the *419 Town Center Plan*. Parking consolidation and cross-access is encouraged to reduce the number of access drives. Parking areas should be designed with a clear hierarchy of circulation for both vehicles and pedestrians.

Types

Structured Parking

Structured parking or parking garages are most appropriate in higher density mixed-use areas. They provide a reduced footprint and can fit well into an urban environment while maintaining scale and façade articulation. Garages should be located within block interiors wrapped by perimeter liner buildings or as standalone structures that can integrate first floor retail. The proportion, style, and massing of a garage should reflect that of surrounding buildings.

Surface Parking

Surface parking should be located to the rear of buildings wherever possible. Any off-street parking adjacent to the public right-of-way should be screened with landscaping or fencing, but in such a way that it does not create a barrier to adjacent sites or blocks. Long aisles of parking bays should be broken up with landscaped islands. Pedestrian access should be designed around the perimeter of on-site parking and between parking aisles.

On-Street Parking

On-street parking occurs within the right-of-way and is an important factor contributing to public realm activity and business vitality. Section 5.0 provides additional information regarding design of the public realm.

Roanoke County can consider encouraging on-street parking and limiting requirements for off-street parking by allowing on-street parking spaces to contribute towards parking minimums. The county can also consider additional reductions to parking minimums throughout character districts. Roanoke County could also consider development of a parking garage, and using some sort of shared parking calculations, allowing developers to use the parking garage to meet some of their off-street parking needs. Additionally, Roanoke County should consider developing a new shared use parking worksheet that would allow developers to meet needed parking (if required due to financing regulations) while ensuring developments are not being overparked.

Location

Off-street parking should be located behind or beside buildings. Building facades that open directly onto the sidewalk without parking are more inviting to pedestrians.

Shared Parking

Shared parking allows neighboring land uses with different peak times for parking demand to use the same parking spaces. Wherever possible, shared parking should be provided for adjacent uses with staggered parking demands, to reduce the overall number of parking spaces required for multi-tenant or mixed-use buildings. Generally, the amount of parking required should be based on the maximum demand at any time across all land uses present.

Roanoke County's zoning can incentivize a decrease in the size of parking lots and encourage shared parking. The county can also consider building a parking garage as a way of meeting parking needs.

Bicycle Parking

Bicycle parking is a low cost yet effective way to encourage bicycling. Racks should be provided for short-term visitor parking and lockers should be provided for long-term visitor and/or employee parking. Bicycle racks should be located near building entrances or along direct paths to building entrances in highly visible areas but should not interfere with pedestrian access or be further from the building entrance than the nearest non-handicapped vehicle parking space. Innovative and creative bicycle rack designs should be encouraged, especially those that form a theme throughout the 419 Town Center study area or complement building architecture. Bicycle lockers should be in secure, well-lit, covered areas.

Bicycle parking encourages people to ride (source: https://cyclesafe.com)

Bike parking requirements should be developed across the Arterial Infill, Mixed Use, Residential, and Town Center Core districts. This should include all public parking garages in the character districts. This would involve developing requirements for short-term and long-term bike parking. Roanoke County can consider implementing bike parking minimums that can be met through bike parking in the right-of-way or on-site. Along with bike parking, the county should also consider providing facilities such as a bicycle maintenance/repair station, especially for long-term parking spaces.

Transitions

Scale

Compatible scale should be considered in terms of building dimensions, building placement, and orientation. Where practicable, similar sized buildings should face each other across local streets, but not to the detriment of achieving an appropriate mix of uses at the edges of Districts or neighborhoods. Transitions of development scale are best accomplished across rear lot lines, alleys, open space, or collector and arterial streets. New development should relate to other existing or proposed development on adjoining properties to maximize useful interconnection and shared efficiencies.

Views

Important views and vistas, both natural and man-made, should be used as opportunities to create edges or to align public spaces and corridors to enhance the quality of the public realm experience.

Buffering and Screening

Where incompatible scale or activities cannot be mitigated through adequate transitions, buffering and screening should be required. Buffering and screening strategies should consider building and parking placement, building orientation, walls, fencing, and landscaping.

Top: Buildings with compatible scale (source: www.tndtownpaper.com); Middle: View lines can create interest (source: https://www.pinterest.com/); Bottom: Design with materials appropriate to the region and use (source: https://urbannext.net)

Landscaping and Hardscaping

Materials

Plant materials should be selected that are appropriate for the regional climate and provide seasonal interest. Street trees should be deciduous – coniferous trees should not be used for this public realm feature.

Decorative paving should be used to identify special areas of the streetscape such as intersections, pedestrian building entrances, crosswalks, and plazas and help differentiate functional zones on a sidewalk or street. Special pavement surfaces should be designed for urban traffic and meet the requirements set forth within the Americans with Disabilities Act. The use of permeable pavement systems is encouraged as appropriate.

Roanoke County can consider emphasizing sustainable development methods for landscaping and hardscaping across character districts. A landscaping guide can be developed to promote water quality protection, thoughtful sustainable design, and native plant materials for landscaping and screening. Developers can also be required to complete a worksheet as a part of a landscaping plan that outlines how the project will include sustainable landscaping techniques.

Requirements for the minimum percentage of landscaping can be developed for the character districts. For residential districts, landscaping can be used within common open space areas, and along the property's perimeter to increase the visual appeal and outlook of residential units.

For commercial districts, a minimum percentage of landscaping can also be developed for parking areas based on the number of parking spaces. Additionally, the county can encourage trees to be placed along the street right-of-way, entries, and focal points within commercial districts. Large trees can also be used to separate commercial uses from residential uses in areas where they might be adjacent.

For mixed-use districts, landscaping is especially important within large parking areas, along the streetscape, and in common open spaces. Landscaping is beneficial in a mixed-use district as it can define and separate areas that allow these spaces to be more pedestrian-oriented.

Screening

The design and materials for walls and fences should be coordinated with the design and materials of nearby and adjacent buildings in terms of color, quality, scale, and detail. They should not necessarily be identical, but should be high quality, decorative rather than utilitarian, and be substantial in appearance appropriate with the urban environment.

Rooftop mechanical equipment (except for solar panels) should be concealed from street-level public vantage points. The method of screening shall be architecturally integrated with the building in terms of color, shape, and size. Ladders for roof access should be hidden and/or integrated into the building design. If the developer proposes a landscape screening, the screening plan can be included in the developer's landscape plan to ensure screening requirements are met. This can include screening for trash bins, mechanical equipment, parking areas, and existing screening.

Lighting influences design character (source: www.designplan.com)

Service Areas

Service and utility areas should be concealed as much as possible from the public view by employing means such as enclosing walls, fences, screening and/or landscaping of sufficient height, structure, and density for year round cover to provide an opaque screen.

Safety and Security

Incorporate Crime Prevention Through Environmental Design (CPTED) measures, as appropriate, to provide safer environments. CPTED measures should use elements of the environment to control access, provide opportunities to see and be seen, define ownership, and encourage the maintenance of territory. [Note: reference www.safenow.org for additional CPTED information.]

Exterior Lighting

General

Lighting has a strong effect on the character of a place. This includes both the distribution of the light and the character of the fixture/pole itself. A variety of lighting types should be used to address the different needs of civic spaces, pedestrian-oriented streets, buildings, and parking areas.

Exterior lighting for pedestrian areas should be provided at all points of decision such as intersections, crossings, steps, and arrival points. It should illuminate pedestrian pathways, drives, buildings, signage, landscaping, and other appropriate areas.

All lighting should be aimed, located, designed, fitted, and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance through light trespass. Lighting design should implement energy conservation, including automatic cut-off controls, and maintain dark skies. [Note: reference www.darksky.org for additional information from the International Dark Sky Association.]

Site, building, and parking lighting fixtures should be coordinated and compatible with the architecture of adjacent buildings and streetscape. Simpler fixture styles are recommended to be compatible with different architectural styles.

Exterior lighting on private property is typically handled through zoning ordinance, whether generally speaking (applicable to all types of development) or with regulations specific to certain types of land uses (e.g., outdoor recreation or parking structures). Regulations tend to focus on mitigating the impact of lighting on neighboring properties, the extent and brightness of the lights, or the height of freestanding light poles. Specific design elements can be evaluated and approved through any number of other processes, such as planned development review or additional regulations via overlay districts. Further, the code could be modified to address lighting, but this would then apply to all other properties with the same zoning.

For a development review process, Roanoke County may want to consider putting together a primer on lighting techniques, guidelines, and/or requirements if lighting requirements for the 419 Town Center districts are going to be different than other areas of the county. For example, Dutchess County, New York, has a primer on LED lighting for site plan review that outlines all the parameters they consider when looking at lighting plans (https://www.dutchessny.gov/Departments/Planning/Docs/Plan-On-It-Vol-12-2018.pdf).

Street

Streetlights are used for overall illumination of roadways and sidewalks and should enhance security of the street while minimizing negative impacts on private properties. They should be pedestrian scale and apply adequate illumination for both pedestrian use of the sidewalk and street, and vehicular use of the street. Placement of fixtures should provide a coordinated and organized appearance that contributes to the overall continuity of areas.

Generally, all streetlights should be located to provide safe clearance for pedestrians and adjacent vehicles. The setback for each pole from the curb edge should be consistent to create visual alignment. Poles should be intentionally placed in relation to on-street parking spaces to prevent conflicts with vehicle doors. Streetlights should be spaced consistently based on the width of the street and the length of the given block. Mature tree canopies should be considered when spacing streetlights and should be centered between trees whenever feasible. Spacing should strive to achieve a consistent look.

Building

Building lighting design should highlight primary building entrances, light specific usable exterior spaces such as balconies or terraces, complement adjacent streetscapes, and accentuate adjacent plazas and open spaces. Building lighting should be integrated into the architecture through concealment or through materials, detailing, form, and spacing that complements the building elements.

Building lighting fixtures, whether exposed or concealed, should not have power sources, conduit runs, junction boxes, or other unfinished elements exposed to view. Architectural accent lighting should be limited to indirect lighting only.

Building Signs

Illuminated signs should be oriented to the public right-of-way and should avoid facing residential uses and publicly accessible open spaces or plazas whenever practical. They should have tops to prevent light from escaping upward.

Pulsating, flashing, running or rotating lights are generally not compatible with pedestrian-oriented areas and should be avoided. Power sources, conduit runs, junction boxes, or other unfinished elements should be concealed to minimize their visual impact.

Light fixtures should be pedestrian-scale and complement design character of the street (source: https://harriman.com)

Open Space

Open space lighting should create a comfortable and safe nighttime ambience in publicly accessible open spaces and plaza areas and provide continuity of light levels with adjacent streetscapes. It should provide the lowest levels necessary to achieve safety and efficient wayfinding. Appropriate elements of plazas such as gazebos, art, and fountains should be highlighted to aid in orientation, provide visual interest, and become an inviting nighttime presence.

Pedestrian lighting may be used to illuminate primary walking pathways or accented paved areas. Illumination sources that are low to the ground or integral with pavement such as bollards and walkway lights are encouraged. High power and general illumination of entire open spaces from remotely mounted fixtures are strongly discouraged.

Parking Areas

Parking areas should include adequate lighting levels to create a safe and secure environment. Fixtures should be installed at illumination levels to provide safety for vehicles and pedestrians, while minimizing glare or spillage onto adjacent properties. The entrances and exits to parking areas should be well lit. Poles should be placed to provide a unified, organized appearance throughout the parking area and provide reasonably even and uniform light distribution without hot spots or dark spots.

Accent

Accent lighting should highlight appropriate design elements. It may be either ground mounted or mounted on buildings, and light levels should be low or background in appearance. Flood lighting is prohibited.

Landscape lighting should be subtle and should be carefully shielded to avoid view of the source. Up lighting of landscaping should be limited to a select few elements and should be designed to minimize sky glow.

Signage

General

Signage helps identify places, provide direction, and advertise businesses. Along with communicating that information, signage should be used across the study area to establish a consistent character and reinforce the sense of place.

Roanoke County may want to consider developing a wayfinding signage system that will provide directional information for transportation modes to public facilities, businesses, and points of interest across character districts and especially within the Town Center Core. Directional signage will allow people to identify the Town Center and draw them toward the area. A consistent way-finding design will be important throughout the character districts. This can be regulated in the site development review process which should take into consideration the gateway, area, site/building, and materials/design elements.

Signage helps create sense of place (source: www.imoveisnadisney.com)

Gateway

Gateways serve to announce arrival to the study area. Their main purpose is to create a sense of place and boundary. Gateways not only serve as an introduction to the area itself, but to the style, mood, and branding of the 419 Town Center and the primary visual elements of the streetscape and architecture.

The county can consider encouraging the construction of entry and directional signage to help identify entrance/gateways to the Residential district. These signs should be clearly visible to both pedestrians and automobile traffic.

Area

Public signage can serve to announce arrival into a special destination. This is particularly significant at intersections that serve as gateways to a District or transitions between Districts. Signs and their text should be scaled for legibility by both pedestrian and automobile traffic.

Site and Building

The size, location, and design of site and building signage should relate to the location and character of the building. Monument signage should be placed along the road with the purpose of identifying entry and/or commercial tenants. Primary building-mounted signage is intended to direct vehicular traffic, while secondary building-mounted signage is intended to be smaller in size and provide direction for pedestrians.

Signage should be located so that it reinforces an orientation to the primary street on which the buildings are located.

Materials and Design

Based on the speed of the viewer, sign materials and design may vary from simple to more complex. Signs oriented toward higher speed vehicles should use simple colors and text so that they can be easily understood from a distance.

Pedestrian-oriented signs, or those viewed at slower speeds, may incorporate multiple colors, sign shapes, varying and smaller fonts, as well as images and other design elements. Sign materials and design should be proportional and compatible with building architecture.

Signs with movable text or electronic messaging signs, signs with movable parts, tall mast signage, over-scaled signage, and blinking signs are strongly discouraged.

Roanoke County can encourage partnerships with local artists to develop the design for the wayfinding system.

Public Art

General

Public art and cultural amenities are strongly recommended throughout the study area to establish identity, stimulate public spaces, and celebrate regional history and the local art community. They enrich the physical environment and are an investment in placemaking. Public art and cultural amenities come in many forms - sculptures, paintings, murals, mosaics, pavement treatments, banners, and even landscapes or earthwork.

Roanoke County can encourage developers to contribute to Roanoke's public art through building permit applications or as part of a development review points system (see Implementation). Applications for construction or building improvements for multi-dwelling, mixed-use, or non-residential developments that have a construction value of more than a certain value could be required to contribute a certain percentage of the costs to a public art fund specifically for 419 Town Center study area.

The location of the artwork should be carefully considered. Public art should be located in an area clearly visible and easily accessible to the public. The county should consider implementing a design review process that will evaluate the artwork's design, the location, and the artist's qualifications. The application could also include a maintenance plan along with the final design of the artwork for approval. The location of the artwork should also be identified on the site plan, development plan, and other related documents for the approval process.

Location

Public art should be placed in highly visible locations, such as centers of open spaces, along walkways, at building approaches and entries, and as the terminus to roads and/or viewsheds.

Design Considerations

Any art piece introduced into the public realm should be constructed of durable materials, easily maintained, free of safety hazards, and located to maintain clearances (both vertically and horizontally) with pedestrian walk spaces.

Art installations liven public spaces (source: https://i.pinimg.com)

BUILDING DESIGN

Build-to Lines and Setbacks

Building setbacks should be regulated to reinforce the desired District character and streetwall. Minimal front setbacks are recommended to encourage pedestrian activity along the sidewalk. Building entries that border main streets and public thoroughfares foster vibrant, walkable streetscapes and allow for clear pedestrian access and circulation.

Wider setbacks may be used where necessary for outdoor seating, on-street markets, courtyards, or plazas. In mixed-use or high-density residential areas, minimal side setbacks and/or use of party walls help reinforce pedestrian activity. In less intense areas, larger setbacks may be suitable, especially when residential uses are on the first floor.

Where build-to lines apply, at least 70 percent of the primary building façade and 50 percent of the secondary building facade should be maintained within those limits. The remaining façade may be set back to allow amenities such as outdoor seating, plazas, landscaping, and art.

Outdoor spaces add interest to the streetwall (source: www.bostonmagazine.com)

Lot Coverage

Lot coverage helps control the scale and massing of a building and ensures that a given parcel, and its adjacent parcels, have suitable access to sunlight and air. The maximum lot coverage by a building footprint should not exceed 75 percent of the overall lot area.

Mass, Form, and Scale

Mass

Massing describes the physical form and shape of a building or group of buildings. Massing should be compatible with surrounding buildings to create a streetscape that maintains a consistent scale while allowing unique articulation between and within buildings.

Building location and frontage should generally match that of adjacent structures to create a unified streetscape. However, breaking the established pattern of spacing and building form of a street wall may be used to emphasize a circulation pathway or a transition to a different use.

Front facades should avoid monotonous and plain facades and instead be divided into modular bays with widths of approximately 25 to 50 feet to reflect a small-scale street frontage; variations should incorporate elements to help break down the mass of the façade wall, limit blank walls, and help reduce its apparent scale at the pedestrian level. These elements include recesses and projections of the wall plane; entryways or storefront windows; changes in texture, material, or color; arcades; and balconies. Blank walls on other facades should be avoided by incorporating treatments that use colors, materials, landscape, or openings to create interest.

Form

The ground floor should be defined by architectural features that help to enhance the pedestrian space and provide a comfortable sense of scale, or landscape materials such as street trees and foundation planting. Retail spaces should have a ground-floor entryway fronting the public street and visible to pedestrians, and transparent storefront windows that integrate the interior space with street activity. At least 70 percent of the ground floor façade of retail spaces should be devoted to transparent windows and/or doors. Glass shall be clear to allow a view through to the sales floor for customers to easily see whether the shop is open and to entice shoppers with merchandise.

Site design and form should complement surrounding buildings (source: https://www.realestaterama.com/)

Scale

Variations in height, horizontal divisions, window treatments, and façade materials should be used to create façade articulation and break up the perceived mass of a building, relate it to the scale of a pedestrian, and provide appropriate transitions.

Facade Treatments/Articulation and Composition

Building facades are the interface between the public street and the building interior. The placement and size of the façade elements is critical to the way a building is perceived in its scale and character. In general, the larger the expanse of blank wall on a building, the larger the structure appears to be to the pedestrian on the street, thus limiting the desirability to walk along these blocks.

Façade articulation adds interest and scale (source: https://i.pinimg.com)

At the scale of an entire block, building widths, recesses, and storefronts should generally be uniformly spaced and scaled to create visual unity in the street wall. At the scale of a building façade, form and aesthetics should be established through the repetition of elements such as windows, columns, recesses and projections, color, and materials.

Building facades may be vertically articulated to identify a base, body, and a top. The floor-to-ceiling height of the ground floor should be greater than that of upper floors to accommodate retail space where permitted. Upper stories may be slightly set back from the ground floor and treated with different materials and colors to reinforce the contrast with the base of the building. A single, unarticulated building mass should be avoided. The middle portion of a building should have evenly spaced bays of windows, reflecting either a residential or office use. The top of a building may be defined by roof form, eaves, and cornices.

Character and Materials

All buildings should be constructed or clad with materials that are durable, economically maintained, and of a quality that will retain their appearance over time. Variations in materials and colors are important for creating a vibrant and interesting streetscape. All sides of a building visible from the public street should have a consistency in architectural detail and character.

Colors should be skillfully used to complement building architecture and contribute to the façade articulation along the street wall. Entryways, openings, roof trim, and other architectural details should be highlighted with a change in texture and color. Colors should be compatible with other buildings in the area. Color and texture for architectural finishes should be selected to provide visual unity.

Entry Locations

Building entries that border main streets and other urban streets help to create vibrant, walkable streetscapes and provide clear pedestrian access and circulation. The primary building entrance should be oriented toward the principal pedestrian accessway, typically the public sidewalk or an interior sidewalk where the majority of pedestrian traffic is expected to be coming from within the site. Additional entrances should be oriented towards on-site parking or outdoor gathering areas.

Building entries should be easily identified and accessed from pedestrian walkways (source: https://bdcnetwork.s3.amazonaws.com)

Vertical Step-Backs

Buildings exceeding 35 feet in height in Mixed-Use Districts should maintain no more than three floors without horizontal moderation in the vertical surface plane to reduce the perception of building mass from the street and allow sunlight into the public realm. A step-back should be provided above the third floor, which may serve as a balcony or outdoor living space for residential or office uses. The step-back should occur on the building side facing the primary street but may also be added on building sides facing residential neighborhoods. The step-back should be between 8 feet and 12 feet in depth from building face to building face.

Vertical step-backs reduce the perception of building mass (source: https:cdnassets.hw.net)

Rooftop Details

Roofline ridges and parapets should not run unbroken for more than 75 feet. Roof-mounted utility and communication equipment shall be screened from view by structural features that are an integral part of the building's architectural design.

Where practical, rooftops are encouraged to accommodate usable outdoor space, including sun decks, seating areas, roof gardens, outdoor cafes, grilling areas, or recreation areas.

Rooftops can be used for a variety of activities (source: https://i.pinimg.co

Green/Sustainable Design

Green building techniques and renewable energy infrastructure should be incorporated into both site and building design to encourage the efficient use of energy, water, waste reduction, and construction materials.

Green building elements can be integrated into all areas of site design (source: www.craftontull.com)

PUBLIC REALM

Context Zones

General

Successful public realm design provides efficient movement for pedestrians, bicyclists, and vehicles. Street function and appearance, balanced with the design of the built environment, creates a pleasant and safe experience for travelers, residents, and business owners. An interconnected street network disperses vehicle traffic, allowing for narrower streets and a more comfortable pedestrian environment. In general, the design of the public realm can help to define and enhance the overall character of the study area.

An active public realm encourages pedestrian activity (source: www.designworkshop.com)

The public realm adjacent to building frontages is the primary area of occupation by the pedestrian and, as such, has significant power to shape the walking experience. It should provide a comfortable, attractive, and maintainable environment that encourages pedestrian use, reinforces movement and activity, and promotes coordination and access with private sector investments.

Frontage conditions are key to establishing the mixed-use and walkable character envisioned in the *419 Town Center Plan*. Context zones will vary by District, street type, pedestrian activity level, and the speed and volume of traffic. The public realm is shown in Figures 7 – 9 and described in more detail below. The cross-sections shown provide general configurations and minimum dimensions for streetscape elements; however, these elements will vary depending on street type, location, and purpose.

Although the Thoroughfare Frontage Street Design (see Figure 9) indicates that the shown cross-section does not apply to Route 419, it should be noted that potential changes to Route 419 west of Starkey Road have been discussed by the County. These enhancements could potentially include a cross-section with two travel lanes each direction and a buffered bike lane, with a landscaped strip separating sidewalks from the roadway.

Building Frontage Zone

The building frontage zone is the space directly adjacent to buildings, often located within the building setback. This area affects how buildings relate to both pedestrians and motorists. When this zone is small, pedestrians interact with the buildings more easily. Buildings that are closer to the sidewalk are easier to enter. Windows close to the sidewalk invite pedestrians to look in. This zone can include space for street activities like café tables, sidewalk sales, and other extensions of building activity. These activities should be kept within the building frontage zone and should not encroach on the space for the pedestrian through zone. The building frontage zone may also be a landscaped area that provides a separation between the sidewalk and the entrance area to the building.

Pedestrian Through Zone

The pedestrian through zone is the space where pedestrians walk. It is one of the most important elements contributing to an active and vibrant streetscape and should be free of obstacles and accessible to all users. Promoting a walkable environment requires safe and connected sidewalks that unite the pedestrian with their desired destination or activity.

Furnishing Zone

The furnishing zone acts as a buffer between moving traffic and pedestrians on the sidewalk. It includes a planting strip for street trees or has trees in grates. It may also contain street furniture, bicycle racks, utilities, wayfinding, and other elements. The design and location of furniture should be visually coordinated and support its function; often, street furniture can be consolidated in high use areas to keep them from being obstacles for pedestrians. Street trees should be aligned with breaks in on-street parking or delineations of spaces to avoid conflicts with vehicle loading and unloading.

Curb Zone

The curb zone provides a clear distance from the back of curb to streetscape elements to avoid conflicts with vehicle doors and mirrors.

Roadway Zone

The roadway zone is the space between curb lines (or edges of asphalt pavement). It includes the vehicle travel lanes, bus lanes, bike lanes, on-street parking spaces, and medians.

Corner clear zones provide pedestrian visibility (source: https://rdgusa.com)

Intersection Zones

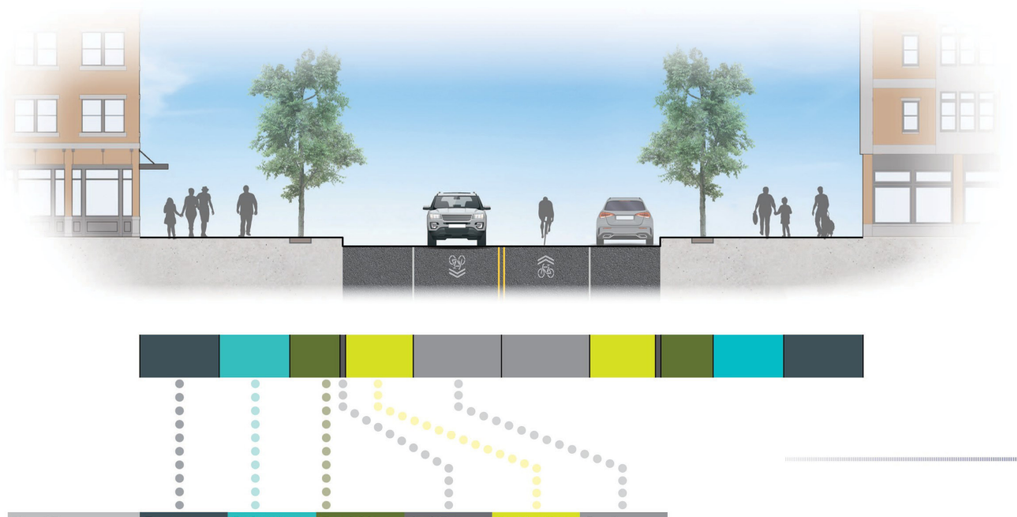
Corner Clear Zone: This intersection zone is an obstruction-free space between the curb and the lines created by extending the inside sidewalk line to the curb face. Priority use of this zone shall be for curb ramps, accessible pedestrian signals, and other pedestrian call buttons. Corner clear zones accommodate the higher pedestrian volumes that congregate at intersections and provide safe viewing sightlines for both pedestrians and motorists.

Corner Public Use Zone: This zone is the portion of the furnishings zone immediately adjacent to the corner clear zone generally designed for public utilities and signs, including fire hydrants, traffic signals, streetlights, and service cabinets.

Figure 7. Street Design for Mixed Use and Town Center Frontages

STREET DESIGN: MIXED USE AND TOWN CENTER FRONTAGE

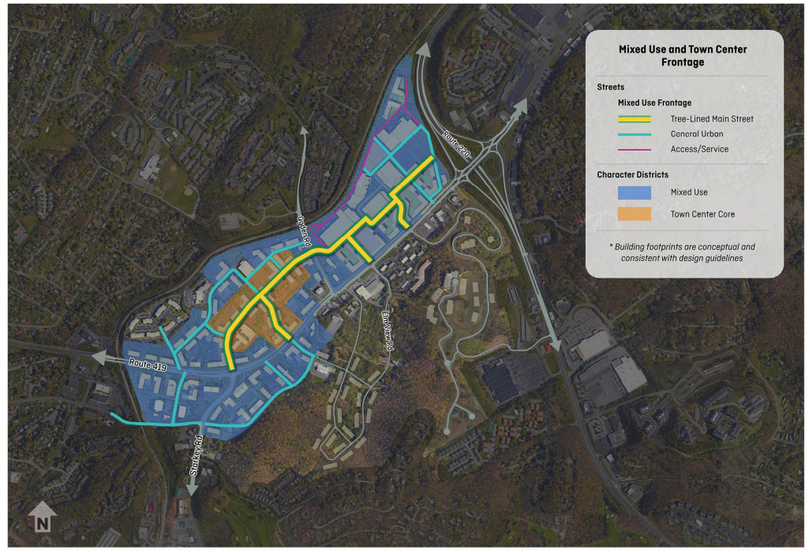
Mixed Use and Town Center Frontage



Street Type	Frontage Zone	Pedestrian Zone	Furnishings Zone	Curb Zone	Parking Zone	Roadway Zone (lane)
Main Street	3.0	8.0	7.0	2.0	8.0	11.0
General Urban	3.0	6.0	6.0	1.5	8.0	11.0
Access/Service	0	5.0	5.0	1.0	0	10.0

Dimensions shown are minimums and may be increased during site design.

Where should this cross-section be applied?



The mixed-use frontage encompasses three street types - Main Street, General Urban, and Access/Service. These are placemaking streets that prioritize pedestrian comfort and safety and where vehicular speeds should be less than 30 MPH. They serve the Mixed Use and Town Center Core development types.

These streets should have buildings that front the sidewalk with ground floor uses that create activity throughout the day and into the evening. A furnishing zone with plantings should create a buffer to vehicular traffic in the roadway zone. Main Street provides the most ample space for pedestrians while General Urban and Access/Service have slightly more narrow pedestrian zones reflecting lesser intensities of development along these streets. Starkey Road north of Route 419 is intended to be the primary placemaking street, and therefore is labeled as a "Main Street."

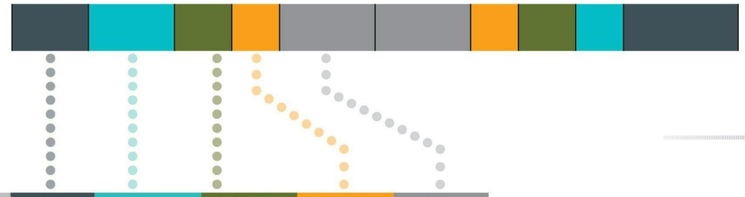
Existing Conditions | Starkey Road between Route 419 and Ogden Road

Precedents

Figure 8. Street Design for Multimodal Thoroughfare Frontages

STREET DESIGN: MULTIMODAL THOROUGHFARE FRONTAGE

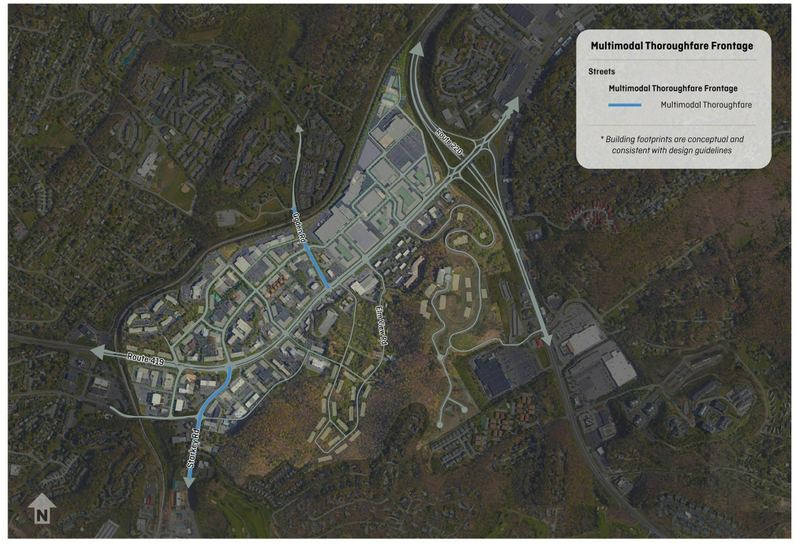
Multimodal Thoroughfare Frontage



Street Type	Setback Zone	Shared Use Path/Sidewalk	Landscape Zone	Bike Lane	Roadway Zone (lane)
Ogden Road	10.0	8.0/5.0	5.0	5.0	11.0
Starkey Road	5.0	8.0/5.0	2.0	5.0	12.0

Dimensions shown are minimums and may be increased during site design.

Where should this cross-section be applied?



The multimodal thoroughfare frontage applies to two key streets that provide access to adjacent neighborhoods - Ogden Road and Starkey Road (south of Route 419 only). These should be "complete streets" that accommodate all users and where vehicle speeds are 35 MPH or less.

These streets are intended to have a parallel shared-use path or sidewalk that connects the area into the region's trail system. The street design supports the goals of "complete streets" policies, providing space for all users. The sidewalk and shared use paths are protected from the roadway zone by a landscape zone. The roadway zone also includes bicycle lanes for bicyclists who are faster and more comfortable riding in close proximity to vehicles. The cross section does not apply to Route 419.

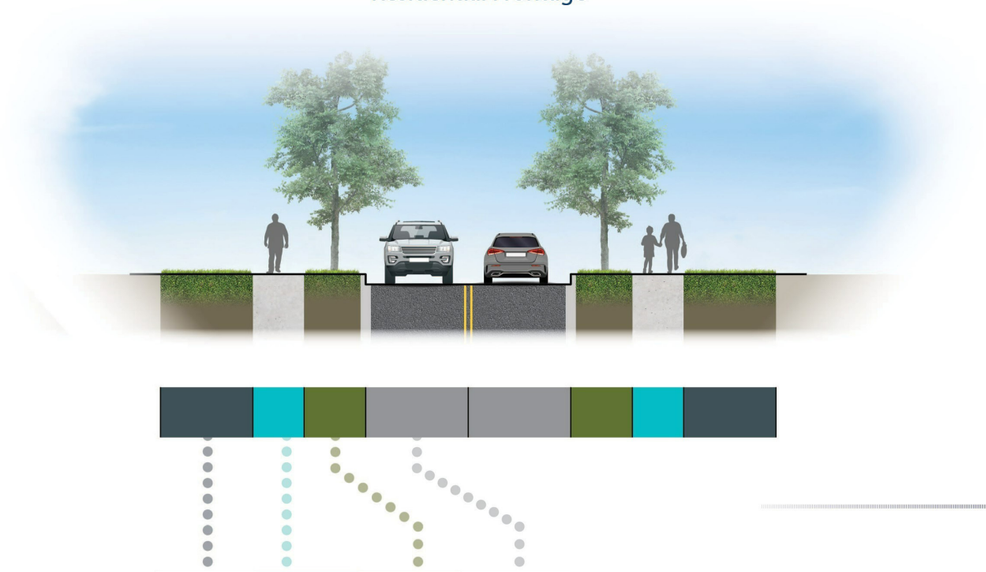
Existing Conditions | Ogden Road Looking North

Precedents

Figure 9. Street Design for Residential Frontages

STREET DESIGN: RESIDENTIAL FRONTAGE

Residential Frontage



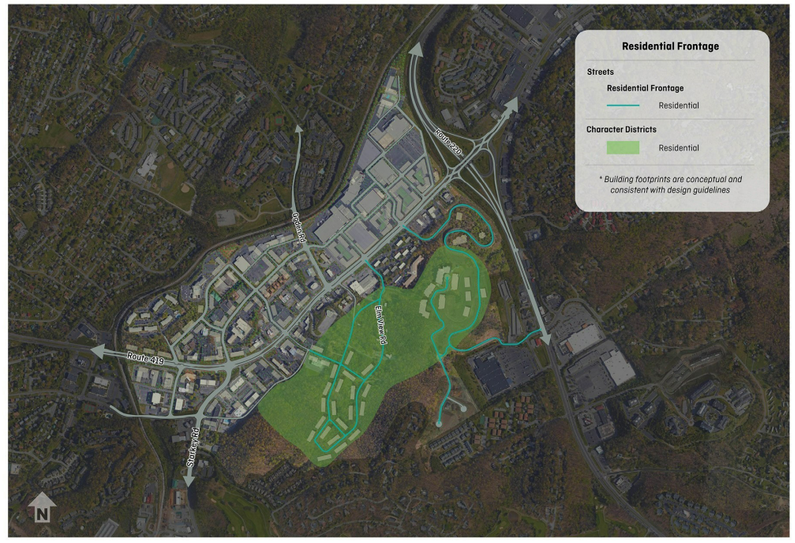
Street Type	Setback Zone	Sidewalk	Landscape Zone	Roadway Zone (lane)
All	10.0	5.0	5.0	11.0

Dimensions shown are minimums and may be increased during site design.

The residential frontage applies to streets that serve single-use residential areas, primarily south of Route 419. These streets provide access to and from residential areas for all modes. Vehicular speeds should be 25 MPH or less. Sidewalks ideally are provided on both sides of the street. However, a sidewalk on only one side of the street is acceptable where topography makes it difficult or infeasible to build sidewalks on both sides. A landscaping zone provides shade and protection for pedestrians. Traffic calming ensures low vehicular traffic speeds.

Existing Conditions | Elm View Road

Where should this cross-section be applied?



Precedents

Open Spaces

General

Open space is a broad classification for public spaces. Carefully planned open space is necessary for the richness of mixed-use development and the vitality of the public realm. The scale, enclosure, and density of the surrounding urban environment determine the appropriate type of open space - areas designed as outdoor rooms that can be used for play, recreation, social interaction, and/or cultural activities.

Types

Plaza: The most formal public space, a plaza is generally less than half the size of a block and often located at the intersection of important thoroughfares. It is devoted to civic uses and commercial activity and surrounded by buildings on most sides. Its landscape is composed primarily of durable pavement and formally planted trees. Features such as fountains, statues, and other vertical elements help mark the civic prominence of the plaza. These features are most successful when planned in accordance with a strong visual axis, allowing the plaza to be seen from a distance.

Urban Park: An urban park may occupy a full urban block. Its landscape consists of lawns, paved walks, and shade trees. Formal fountains and public art are often incorporated. Landscape elements can help to organize the park into a series of smaller spaces that offer diverse qualities and uses. Urban parks may be surrounded by civic buildings or residential uses. Urban parks provide an excellent terminus for greenways and bicycle routes originating outside the area. In most cases, it is appropriate to frame the park with a visual axis.

Pocket Park: A pocket park is a small park that often occupies an undeveloped space between buildings. Typically, no longer than one hundred feet of frontage, pocket parks provide vegetation, shade, and open space within commercial or mixed-use areas. Due to their small scale, pocket parks predominantly serve immediately adjacent buildings. These small, informal breaks in the urban fabric provide alternatives to more prominent civic spaces.

Neighborhood Park: A neighborhood park is an open public space serving a residential area. The space may be used for either (or both) passive and active recreation. Neighborhood parks provide a safe open area free from moving traffic for children and other neighborhood residents. They may be bound by residences or small-scale institutional or civic buildings to form a common green. Where possible, they should be tied into trail networks.

Location

Public spaces should be located in visually prominent, accessible, and safe locations that promote year-round activity in both day and evening hours. Scattered green features that do not relate to each other or create connections within the public realm should be avoided.

Design Considerations

Well-shaped public spaces help create meaningful places for people to gather and contribute to an inviting pedestrian environment that connects different Districts within the study area. Design elements to consider while creating open spaces includes:

- Design open space to maximize circulation opportunities between adjacent uses and/or areas.
- Where possible, open spaces should be designed to take advantage of prevailing breezes in the summer and sun in the winter. Provide filtered shade by using deciduous trees that reduce temperatures in summer and allow sun in winter.
- Open spaces are the places where people gather to relax and socialize. The most important element in encouraging use is through seating. Provide a variety of seating locations in both shaded and sunny areas that accommodates the needs of various users. Place seating where sitters can watch passersby. At least half of seating options should be secondary, in the form of steps, planter seats, retaining walls, grass mounds, or other site features.

Open spaces can provide recreation for children and families (Source: https://cityviking.com/)

Open spaces can host community events (https://www.visitroanokeva.com/)

Open spaces provide areas for social gathering (source: https://i.pinimg.com)

IMPLEMENTATION

Context

These design guidelines provide a framework to ensure that the implementation of projects within the study area will be of a high design quality and character. Ultimately, they are about helping provide consistency and preserving investments. These guidelines are not intended to supplant existing policies and procedures regarding planning and development, but instead to provide additional guidance and flexibility to help both public and private projects achieve the vision of the *419 Town Center Plan*.

Phasing

Depending on market conditions, development and/or redevelopment may occur in multiple Districts at the same time. Independent projects should be designed and built to ensure that, at completion, there are no unsafe or unsightly temporary conditions and that pedestrian connections to and through the project are maintained and/or restored, and functionality of vehicle access and circulation is maintained.

Public Realm Design

Figures 7-9 illustrate typical cross-sections to achieve the public realm associated with each District for the desired character and land uses. However, some existing streets may not fit these templates; in those cases, easements beyond the limits of existing rights-of-way may be required to achieve the desired design elements.

Mall Retrofit

Tanglewood Mall may, over time, be redeveloped with mixed-use development and outdoor public spaces. Key design elements that should be considered during this conversion include:

- Place new mixed-use buildings on corners and along street edges to hide parking lots and create a well-defined public realm.
- Convert primary parking aisles into internal streets to better balance the needs of pedestrians, bicyclists, and motorists.
- Maintain a walkable block size (no more than 500 feet).
- Connect adjacent parking lots to avoid unnecessary curb cuts.
- Prioritize entrances from Route 419 to reduce excess turning movements and reduce curb cuts.

Private Sector Participation

The strategies listed below are intended to encourage and facilitate the creation of high quality private development and investment in the study area through implementation of the design guidelines:

Outreach to developers and lenders

Sharing these design guidelines with the development community can provide benefits in two ways. First, the guidelines help create policy transparency by clearly laying out County expectations for the overall development character and form that is desired for projects in the study area. This helps developers and their lenders know what will be expected of them as they begin projects and allows them to plan for these expectations ahead of time. Second, the guidelines can help investors in a project understand that there is a community vision and commitment to quality building so that future development can protect prior investments made in the study area by ensuring a consistent design character.

Educating Potential Developers

The type of mixed-use development shown on the *419 Town Center Plan* is often a fairly new concept, and some developers may be unfamiliar with the specific details of these design concepts. It will likely be necessary to promote these concepts with developers to familiarize them on the opportunities they represent and the differences with traditional suburban development practices. The illustrations and narrative in the *419 Town Center Plan* will be useful in introducing these concepts and telling the story of these development opportunities.

Public Sector Participation

The strategies listed below include some of the ways that the public sector can incorporate the intent of the design guidelines into public projects and policies:

Modifying Policy

Existing regulatory policy may contain requirements that unintentionally present barriers to the development form proposed for the study area, such as excessive setbacks, separation of individual land uses, or overparking. The design guidelines can be used as a basis for reviewing and updating current development codes and standards to make sure policies are aligned with the intent of the *419 Town Center Plan*.

Aiding Development Review

The design guidelines can be shared with developers or applicants at the pre-application stage of a project so that the design intent of the *419 Town Center Plan* is clearly expressed up front. Subsequently, they should be used as a resource by County staff in reviewing development projects to ensure that the design character and details of the project have carried that intent forward.

Supporting Public/Private Improvement Projects

The guidelines can be used to support public/private initiatives by providing a unifying framework for the quality and design character of improvements in these projects and informing the overall site planning, building design, and siting of improvements to ensure a harmonious character of individual projects within the study area.

Providing Funding Opportunities and Capital Investments

Funding improvements in the study area will likely require multiple revenue sources and planning for different work programs within multiple time periods. By having the Framework Plan available as a resource, it may allow the County to piggyback projects or take advantage of unexpected opportunities that arise over time.

County investment in the 419 Town Center study area will be crucial to its success. Public streets with wide right of ways currently dedicated to vehicles that can be reallocated to the pedestrian realm should be an early priority. Starkey Road between Route 419 and Ogden Road is an early opportunity to implement the intention of the *419 Town Center Plan*. Rebuilding this segment of road as a complete street that is prepared to accommodate the type of walkable future development envisioned in the *419 Town Center Plan* will demonstrate the County's commitment to the area. Future opportunities to site County facilities – such as administrative offices, libraries, structured parking facilities, and public parks – are also key investments that will support redevelopment.

Zoning and Policy Considerations & Recommendations

There are three general approaches to codifying a set of design guidelines, particularly when those guidelines are intended to apply to a limited zoning district and/or geographic area. Each method has unique benefits and limitations that impact the approach the County and developers must take in order to develop properties. Those general approaches are implementation of overlay districts, development review standards, and adoption of policies that encourage more by-right development.

Overlay Districts

Use of overlay districts is a regulatory tool that creates a special zoning district that is placed "over" an existing base zone. This overlying zone identifies special provisions in addition to those in the underlying base zone. This strategy is most commonly used when there are specific needs in certain areas that require additional regulation that would not apply to the same uses elsewhere. Overlay zones based on floodplain proximity or topography are common and they don't change the uses that are allowed but they may change how those uses are developed. Overlay zones, however, also allow jurisdictions to add additional regulations to base zones that are based more on character or neighborhood-specific goals. Regulations that may be included in this type of overlay could relate to lighting, signage, or parking, for example.

Roanoke County has employed overlay districts in the past. A majority of the overlay districts are based on practical needs, such as the Airport Overlay District (AO) and the Floodplain Overlay District (FO). However, there is a character-based overlay district for Clearbrook Village (the CVOD district). However, based on conversations with County staff, the Planning Commission, and the Board of Supervisors, there is little appetite for using overlay districts to implement the *419 Town Center Plan*.

Planned Development/Development Review

One strategy for implementation is the creation of a specialized planned development process for all development within the 419 Town Center study area boundaries. This would require every development with the district to go through a specific planning review. This would also require the establishment of new zoning districts that require that additional review to ensure it is limited to the 419 Town Center study area. While this would introduce an additional administrative burden on Roanoke County, it has the benefit of providing the County some regulatory control over elements that are not required elsewhere in the County without the need of an overlay district. It would also provide an opportunity for the County to offer developers some flexibility in how they approve the development because they can use the additional level of review to introduce some type of scoring or points system for development. In essence, a developer can provide certain desired elements that are not explicitly required by code in exchange for modifications to other regulations.

The incentives will make a significant difference in how a program like this would work. The goal is to ensure that there is a continuum of possibilities in how new developments are designed. There are the regulatory requirements which meet the minimum goals of the district and the resulting development will be consistent with the goals of the *419 Town Center Plan*. However, the desired outcome is to encourage developers to go beyond the regulatory requirements. For this reason, the incentives need to be carefully thought out and balanced with the district goals. Further, there needs to be some equivalence between the exemptions or exceptions being requested and the additional steps being taken by the developer.

One method of implementing a review system like this is to "score" developments based on certain factors. When a development proposal comes in, the project is automatically scored based on adherence to the regulations and then rewarded additional points for certain elements of the proposal that may go above and beyond the minimum regulations. Developments that score over a certain value can be approved administratively without additional input from the Planning Commission. Developments with scores that fall under that threshold would be required to go to Planning Commission to ensure that there is some consistency between what is being asked for (incentive program usage, modification to the requirements) and what is being included with the proposal.

By-Right

A third option for implementation is to establish new zoning districts where a majority of the development that is desired is allowed by-right. This would certainly make the new zoning districts more appealing for developers as it introduces far more flexibility in the process of design and site development. This approach can be applied to uses, setbacks, heights, and any other characteristics of development; further, certain elements can be receive by-right treatment in favor of additional regulations in other areas. Streamlining the zoning, however, makes it difficult to administer multiple goals and provides little opportunity for phasing or other tiered or stepped approaches.

ROANOKE COUNTY VA