

# North Main Street: A Strategy for Redevelopment



Blacksburg, Virginia

January 2020

**WHITE PAPER**

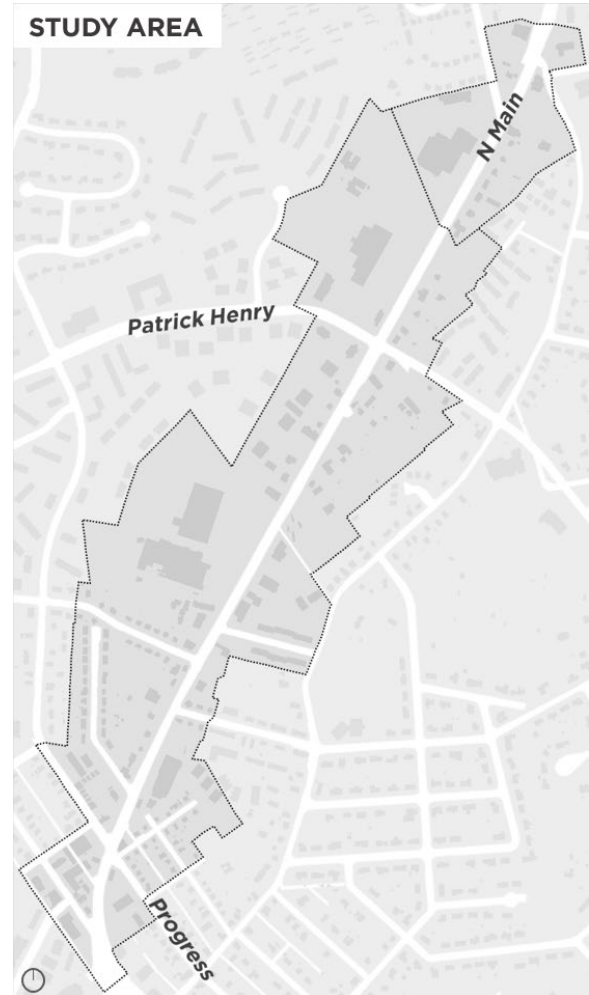
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## INTRODUCTION

Develop Strategies was tasked by the Town to evaluate the North Main corridor from the edge of downtown to the commercial area at Giles Road. In September of 2019, a team from Development Strategies traveled to Blacksburg, Virginia to develop preliminary placemaking concepts and market strategies for North Main Street. This particular corridor is not thriving like the rest of the Town, partly due to the small-scale unplanned development that occurred in the past as the Town grew and modest single-family homes along the street were replaced with various types of commercial uses. Ultimately, the Town would like North Main Street to be an attractive walkable corridor, which will require a complete transformation of the roadway itself and the properties that flank it. Achieving this vision will require more active planning and involvement on behalf of the Town and a shift in mindset to focus on moving people, not *just* cars.

Over the course of the three-day work session, Development Strategies toured the corridor, met with several key stakeholders and staff, and worked as team to provide initial guidance on a potential road diet, development feasibility, catalyst sites, and public policies that will help North Main Street reach its full potential. These efforts culminated in a presentation to a core group of staff members, and ultimately, this report. This document summarizes the challenges and opportunities involved in the redevelopment of North Main Street and identifies a path forward that will enable a vibrant mixed-use pedestrian- and bicycle-friendly corridor.



## PROBLEM STATEMENT

### Lack of a cohesive vision, identity, and brand

The community is unsatisfied with the current state of North Main Street, however no clear consensus for the future of the corridor has emerged. **To effect change, the public and private sectors need to be aligned and headed in the same direction.** However, the inertia of the current uses, requirements of the underlying commercial zoning, and elements of the proposed new developments all pull in opposite directions, leaving no one satisfied and preventing progress. **A unifying vision for North Main Street is the critical first step towards transforming the corridor, enabling the Town to move forward.**

### Street and buildings need to be in sync

**In its current form, North Main Street is completely car-centric and devoid of landscaping.** With four wide lanes, narrow sidewalks, and fast vehicular speeds, it feels like a suburban thoroughfare. Along a street such as this, one may expect to see retail strip centers and big box stores tucked behind large parking lots. And yet, those types of uses have no future along this corridor and are antithetical to the walkable street that the community desires. To help promote a more urban, pedestrian-friendly environment, the Town has required new buildings to be sited close to street. However, **without any corresponding changes to the roadway, this has created an odd mismatch of environments—a road which is completely hostile to pedestrians, and buildings that are being placed as if they were part of a walkable corridor.** The street and the buildings need to be in sync, or the desired results will not be achieved.

### Economic and political tension between student and non-student housing

**Blacksburg's economy and way of life is tied to Virginia Tech, but the pressure of accommodating such a large student population has created tension within the community.** In response to the growth occurring at Virginia Tech, the Town has approved thousands of new beds of student housing. Even so, the demand for this product continues to have a significant effect on the local market. Students can pay top dollar for existing housing, pricing out many full-time residents, and student housing developers can pay high prices for land, edging out other products that serve different market segments. **This situation has put the community in a very difficult position as it struggles to provide adequate housing to attract and retain young professionals and families.** While student housing projects are able to finance difficult redevelopment projects that may not occur otherwise, the Town has made it clear that student housing isn't appropriate everywhere in the community. Blacksburg clarified its official stance in Resolution 2-F-19, which seeks to strike a balance between accommodating some additional student housing and protecting existing residential neighborhoods and preserving commercial corridors for other product types.

## GOALS STATEMENT

Blacksburg hopes to see North Main Street redevelop into a **vibrant, walkable, bikeable, and transit friendly corridor lined with high-quality development.** North Main Street is seen as a **key opportunity to provide non-student housing along with a diverse mix of retail, dining, entertainment, services, and employment opportunities.** With improvements, this corridor can become a compelling place that attracts residents, employees, and shoppers, and allows the Town to grow from within.

# KEY ELEMENTS FOR IMPROVEMENT

This section of the report highlights five key elements where improvements are needed in order to allow North Main Street to reach its full potential. For each topic, existing conditions and background information are discussed, followed by the recommendations specific to the corridor.

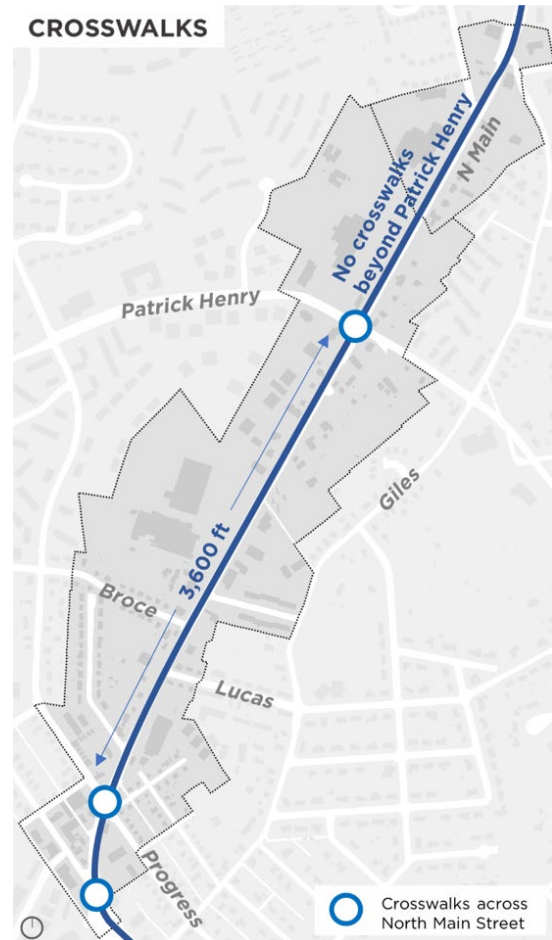
## STREET DESIGN

### Existing Conditions/Issues

As currently designed, North Main Street primarily serves as a vehicular conduit between the core of Blacksburg and areas to the north. It has four full lanes of traffic and relatively narrow sidewalks that directly abut the curb. Along the approximately 1.2-mile length of the study corridor, there are only two signalized intersections, reinforcing the freeway-like feel of the roadway and leaving few opportunities for pedestrians and cyclists to cross the road safely. The posted speed within the study area is generally 35 miles per hour, however traffic appears to be traveling at significantly higher speeds.

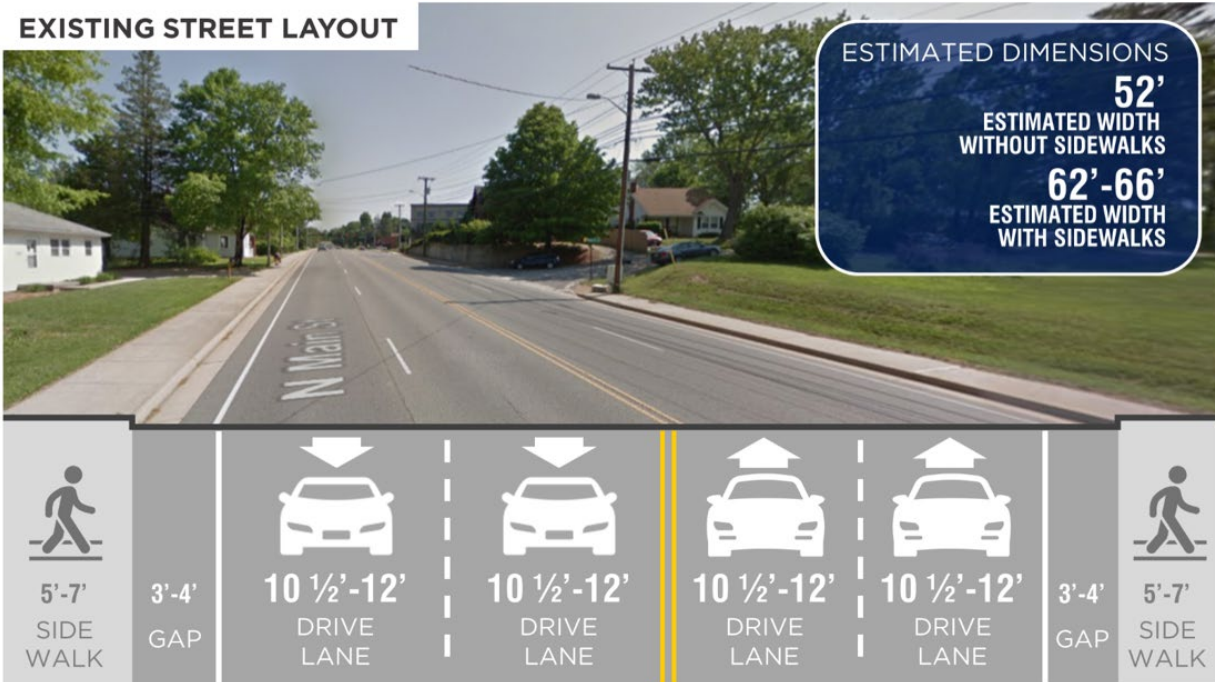
In spite of the poor physical environment, a brief visit to the corridor revealed quite a bit of bicycle and pedestrian activity, some of which raised safety concerns. Cyclists were riding on the sidewalk and in the narrow gutter area of the road adjacent to fast moving cars due to lack of facilities, sometimes without even minimal safety equipment like helmets. Pedestrians were utilizing the sidewalks and some waited at bus stops that offer no shelter or seating. Due to the lack of marked crosswalks or other types of facilities, pedestrians are exhibiting risky behaviors such as dashing across the busy street, creating dangerous situations that could possibly result in serious injury or death.

As a whole, the street design works against the community’s goals for the corridor. It discourages bicycling and walking and is not conducive to the commercial uses required by zoning, nor the non-student housing that has considerable market and political support within the community. The Town needs to explore both temporary and long-term changes to the road that will enable the surrounding properties to reach their full potential.



Non-motorized user of North Main Street

## EXISTING STREET LAYOUT



\*Dimensions are approximated and have not been verified in the field

## Background

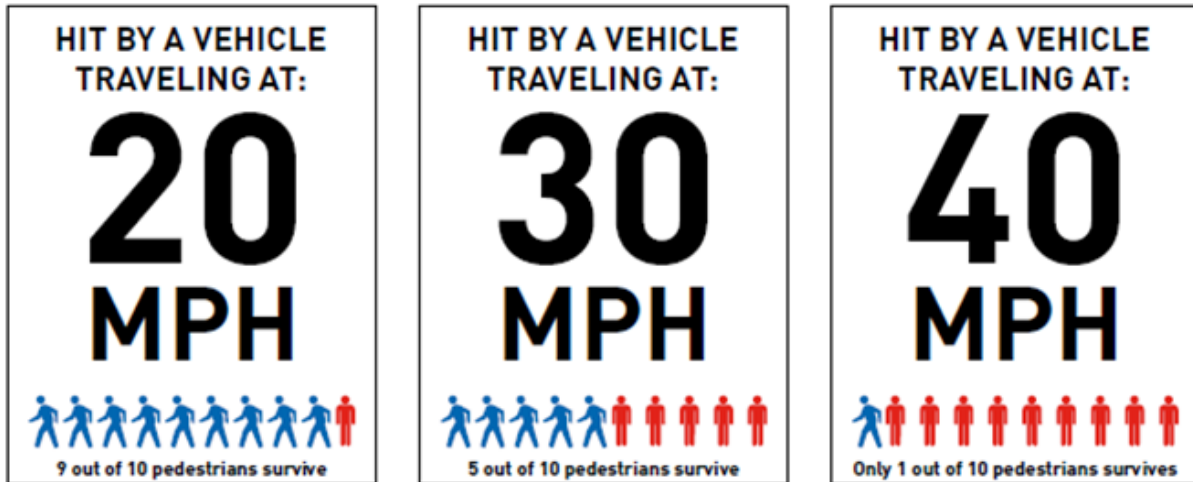
### Safety

Numerous studies have shown that drivers respond subconsciously to the design of the roadway itself and the built environment that surrounds it. Meaning, the posted speed limit will not slow most people down significantly if the road “feels” fast. For example, a 2017 study shows that wider roads with painted lines prompted drivers to judge the appropriate speed at 50 mph.<sup>1</sup> Narrower lanes, on-street parking, street trees, pedestrian/bicycle facilities, and landscaping are known to have the opposite effect, making drivers somewhat more uncomfortable, leading to slower speeds and increased vigilance.

Lowering vehicular speed is a worthy goal, for many reasons, one of which is safety. According to the US National Highway Traffic Safety Administration (NHTSA), speed has been a factor in about one-third of the nation’s motor vehicle fatalities over the past 20 years.<sup>2</sup> While low-level speeding may seem inconsequential on its face, it has serious repercussions for other road users. When an accident between a pedestrian and a vehicle does occur, the risk to the pedestrian increases exponentially with speed. At 20 miles per hour, 90% of pedestrians will survive in a collision. At 30 miles per hour, that number decreases to 50% and at 40 miles per hour, only 10% are likely to survive such an event. With a posted speed limit of 35, and observed speeds well above that, North Main Street is a hazard to those who use it.

<sup>1</sup> *Accident Analysis & Prevention*, Vol. 108, 2017

<sup>2</sup> <https://www.apa.org/monitor/2018/04/curbing-speed>



*Speed is especially lethal for vulnerable users like pedestrians and people biking. The risk of injury and death increases as speed increases.*

*Image source: Seattle Department of Transportation*

### *Marketability*

Streets with lower traffic speeds that are more inviting for walkers and cyclists also lead to greater marketability for properties along the corridor. Walkable shopping districts exhibit higher spending—in at least one example, up to four times greater—than strip shopping centers.<sup>3</sup> Tamed traffic and improved walkability will also increase the desirability of the street for residential products, which will ultimately be needed as there is not enough commercial demand now, or in the future, to fill the corridor with the type of small-scale commercial users that can be accommodated on parcels along North Main. These residential users will expect a relatively quiet, aesthetically pleasing street with trees and nearby commercial amenities. By slowing traffic and reallocating the existing right-of-way to prioritize people over cars, North Main Street can strengthen commercial opportunities and attract other complementary marketable uses that will facilitate redevelopment of the corridor.

### *Types of Facilities*

There are a wide variety of bicycle facility types that can be utilized, depending on road conditions. Generally speaking, greater separation between cars and bicycles comes at a higher cost, but tends to be more effective. The most basic type of bicycle facility is a sharrows, which is often used in low-speed conditions where there is not room for a separate bicycle lane, requiring bicycles and cars to share space on the road. Consisting of only paint and signs, these facilities are low cost, but have limited effect, particularly on busy roads where most cyclists would not feel comfortable riding. An intermediate facility is a bike lane, an area delineated with paint that is dedicated for cyclists, which depending on width, may still place cyclists too close to passing cars. While “vehicular cyclists” will ride on any road with little or no accommodation, a majority of casual riders prefer facilities that provide physical separation from moving vehicles. Within this category of facilities, there are a variety of options to consider, some of which are shown on the following page.

<sup>3</sup> [https://hria.org/wp-content/uploads/2017/01/TechReport\\_131209.pdf](https://hria.org/wp-content/uploads/2017/01/TechReport_131209.pdf)



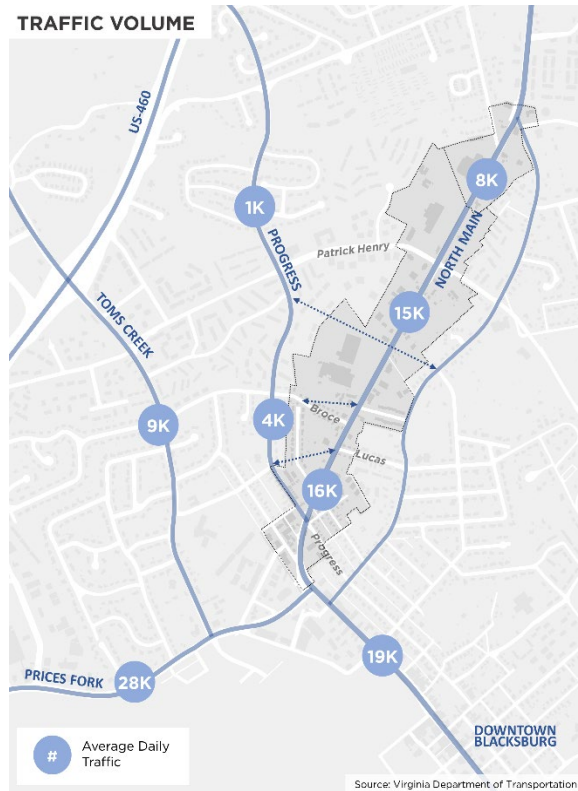
Examples of bicycle facilities of varying degrees of complexity and expense.

## Strategy

In considering a redesign of North Main Street, the Town must plan to accommodate cyclists and pedestrians along the street, as well as across it. The Town should explore the possibility of separated bicycle facilities such as two-way cycle tracks and protected bike lanes. These options can be tested or implemented at a variety of levels—tactical intervention efforts involving paint and temporary barriers, simple designs involving bollards and paint, or high-quality facilities like the Cultural Trail in Indianapolis. Safe and ample opportunities for crossing the street will also be needed to create a truly walkable and bikeable area.

### Road Diet

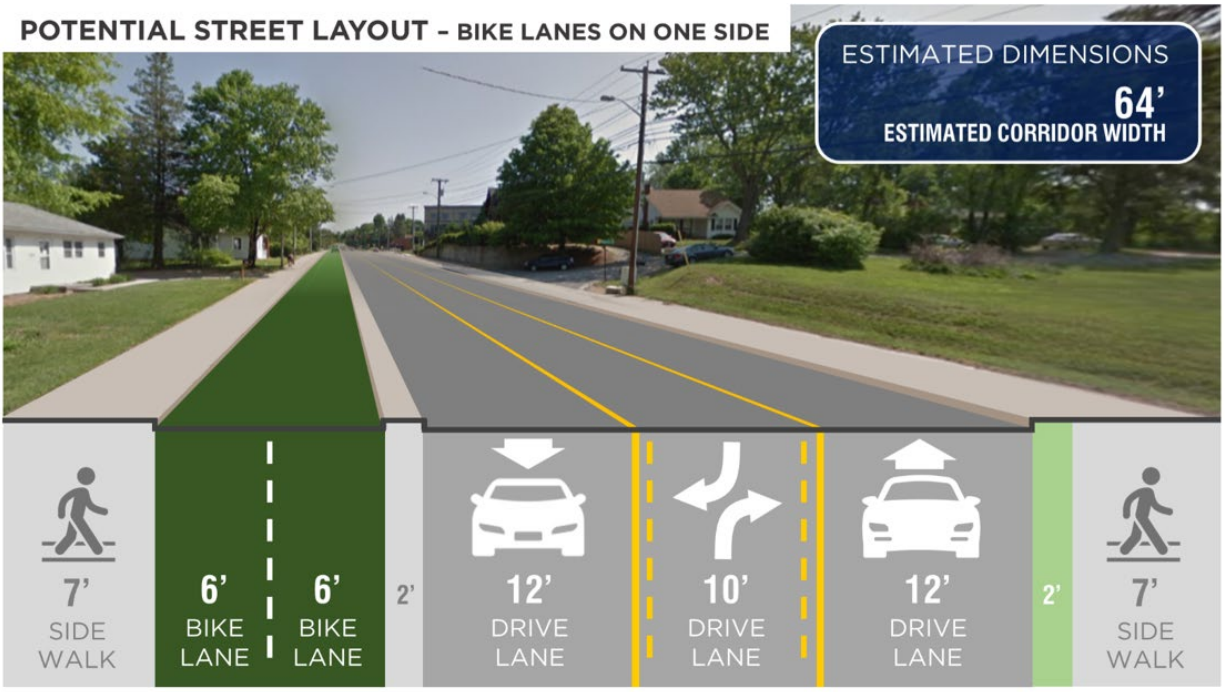
In order to provide better accommodations for pedestrians and cyclists, the existing right-of-way needs to be prioritized to meet their needs, while maintaining access for automobiles, a strategy



often known as a road diet. As a general rule of thumb, streets with average daily traffic counts under 20,000 can be reduced to two opposing lanes of traffic with a center turn lane. At its busiest point, North Main Street has approximately 16,000 trips per day, less than downtown, and well below the recommended threshold where road diets can be successfully implemented.

The extra space no longer being used by vehicles can be repurposed to provide wider sidewalks and/or dedicated bicycle facilities. At a width of approximately 60 to 65 feet, there is plenty of right-of-way to successfully accommodate multiple modes. These new bike/ped facilities will benefit greatly from efforts to consolidate entrances/curb cuts onto North Main Street, thereby reducing the number of conflict points with vehicular turning movements. The Town may also want to consider restricting vehicle turning movements by converting the center turn lane into a planted median in strategic locations, a design which provides significant safety benefits.

Two potential street cross sections are shown on the following page. Each takes advantage of the extra roadway width created by the road diet to include wider sidewalks and separated bicycle facilities. Consideration was also given to incorporating shared bike/bus lanes, however, this roadway configuration requires the continuation of four full lanes of traffic (two for bus/bikes and two for cars) and therefore was not considered a viable alternative if the community hopes to improve the marketability of the corridor for walkable and bikeable high-quality commercial and residential space. The Town will need to have additional community conversations to determine the best street redesign alternatives for this corridor.





POTENTIAL STREET LAYOUT - BIKE LANES ON EACH SIDE

ESTIMATED DIMENSIONS  
**64'**  
ESTIMATED CORRIDOR WIDTH



\*Dimensions are approximated and have not been verified in the field

### Crosswalks at Controlled Intersections

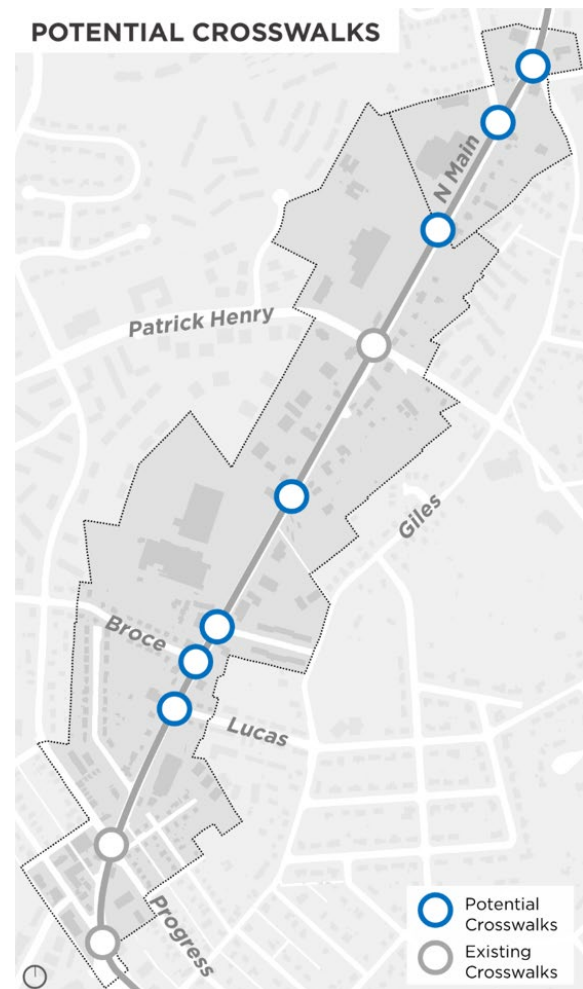
North Main Street needs to provide ample, safe opportunities for pedestrians and cyclists to cross the road. This is particularly critical for bus users who absolutely must cross on either their departure, or return. Ideally, these crossings will take place at high-visibility crosswalks at controlled intersections that have traffic lights with pedestrian activation or stop signs.

Yield-only intersections such as roundabouts are generally not preferred for pedestrians as vehicles often do not stop to provide safe passage. However, they may be a viable option in the absence of other suitable alternatives. At these locations, pedestrian “bump outs” should be explored as an option to improve safety by shortening crossing distances and providing important visual cues to motorists that reinforce the need to stop. At signalized intersections, advance pedestrian signals (that light up a “walk” signal before any cars receive green lights or arrows) are a low-cost way of improving safety by increasing the visibility of pedestrians and preventing conflicts with turning cars.

This study proposes increasing the number of controlled intersections along the North Main Street corridor to slow traffic and provide adequate opportunities for crosswalks, some potential locations of which are indicated in the diagram to the right. Given the long distance between existing intersections, this strategy will require the Town to aggressively pursue all opportunities to improve street connectivity and introduce a more grid-like system to the area. These strategies are discussed in more detail in the Connectivity section of this report.



Example of a pedestrian “bump out.”



## Mid-Block Crosswalks

In its current configuration, North Main Street is not an ideal candidate for mid-block crossings as the vehicular speed is high and the roadway is wide. The Town’s current policy does not generally allow them on roads with more than two lanes or roads over 25 miles per hour. However, given the difficulty of increasing the number of controlled intersections and associated crosswalks, mid-block crossings may need to be considered as an option if coupled with other major changes to the roadway configuration that would address safety concerns.

Whenever possible, these mid-block crossings should be co-located with any bus stops that do not occur near a controlled intersection. Depending on the ultimate speed of the roadway, a simple rapid flashing beacon system may be adequate, or a more substantial overhead HAWK facility may be needed. With either method, high-visibility crosswalks with continental striping will be needed. With the reduction of vehicle lanes, a planted median may also serve as a “refuge island”—providing a safe place where a pedestrian can pause before crossing an additional lane of traffic.



Examples of Rapid Flashing Beacon (upper left) and HAWK (upper right) crossing systems, pedestrian refuge island (lower left), and types of crosswalks (lower right).

### *Bus Transit*

Blacksburg Transit (BT) is an essential component of the transportation system and North Main Street is one of the primary corridors in which it operates. As efforts to improve the streetscape progress and move into the design stage, the needs of BT buses must be incorporated as much as possible. Locations for bus stops must be identified with any redesign or future development. At these stops, pull-off areas should be incorporated as appropriate, taking into consideration impacts on bicycle and pedestrian facilities within the existing right of way. Depending on the ultimate roadway configuration, the width of the bus travel lanes need to be at least 12 feet in width as the current fleet measures 11 feet wide (from mirror tip to mirror tip).

Consideration also must be given to the location of light poles and the types of trees planted as they have the potential to be damaged by or cause damage to the bus fleet. BT prefers that light poles be placed at the back of the sidewalks and that trees do not encroach into the street. However, some of these preferences conflict with urban design principles that recommend physical barriers such as large shade-providing trees and light poles between sidewalks and streets and therefore, must be carefully balanced with the community's aspirations for the corridor.

There are other measures that can be taken to improve the speed and efficiency of public transit that do not have an impact on the streetscape design. One potential option worth consideration is signal prioritization, which could be incorporated along Main Street and other major transit corridors. Signal prioritization requires special hardware that allows for the detection of transit vehicles as they approach an intersection and dynamically adjusts the signal timing to reduce delay.

## CONNECTIVITY

### Existing Conditions/Issues

Unlike the traditional street grid found downtown, North Main Street has very poor connectivity which funnels traffic onto a few main roads and creates longer, more circuitous routes for pedestrians, cyclists, and vehicles. Particularly problematic areas are typified by block lengths over 800 feet, also known as super blocks. Almost the entire length of the North Main Street study area consists of these super blocks with 1,000 to 2,100 feet between intersections in most cases. In combination with the poor roadway design along the length of the street, this lack of connectivity is hampering the ability of North Main Street to become the mixed-use walkable corridor that the Town would like to see.

### Background

In the early 1900s, most cities were laid out in some type of grid system, an efficient network of small blocks with numerous street connections where vehicles and pedestrians were intended to co-exist. This type of system can be found today in Downtown Blacksburg. Traditional street grids generally require slower traffic speeds, but disperse vehicular and pedestrian traffic throughout the roadway system and allow for multiple routes to get to any destination. However, around the 1950s, the wisdom of these older systems were set aside for a new style that was generally intended to separate vehicular and pedestrian traffic, working under the assumption that most people were traveling by car. These systems relied on a hierarchical network design that funneled traffic onto major roads and encouraged cul-de-sacs, t-intersections, and curvilinear designs. Even though these major roads are the only route to get to desired destinations, the roads are often designed solely for automobiles at high traffic speeds, with minimal pedestrian accommodations. North Main Street and the surrounding streets are good examples of this style.

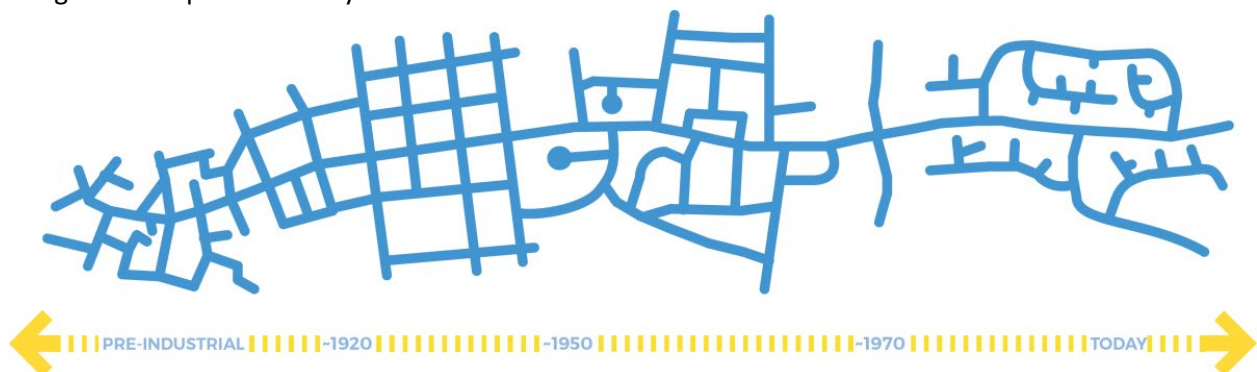
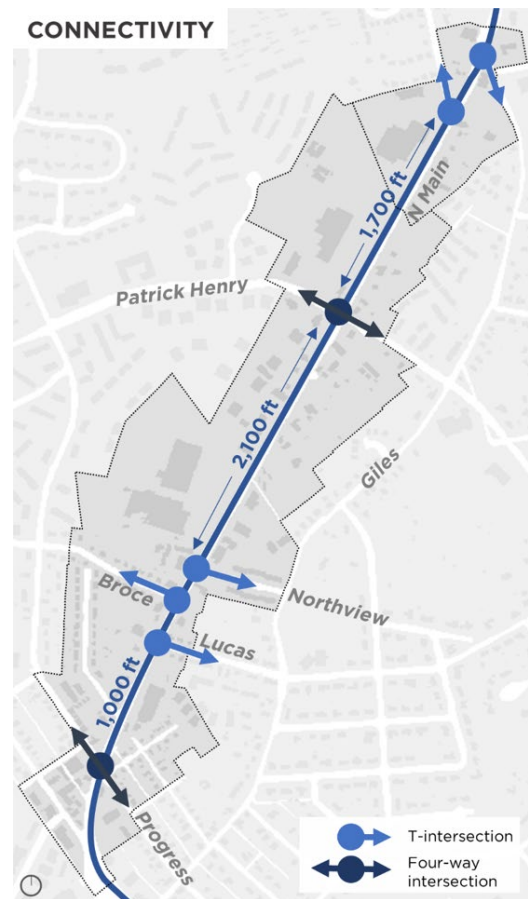
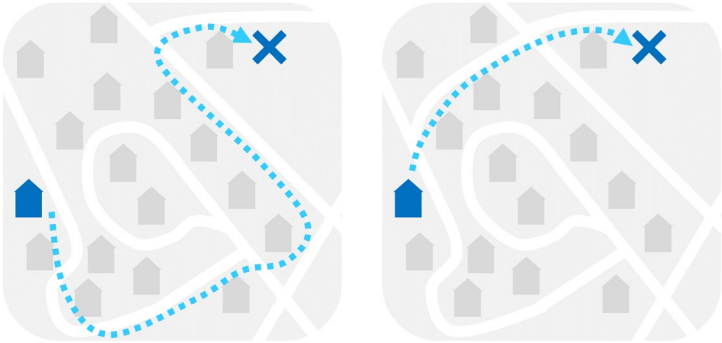


Image Credit: <https://www.cnu.org/our-projects/street-networks/street-networks-101>

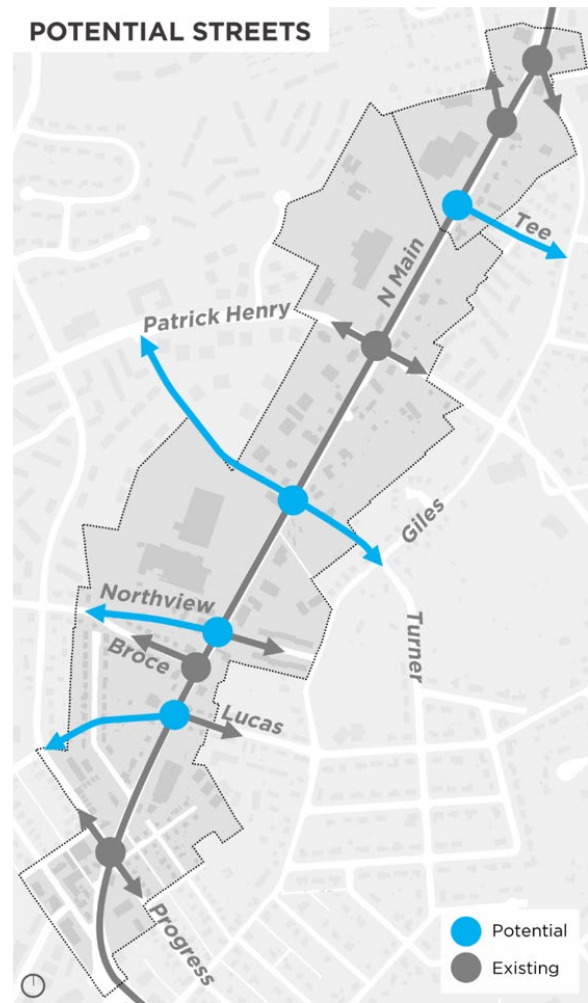
For decades, these vehicular-focused street networks had become the norm. However, communities are increasingly realizing that prioritizing the needs of the automobile does not make for a great place, and great places are critical towards attracting residents, workers, and shoppers. Dense, connected networks increase pedestrian activity and safety, a foundation for high-quality mixed-use corridors.

While connected streets lower speeds, they still benefit vehicles in several ways. Lower speeds lead to less severe accidents and travel times are often reduced due to the presence of more direct routes. These more direct routes also assist in providing timely emergency services. In order to improve the quality of place, many communities now require connectivity in new developments and are slowly making efforts to retrofit existing networks to realize the benefits of an interconnected grid system, just as Blacksburg is seeking opportunities to improve connectivity on North Main Street.



## Strategy

Modification of the streetscape along North Main will be a major component of efforts to transform the street into a walkable mixed-use corridor. However, the effect will be greatly enhanced if coupled with improvements to street connectivity. Four potential locations for future street segments that will connect to North Main are identified on the map to the right. Introduction of one or more of these streets will reduce the effect of the super blocks along the road and improve conditions for walking and biking. Each option faces challenges and will require further investigation to determine viability, however, it is important that the Town incorporates these efforts as part of a long-term strategy and makes its intentions known to any developers who propose projects along the corridor.

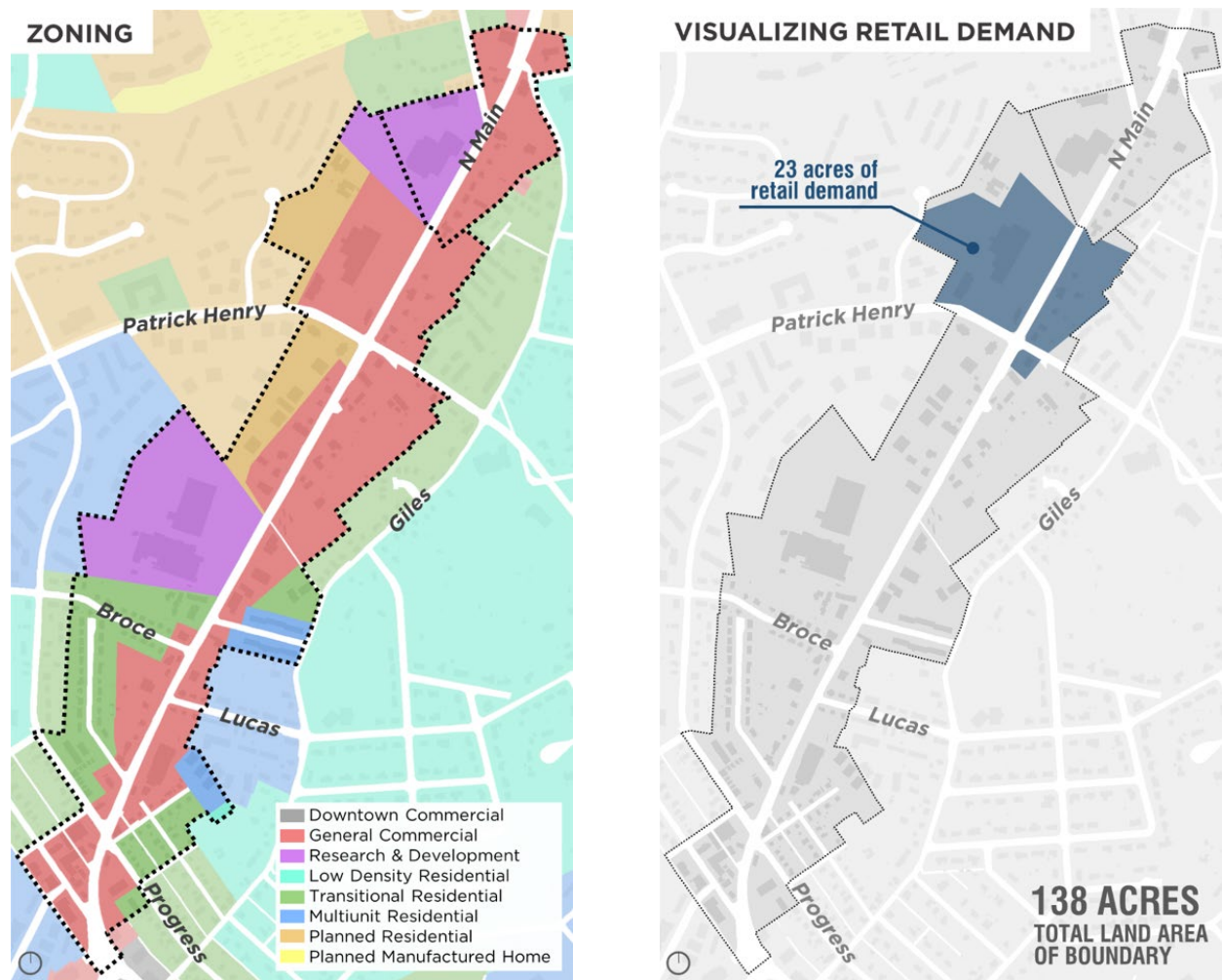


## LAND USE

### Existing Conditions/Issues

Although the zoning is somewhat uniform along the length of the study corridor, the existing land uses are not. North Main Street has a haphazard mix of residential and commercial uses of a wide variety of ages, styles, and quality. As redevelopment pressure mounts, one of the biggest issues facing the corridor is the mismatch between the underlying commercial zoning and the primarily residential products being proposed by the development community, most of which specifically target students. Analysis revealed that demand for purely retail uses along the corridor is much lower than the amount of space available and that there is high demand for residential products for both students and non-students. On the other hand, some amount of commercial uses, excluding retail (i.e. yoga studio, dentist office) will increase as a function of population, so some increased demand is expected. Therefore, a plan for the corridor should concentrate limited demand for retail and commercial uses in key locations, but also recognize that some amount of pared back commercial/retail land will continue to be in demand.

North Main Street serves as an important conduit for the entire population of North Main and all of those arriving from northern counties and the 460 bypass. The number of pedestrians and other non-motorized users along North Main Street, despite the poor conditions, underlies the importance of this





corridor as a major connector between the large student population on Patrick Henry Drive and the Virginia Tech Campus. It also highlights the potential for the street to be a walkable destination in the future. However, there is a complete misalignment between the design of the street itself, which suggests an automobile-oriented arterial, and the placement of new buildings, which hints at the community’s vision for it to be a walkable place.

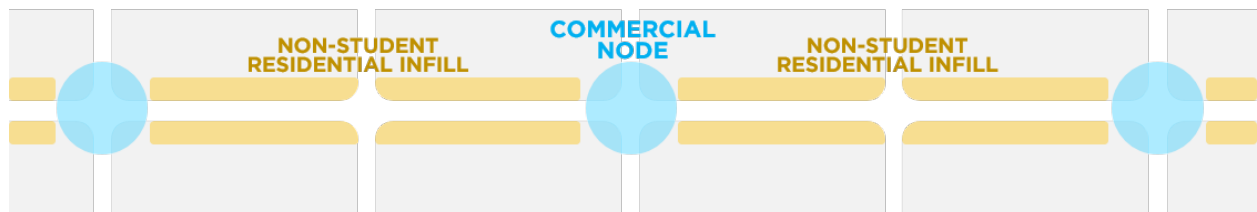
## Background

The nature of retail has changed dramatically over time; first as people shifted a majority of their shopping from smaller independent shops to large chain stores, and now an increasing share of money is spent at online retailers with products shipped directly to the home. Given these changes and the relatively modest growth, or potential contraction, of retail predicted in the future nationwide, many communities are facing a challenging situation where sites along major roads, that once seemed destined for retail uses, sit dormant. Viable commercial areas tend to be those that include service establishments, restaurants, or other businesses where transactions cannot occur online. Municipalities are increasingly having to think outside the bounds of strict commercial zoning and look to mixed-use projects that incorporate a commercial component, which may be attractive to residents in the corridor as much as a viable product for the general public.

## Strategy

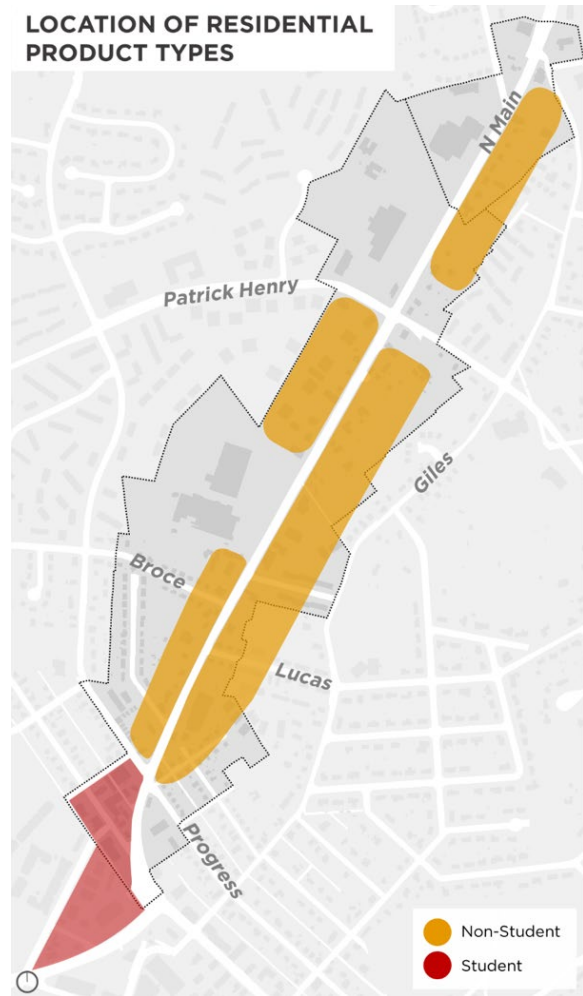
### Nodes

While the community is understandably protective of the commercial zoning along the corridor, a nodal strategy is a good compromise that achieves many of the same goals while accommodating other complementary uses. As shown in the diagram below, a nodal strategy encourages or requires commercial space at key locations along the corridor, often at important intersections. This concentrates commercial uses where they’re most likely to succeed and if adequately spaced, will effectively maintain momentum along the corridor, encouraging pedestrians to keep walking to reach the next destination. Between those nodes, high-quality residential products can be introduced.



### Use

An influx of new residents along the street will add to the customer base for the future commercial space and contribute greatly to the street life along the corridor, making it active during the day and evening. While student products are in high demand, the community has expressed a desire to limit their expansion to select areas of the Town and to focus on other unmet housing needs in the Town. Therefore, this corridor could be an excellent site for products that target young professionals and families, a major strategic priority of Blacksburg.



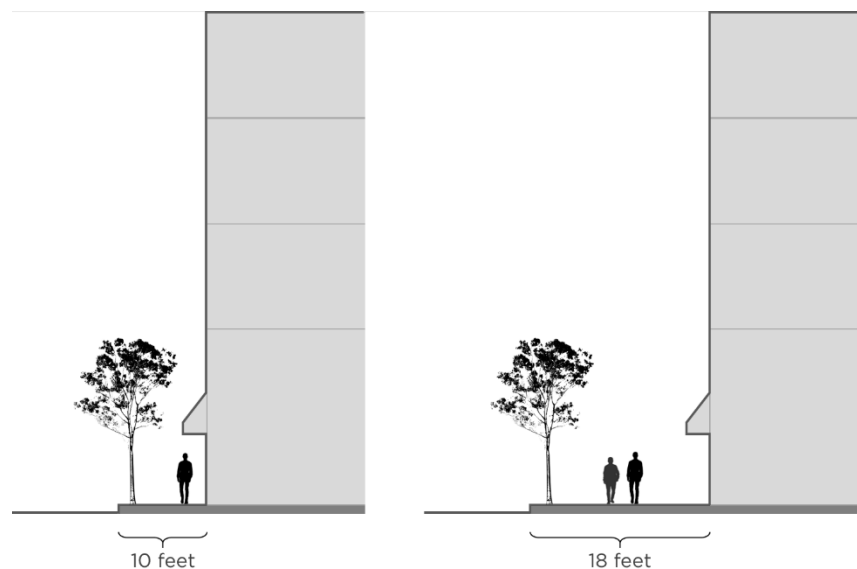
## Urban Design

As with any revitalization effort, the details matter greater, perhaps few more so, in this instance, than urban design. Specifically, the relationship between new development and the street is vital. If the new buildings are oriented in a way that reinforces urban form and walkability, but the street remains suburban and auto-oriented, the corridor will not work properly. Conversely, if the street is remade to be supportive of walkability, but building layouts and site design remain fundamentally suburban (i.e., with surface parking in front of buildings), that will also be unsuccessful. The key, then, is to remake both the street and the building form to be supportive of a walkable, human-scaled environment.

The roadway needs to be significantly altered to reduce the amount of lanes, slow traffic, add landscaping, and create high-quality pedestrian and bicycle facilities in order to attract the type of commercial and residential uses that will transform the corridor. New construction needs to be human-scaled and must be sensitive to surrounding lower-density residential properties. Buildings need to be oriented to the street, with entrances facing the street and parking behind buildings, largely out of view from the street.

Although some degree of variability in the front setback can provide a bit of visual relief, wider sidewalks (or “streetside zones”) are generally necessary to create a comfortable and pleasing pedestrian environment. This is particularly true as buildings begin to reach a height of three or four stories. As the diagram below shows, the difference between an 18-foot sidewalk and a 10-foot sidewalk is significant in their ability to accommodate street trees, street furniture, sufficient buffer from vehicular traffic, and opportunities for outdoor dining.

Given the limited right-of-way width and, in many cases, sufficient adjacent parcel depth, the additional space required to achieve more than a 10-foot streetside zone is better-accommodated with private land. In doing so, greater density can be provided (at a three or four-story scale) without buildings feeling excessively imposing or creating a “canyon-like” effect that some Blacksburg residents have expressed a desire to avoid on future projects.



## POLICY

### Existing Conditions/Issues

#### *Zoning*

Zoning is one of the most important municipal policies as it ultimately determines what can be built in the community. A cursory review of the General Commercial District, which is present along most of the corridor, shows that the regulations generally appear to be reasonable in terms of height, density, and parking. Upper floor residential uses are permitted by right, but ground floor residential uses and entirely residential buildings face additional approvals and are also subject to restrictions that require “support facilities” (such as clubhouses, meeting rooms, fitness centers, etc.) to be on upper floors of the building. The intent of these regulations is to have ground floor space with true commercial uses and prevent residential developers from trying to count these support facilities and/or parking areas as the required commercial space for the development. Increased developer flexibility in certain aspects of the zoning code may be needed to effectively transform the North Main Street corridor. If permitted by state law, opportunities to control the architectural quality of the buildings would also be beneficial.

#### *Student Housing*

Determining the appropriate policy towards student housing is a major issue in Blacksburg. In weak markets, student rentals can be a welcomed infusion of energy, but in strong markets such as Blacksburg, student housing can exert significant pressure on availability of housing and affordable housing. The continuing growth of the student population at Virginia Tech has placed a significant strain on the community. To accommodate this growth, the Town Council has approved thousands of beds of student housing within the last few years and has generally been supportive of allowing increased student housing density in areas where the product is already present. North Main Street is not currently one of those areas.

Given the high demand and lucrative nature of student housing, developers are attempting to push those boundaries and introduce student housing into new areas of Town. Blacksburg has generally not been in support of these efforts. However, student housing developers can afford to pay large sums of money for sites, and this land speculation has increased the price owners expect to receive, making it increasingly cost-prohibitive to provide affordable products that target non-students and other types of commercial products.

#### *Economic Development Tools & Incentives*

Another important policy consideration involves the use of incentives and economic development tools, which the Town of Blacksburg has not used regularly in the past. However, that general policy may need to be reconsidered as the use of available economic development tools and incentives may help the community pay for needed public infrastructure or enable greater control over the built environment. This is an important component of the Town’s efforts to attract and retain young professionals and families, and potentially serve a long-term resident population anxious to age in place. An important first step is the Building Better in Blacksburg initiative, which is exploring the possibility of providing incentives for affordable housing and sustainable development within the community.

## Background

### *Zoning Incentives*

The inclusion of density and/or height bonuses within zoning codes can be a cost-free incentive for projects that provide an identified community benefit. Affordable housing and green building design are some of the most commonly incentivized features, but priorities vary significantly from community to community. The enabling statutes in Virginia specifically authorize this type of “incentive zoning” and communities may determine what elements are valued locally. As an example, Arlington County allows the elected body to approve additional height or residential density for both market-rate and low or moderate income housing. Virginia law also allows for transfer of development rights, which could be used to allow for increased densities in target locations and/or allow more developer flexibility on topographically challenged sites.

Another interesting provision in state law (§ 15.2-2306) allows for design review in designated areas, which are either historic or “encompassing parcels of land contiguous to arterial streets or highways (as designated pursuant to Title 33.2, including § 33.2-319 of that title) found by the governing body to be significant routes of tourist access to the locality or to designated historic landmarks, buildings, structures or districts therein or in a contiguous locality.” For historic districts, localities are required to identify and inventory all structures being considered for inclusion. However, tourists routes described above are not subject to this requirement.<sup>4</sup> Scottsville, Virginia is one example of a community that has taken advantage of this provision to create an Entrance Overlay District to control the appearance of key corridors.<sup>5</sup>

### *Economic Incentives*

Although the toolbox of incentives is more limited in Virginia than other states, several important tools exist including:

#### Community Development Authority

A CDA can purchase land to facilitate redevelopment and issue revenue bonds to pay for infrastructure or public facilities. Those bonds can then be repaid over 20 to 30 years through special taxes, special assessments, and/or tax increment financing. CDA financing allows the locality to allocate the cost of improvements to those most benefitted. The debt of the CDA is not the debt/liability/obligation of the locality, although rating agencies do consider it.

#### Tax Increment Financing

Two types of TIF exist in Virginia: a statutory TIF (a process common in many states) or an agreement/non-statutory TIF (in which a locality enters into an agreement with a CDA or Economic Development Authority to pay over certain incremental tax revenues to support bonds issued by the CDA or EDA.) Non-statutory TIFs (also known as “TIF by agreement,” “informal TIF,” or “synthetic TIF”) are not limited to real estate taxes and have fewer limitations on the types of facilities that can be financed. It’s important to note that TIFs are generally more effective in cities than in towns, since a majority of the real estate taxes go to the surrounding county.

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<sup>4</sup> [https://www.albemarle.org/upload/images/Forms\\_Center/Departments/County\\_Attorney/Forms/LUchapter04-scopeofzoningpower.pdf](https://www.albemarle.org/upload/images/Forms_Center/Departments/County_Attorney/Forms/LUchapter04-scopeofzoningpower.pdf)

<sup>5</sup> [https://www.scottsville.org/wp-content/uploads/documents/19\\_Entrance\\_Corridor\\_Overlay\\_District.pdf](https://www.scottsville.org/wp-content/uploads/documents/19_Entrance_Corridor_Overlay_District.pdf)

### Special Service Districts

A service district may be created by the locality's governing body, without any petition or agreement from the landowners in the district. The governing body is authorized to levy and collect an annual tax on the property to pay for the additional facilities and services authorized to be provided in the district.

### Assessments for Local Improvements

With the agreement of the underlying land owners, a municipality can levy a special tax on those who benefit from improvements such as streets, sidewalks, alleys, sanitary system, storm water management, etc.

### Economic Development Authorities

EDAs provide economic development incentives and financing for government facilities or infrastructure, non-profit facilities, and affordable housing.

Many projects in the State of Virginia have used incentives such as these to complete challenging projects. Some examples include Short Pump Town Center in Henrico County, Mosaic in Fairfax County, and Dulles Town Center in Loudoun County.

## Strategy

There are several steps the Town may take to address the policy issues outlined above. First, adjustments to the zoning code that increase developer flexibility will facilitate redevelopment of the corridor. Changes that require commercial uses only in select locations and/or the use of "incentive zoning" to provide density or height bonuses for the presence of ground floor commercial or other desired uses, would be a welcomed addition. Development between the nodes should not require commercial, in every instance, because there isn't sufficient demand, but it should be allowed. What must be required, in every instance, is attractive, human-scaled architecture at the ground floor, regardless of use. Attention should also be given to the best zoning district for the more intense non-student residential products that could occur between commercial nodes. In addition, Blacksburg should investigate the possibility of creating overlay districts along key tourist arterials (per state regulations listed under the Background section) to have more control over the architecture of new development.

In terms of policies towards student housing, the Town will need to make its intentions absolutely clear to the development community and land owners on where high-density student housing will be accepted, particularly for this corridor which is experiencing pressure for student housing development. The map in the Land Use section of this report visualizes the Town's desire to allow for student housing near campus at the intersection of North Main Street and Prices Fork Road on the west side of North Main Street, and leaving the remainder of the corridor set aside to cultivate other desirable land uses including housing for non-students and commercial uses. Blacksburg should continue to use current methods to encourage the introduction of rental products that are not specifically geared towards students.

Lastly, Blacksburg needs to increase its comfort level with using available economic development tools to achieve high quality architecture and desirable non-student housing products. To do so, there are certainly political obstacles to overcome, but just as importantly, there are capacity issues that hamper the ability of the Town to more proactively shape development occurring within the community. Blacksburg could benefit greatly from an additional staff member whose sole focus is on economic development.

## DISTRICTS

### Existing Conditions/Issues

North Main Street lacks an identity. The streetscape is auto-centric, unremarkable, and devoid of landscaping and amenities. The buildings that line the street are an eclectic mix of low- and high-quality structures. Along this 1.2-mile corridor, there are no discernable neighborhoods or distinct commercial districts, which makes the distance feel even longer. In its current state, the corridor primarily acts as a through street to get somewhere else, instead of being a remarkable place of its own. The present conditions do not reflect the long-term vision for the corridor.

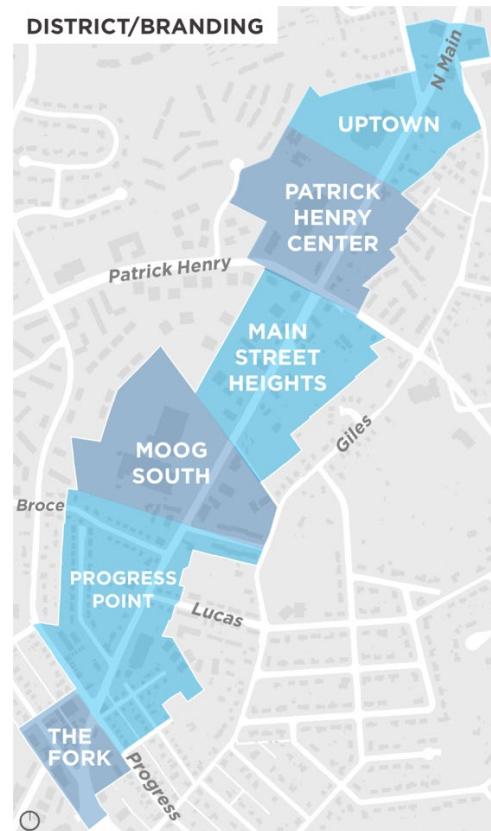
### Background

A district strategy can be thought of as the intersection of place, branding, and market opportunity—it differentiates areas of a corridor based on their functions, amenities, and opportunities. In many ways, it’s analogous to retail branding where a company or product seeks to identify the qualities that make it unique and desirable. However, a district strategy is more than a logo or tagline—it provides a framework for guiding the densities, uses, and character of new development and public realm investments. It helps people orient themselves, sets user expectations, and assists with marketing.

### Strategy

Within the North Main Street corridor, six unique districts have been identified—each with their own distinct personality, yet all complementary of each other in service of a revitalized street. The boundaries of these districts were primarily defined by key intersections and significant changes in existing building character (such as the existing MOOG facilities or Food Lion shopping center).

The Patrick Henry Center is seen as the best area for larger-scale retail space and it is anticipated to have a redeveloped shopping center and companion retail space across the street. There is also potential for high-quality retail space in mixed-use properties closer to campus in the Fork District. Along the rest of the corridor, general commercial space (which could include retail, office, service uses, etc.) will likely consist of smaller-scale tenants intended to serve the surrounding neighborhood. Residentially, higher density mixed-use student housing will be a key component of the Fork District on the west side of Main Street, and other medium-density (approximately 20-30 units per acre) non-student housing will be interspaced between commercial nodes along the remainder of the corridor.





### The Fork

- Close to Campus
- New Construction
- Student Housing
- Mixed-Use with Retail
- High-Visibility
- Gateway
- Higher Density



### Progress Point

- Neighborhood-Feel
- Commercial Amenities
- Walkable
- Non-Student Housing
- Young Professionals
- Medium-Density



### MOOG South

- MOOG Campus
- Service Establishments
- Transitional



### Main Street Heights

- Commercial Amenities
- Non-Student Housing
- New Connections
- Strong Corners
- Medium Density



### Patrick Henry Center

- Retail Anchor
- Identity
- Grocery
- Chain Establishments
- Major Commercial Center



### Uptown

- Commercial Amenities
- Non-Student Residential Options
- MOOG



# CATALYSTS & FEASIBILITY

Catalyst projects seize on near-term market opportunities and are critical because they prove market strength, build momentum, and set the standard for future efforts. Three large catalyst projects have been identified that incorporate mixed-use developments, non-student residential products, and high-quality single-story retail space at various points along the corridor.



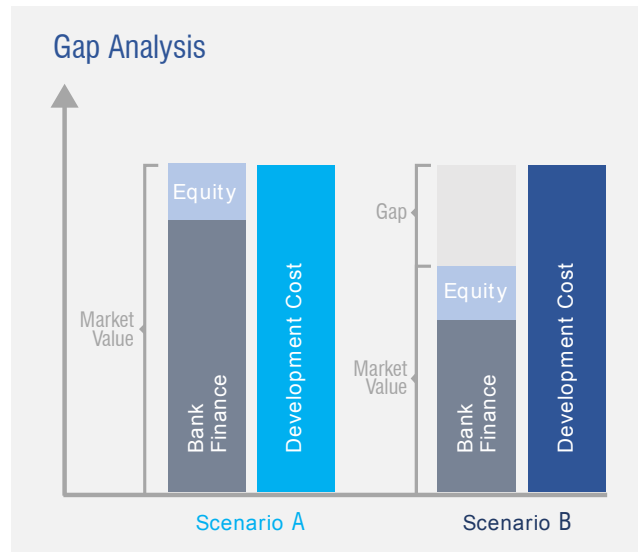
A critical component to these catalyst sites is proper vetting through a number of criteria, including market analysis, economic viability, site capacity, and political support. The vetting of potential projects through these different lenses is often referred to as feasibility testing, as in:

- **Market Feasibility:** Determines the likely revenues (expressed in rents, lease rates, and sale process) and depth of demand that exist for different development products
- **Economic Feasibility:** Compares revenues (typically in the form of rents or sale prices) with construction and operation costs, to determine whether a project is economically viable
- **Site Feasibility:** Tests how much development product (typically expressed in housing units or commercial square footage) can be reasonably fit onto a site
- **Political Feasibility:** Assesses whether a project is not only legally permissible, but also gauges level of public support or opposition

A basic market analysis revealed strong demand for student and non-student housing and a relatively limited pool of demand for retail products. This section of the report focuses on economic feasibility—and, to some extent, site feasibility—of several marketable development programs within the study area. This is done to understand the degree to which they are viable, making the analysis the culmination of market, financial, and site feasibility testing. Testing political feasibility is outside the

scope of this study, but some guidance has been provided by Town staff members about what developments and proposed land uses are desired by the local community.

Economic, or financial, feasibility analysis evaluates and tests the financial viability of potential development products by determining their prospective development value and weighing it against their development (i.e., construction, acquisition, etc.) and operational costs. Where development value is equal to or exceeds development costs, a project is likely to be viable and attractive to private investment. Where development value is less than development cost, a financial “gap” will exist and public or institutional funds will be needed to make a project feasible.



Preliminary site layouts and feasibility analysis are presented for three catalyst sites along the corridor in order to give an idea of what development opportunities are possible within the corridor. These catalyst projects include product types that are feasible (such as the single-story commercial uses near Patrick Henry), as well as those which have gaps (such as for-sale townhomes) in order to demonstrate the challenges associated with developing certain types of products desired by the community. The site plans represent just one potential opportunity and there may be other proposals which would also achieve the goals of the community. A more detailed site plan and analysis will be required to refine the information contained within this study.

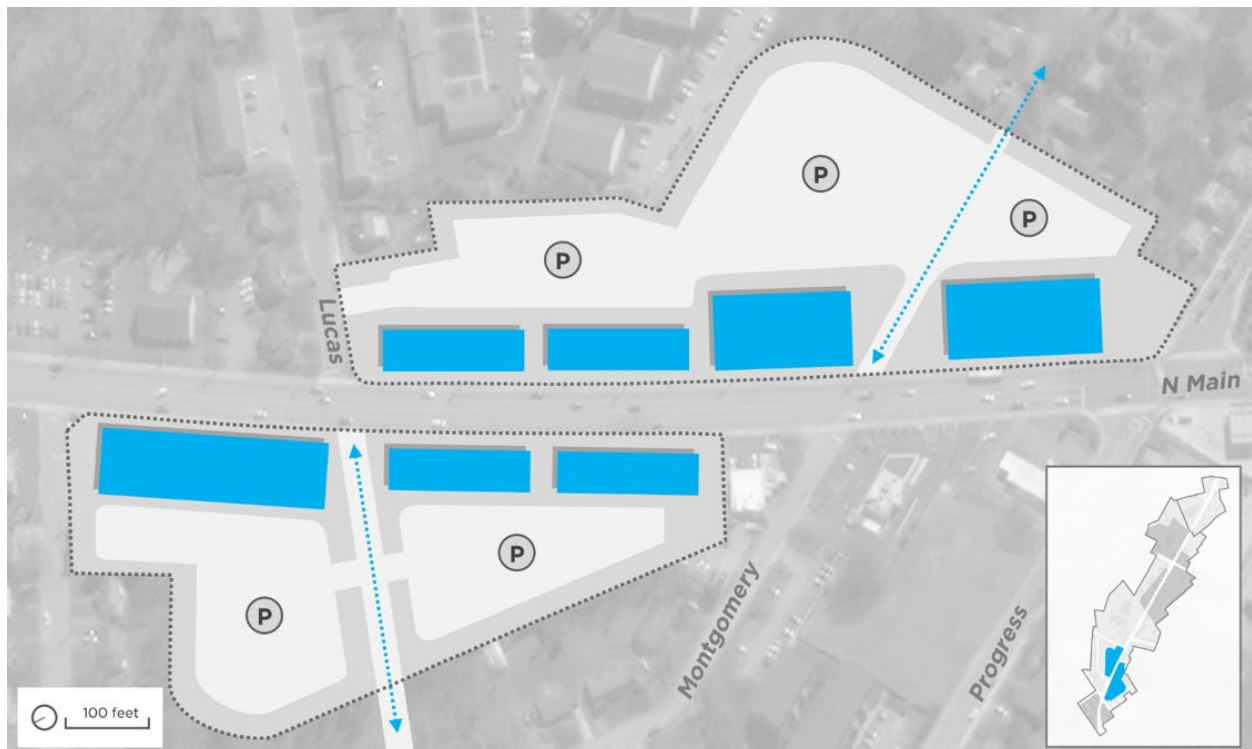


## Progress Point Catalyst Site

Near the south end of the study area, a series of seven buildings are proposed north of Progress Street. Potential opportunities for street connections were incorporated into the design.

### Development Program & Feasibility Summary

- East Side—Two mixed-use buildings and two apartment buildings (4-stories)
  - 28,000 square feet of ground floor retail leased at \$20.00 per square foot
  - 140 non-student housing units rented at \$1.50 per square foot
  - Minimum parking ratio of 1.5 spaces per residential unit plus 4 spaces per 1,000 feet of retail\*
  - Total 6 acres at an assumed purchase price of \$5.2M (\$867K per acre)
  - 7% feasibility gap, which may be overcome with incentives or other concessions
- West Side—One mixed-use building and two apartment buildings (4-stories)
  - 22,000 square feet of ground floor retail leased at \$20.00 per square foot
  - 130 non-student housing units rented at \$1.50 per square foot
  - Minimum parking ratio of 1.5 spaces per residential unit plus 4 spaces per 1,000 feet of retail\*
  - Total 4.6 acres at an assumed purchase price of \$4M (\$871K per acre)
  - 6% feasibility gap, which may be overcome with incentives or other concessions



\* Parking shown on preliminary layout meets or exceeds the ratios listed in this report. The final number of parking spaces can be determined as part of a more detailed site plan and may differ based on topography.

## Main Street Heights Catalyst Site

Near the middle of the study area, a series of seven buildings are proposed along main street, with small-scale townhomes in the rear on the east side of the street. north of Progress Street. An important connection between Turner and Main Street is established, which creates a good opportunity for a strong retail node.

### Development Program & Feasibility Summary

- Mixed-use buildings and apartment buildings (4-stories)
  - 36,000 square feet of ground floor retail leased at \$20.00 per square foot
  - 200 non-student housing units rented at \$1.50 per square foot
  - Minimum parking ratio of 1.5 spaces per residential unit plus 4 spaces per 1,000 feet of retail\*
  - Total 6 acres at an assumed purchase price of \$3.9M (\$653K per acre)
  - 1% feasibility gap, which may be overcome with incentives or other concessions
- Townhomes (2-stories)
  - 12 for-sale townhome units sold at \$150 per square foot (\$430,000 per unit)
  - Minimum parking ratio of 1.25 spaces per residential unit
  - Total 2.7 acres at an assumed purchase price of \$1.4M (\$523K per acre)
  - Significant 29% feasibility gap, which cannot be overcome with incentives



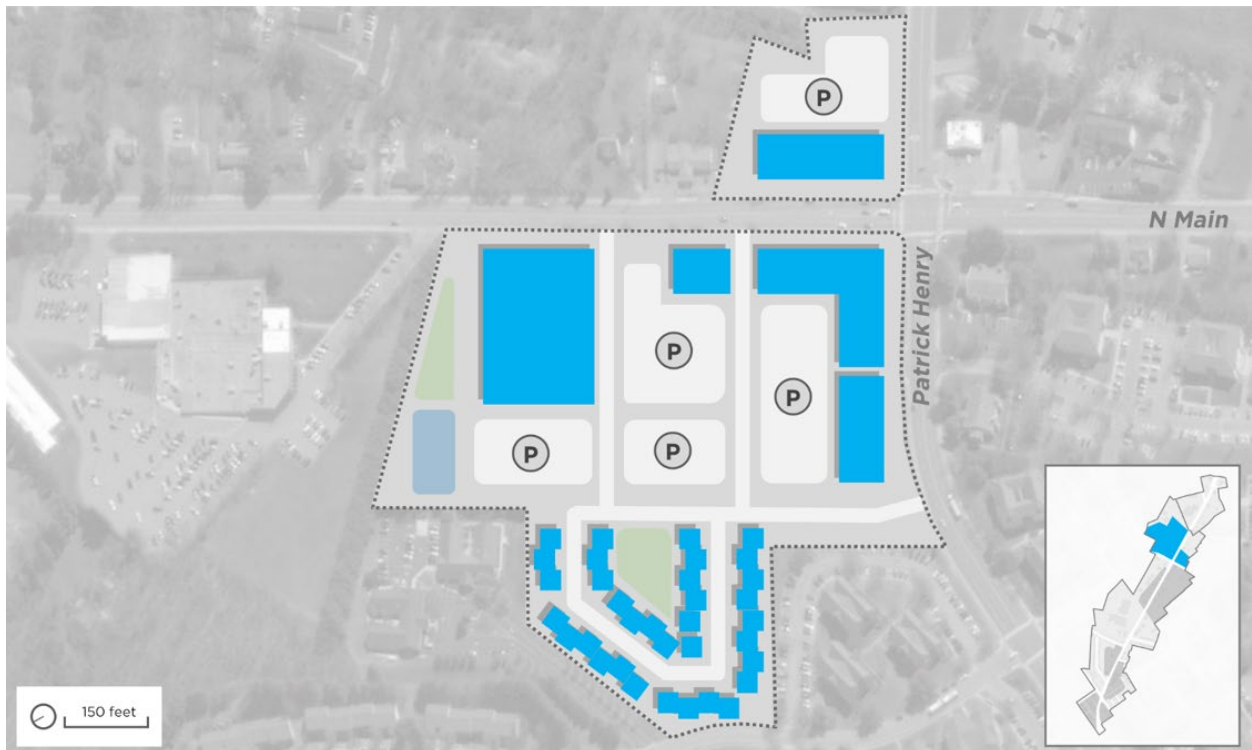
\* Parking shown on preliminary layout meets or exceeds the ratios listed in this report. The final number of parking spaces can be determined as part of a more detailed site plan and may differ based on topography.

## Patrick Henry Catalyst Site

Near the north end of the study area, a redeveloped retail center is proposed for the current Food Lion site, along with a smaller companion retail center across the street. Townhomes have been placed on Town-owned land that is currently park space and would require Town Council action to change.

### Development Program & Feasibility Summary

- Primary retail center at northwest corner of Main & Patrick Henry (1-story)
  - Total of 110,000 square feet of retail leased at \$18.00 per square foot
  - Minimum parking ratio of 3 spaces per 1,000 square feet\*
  - Total 11 acres at an assumed purchase price of \$5.5M (\$500K per acre)
  - This project is feasible without incentives
- Secondary retail center at northeast corner of Main & Patrick Henry (1-story)
  - 28,000 square feet of retail leased at \$22.00 per square foot
  - Minimum parking at a ratio of 3 spaces per 1,000 square feet\*
  - Total 2.2 acres at an assumed purchase price of \$2.2M (\$1M per acre)
  - This project is feasible without incentives
- Townhomes
  - 34 for-sale townhomes units sold at \$180 per square foot (\$360,000 per unit)
  - Minimum parking ratio of 1.25 spaces per unit\*
  - Total 3.5 acres at an assumed purchase price of \$1.5M (\$435K per acre)
  - Significant 14% feasibility gap which likely cannot be overcome with incentives



\* Parking shown on preliminary layout meets or exceeds the ratios listed in this report. The final number of parking spaces can be determined as part of a more detailed site plan and may differ based on topography.

## RECOMMENDATIONS FOR FUTURE STUDY

North Main Street has the potential to become a vibrant, walkable, bikeable, and transit friendly corridor with commercial and residential uses. However, achieving this vision will require significant changes to local policies as well as the roadway itself. In terms of policy, some early steps that need to be taken include identifying specific areas to be designated as commercial nodes vs other locations where non-student housing may be more appropriate. The use of subdistricts as identified in this report may be a helpful structure for the Town to use in developing land use, infrastructure, and economic priorities. The Town may wish to consider focusing on identified catalyst sites. Other policy considerations to be discussed at this time include potential use of density bonuses and/or incentives for desirable, yet financially infeasible product types. Changes to the Town's zoning ordinance will also be required.

Additional study of the roadway configuration and any potential traffic impacts... will also be needed to transform the corridor, both to determining the feasibility of potential roadway connections as well as redesign of North Main Street itself. It is important to determine the best approaches to improvements for walkability and bikeability in the corridor early on in the process. This will provide direction to future redevelopers and allow the Town to consider phased improvements in the corridor. Ideally, efforts to redesign North Main Street should include a public outreach component and multiple stakeholders. The cost associated with a complete streetscape redesign along North Main Street will be considerable and will likely require creative financing and potentially public-private partnerships.