

Roanoke Valley Transportation PLANNING ORGANIZATION



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The 22nd day of January, 2015

RESOLUTION

Approval of the Regional Pedestrian Vision Plan for the Roanoke Valley

WHEREAS, federal regulations implemented as a result of the *Moving Ahead for Progress in the 21st Century Act (MAP-21)* encourage urbanized area Metropolitan Planning Organizations to include pedestrian planning as part of their multimodal transportation planning activities, and

WHEREAS, the Roanoke Valley Transportation Planning Organization (TPO) envisions a multimodal transportation system in which walking is a common way for people to accomplish daily trips and where pedestrian infrastructure supports other modes of transportation including driving, riding public transit, and biking, and

WHEREAS, the *Regional Pedestrian Vision Plan* serves as a non-binding guide to the development of transportation facilities for pedestrians of all ages and abilities in the TPO Study Area, and

WHEREAS, the *Regional Pedestrian Vision Plan* has been thoroughly reviewed by the Transportation Technical Committee of the Roanoke Valley TPO,

NOW, THEREFORE, BE IT RESOLVED that the Policy Board of the Roanoke Valley Transportation Planning Organization does hereby approve the *Regional Pedestrian Vision Plan for the Roanoke Valley*.

A handwritten signature in black ink that reads "Billy W. Martin, Sr." in a cursive script.

Billy W. Martin, Sr.
Chairman

TPO POLICY BOARD: Cities of Roanoke and Salem; Counties of Bedford, Botetourt, Montgomery and Roanoke; Town of Vinton; Greater Roanoke Transit Company (*Valley Metro*); Roanoke-Blacksburg Regional Airport; Virginia Department of Rail & Public Transportation; Virginia Department of Transportation



REGIONAL PEDESTRIAN VISION PLAN

A Coordinated Approach To A Walkable Roanoke Valley

Roanoke Valley Transportation **PLANNING ORGANIZATION**

Staffed by the
REGIONALcommission

Final Draft January 2015

RVARC.ORG



**Roanoke Valley Transportation
PLANNING ORGANIZATION**

Staffed by the
REGIONALcommission

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Final Draft January 2015

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1.0 INTRODUCTION

Walking is the most basic form of transportation. Most trips, whether they are taken by a car, bike, bus, trolley, or train, all involve walking at the beginning and end of the trip. Unlike these modes, however, walking by itself does not require the individual to pay fares, user fees, operating or maintenance costs. Pedestrian infrastructure is significantly less costly than that of its counterparts, and the amount of space required to accommodate a pedestrian is also much less. Unfortunately, many current land development practices and transportation investments greatly underutilize or completely ignore pedestrians in their investments, especially in places with greater mixes and proximity of land uses where walking to destinations would otherwise make sense.

The Roanoke Valley Transportation Planning Organization (RVTPO) and member local jurisdictions have joined together to develop a plan to improve walking as a mode of transportation in the Roanoke Valley. The Regional Pedestrian Vision Plan for the Roanoke Valley Transportation Planning Organization (herein referred to as the Pedestrian Plan), is the region's first plan focusing specifically on promoting walking for everyday trips. With limited financial resources for pedestrian improvements, this plan identifies where pedestrian infrastructure investments are most needed based on the number of potential residents, employees, shoppers, diners, and other visitors to walk to access nearby destinations.

The purpose of the Pedestrian Plan is to provide a coordinated and strategic approach to making walking a more widely chosen form of transportation. Through the development of a regional pedestrian network, safe and attractive walking environments can exist to enable people to accomplish their daily tasks with greater ease.

1.1 A Multimodal Transportation System

In October 2013, the Virginia Department of Rail and Public Transportation published guidance for developing and designing multimodal transportation systems throughout the Commonwealth of Virginia. As such, the "Multimodal System Design Guidelines" (MMSDG) provided the framework for developing this Pedestrian Plan.

The Pedestrian Plan is one component of the Roanoke Valley's multimodal transportation system, which accounts for walking, biking, driving, and public transit as an interconnected transportation network that enables people to move around, without needing to rely completely on a personal vehicle. The pieces of the Roanoke Valley's multimodal transportation system are brought together in the Constrained Long-Range Multimodal Transportation Plan (CLRMT). As one element of the CLRMT, the Pedestrian Plan accomplishes the following functions:

- ▲ RECORD THE REGION'S VISION, GOALS, AND STRATEGIES FOR IMPROVING THE WALKING MODE OF TRANSPORTATION IN THE ROANOKE VALLEY AS IDENTIFIED THROUGH INPUT FROM CITIZENS AND LOCAL LEADERS
- ▲ SERVE AS A RESOURCE GUIDE FOR PEDESTRIAN ACCOMMODATION PLANNING IN THE ROANOKE VALLEY
- ▲ ENCOURAGE LOCAL GOVERNMENTS TO INCORPORATE WALKING ACCOMMODATIONS IN LOCAL ORDINANCES, POLICIES, PLANS, AND RELATED GUIDING DOCUMENTS
- ▲ IDENTIFY AND MAP ALL EXISTING WALKING ACCOMMODATIONS
- ▲ IDENTIFY AND MAP LOCATIONS WHERE WALKING ACCOMMODATIONS ARE NEEDED AND DESIRED
- ▲ PROVIDE EXAMPLES OF MODEL WALKING ACCOMMODATIONS

With this Plan as a foundation, it is expected that all transportation decision-makers, engineers, designers, planners, development reviewers, inspectors, and infrastructure maintenance staff will work to build and maintain the envisioned regional pedestrian transportation network so that walking conditions will improve greatly in a short time period as current practices and investments are adapted to create a more livable Roanoke Valley.

1.2 Concurrent Efforts

Along with the development of the Pedestrian Plan, several other efforts are taking place, which may not be completed by the Plan's adoption, yet in their draft form have had great influence on it. As recommended in the MMSDG, and in preparation for the next CLRMTP, the RVTPO Transportation Technical Committee has been working to identify multimodal districts, centers, and corridors for the RVTPO study area.

- ▼ **MULTIMODAL DISTRICT:** ANY PORTION OF A CITY OR REGION WITH LAND USE CHARACTERISTICS THAT SUPPORT MULTIMODAL TRAVEL, SUCH AS HIGHER DENSITIES AND MIXED USES, AND WHERE IT IS RELATIVELY EASY TO MAKE TRIPS WITHOUT NEEDING A CAR AS GAUGED BY THE NUMBER OF BUS ROUTES AVAILABLE, AND SAFE WALKING OR BIKING PATHS – EITHER CURRENTLY OR PROPOSED IN THE FUTURE.
- ▼ **MULTIMODAL CENTER:** A SMALLER AREA OF EVEN HIGHER MULTIMODAL CONNECTIVITY AND MORE INTENSE ACTIVITY, ROUGHLY EQUIVALENT TO A 10-MINUTE WALK OR A ONE-MILE AREA.
- ▼ **MULTIMODAL CORRIDOR:** A PUBLIC RIGHT-OF-WAY THAT ACCOMMODATES MULTIPLE TRANSPORTATION MODES AND INCLUDES THE ADJACENT LAND BETWEEN THE MULTIMODAL FACILITY (ROADWAY OR PATHWAY) AND THE BUILDINGS.

A 10-minute walk is generally the maximum that people will practically walk in the course of daily activities.

The MMSDG include six corridor types: Multimodal Through Corridor, Transit Boulevard, Boulevard, Major Avenue, Avenue, and Local Street (see Appendix A for definitions from the MMSDG). At this time, only the corridor types Multimodal Through Corridor, Boulevard, Major Avenue, and Avenue have been drafted for the region. Neither Transit Boulevards nor Local Streets have yet been identified

for the Roanoke Valley.

These multimodal concepts (districts, centers, and corridors) have shaped the recommendations of the Pedestrian Plan and will ultimately guide the recommendations of the CLRMTP.

Preparations have also begun to form VTRANS 2040, the next Statewide Multimodal Transportation Plan. This plan will be developed by the Secretary of Transportation's Office of Intermodal Planning and Investment in conjunction with the state's transportation modal agencies.

In 2004, the Commonwealth Transportation Board (CTB) adopted a Policy for Integrating Bicycle and Pedestrian Accommodations in the funding, planning, design, construction, operation, and maintenance of Virginia's transportation network. VDOT has followed up on that Policy by developing a Plan to clarify the Policy, provide staff with resources, improve outreach and coordination, and measure and evaluate progress. The Pedestrian Policy Plan was published in September 2014. It is an excellent resource outlining Virginia's existing policies, guidelines, processes, and programs. The Policy Plan provides the vision and goals for the future of pedestrian accommodations in the Commonwealth and recommendations for achieving them.

1.3 Study Area

The Pedestrian Plan covers the Roanoke Valley Transportation Planning Organization 2040 Study Area which includes the Roanoke Census Defined Urbanized Area¹ and the contiguous geographic area(s) likely to become urbanized within the 25 year forecast period covered by the CLRMTP. Localities within the RVTPO Study Area include the cities of Roanoke and Salem, the towns of Fincastle, Troutville, and Vinton, and portions of Bedford, Botetourt, Montgomery, and Roanoke counties. Figure 1 shows the TPO Study Area boundary (yellow), Roanoke Urbanized Area (pink), and the jurisdictional boundaries (blue).

1.4 Roles and Responsibilities

The Regional Commission, because it provides the staff for the RVTPO, has taken on the role of facilitating the Pedestrian Plan's development through the cooperation and involvement of interested stakeholders. The Commission, with the help of local governments and VDOT, is responsible for assessing progress towards the regional pedestrian vision via established performance measures.

While the Pedestrian Plan is intended to facilitate, promote, and provide general guidance on improving walking conditions in the region, within the TPO Study Area, the local governments and the Virginia Department of Transportation (VDOT), because they

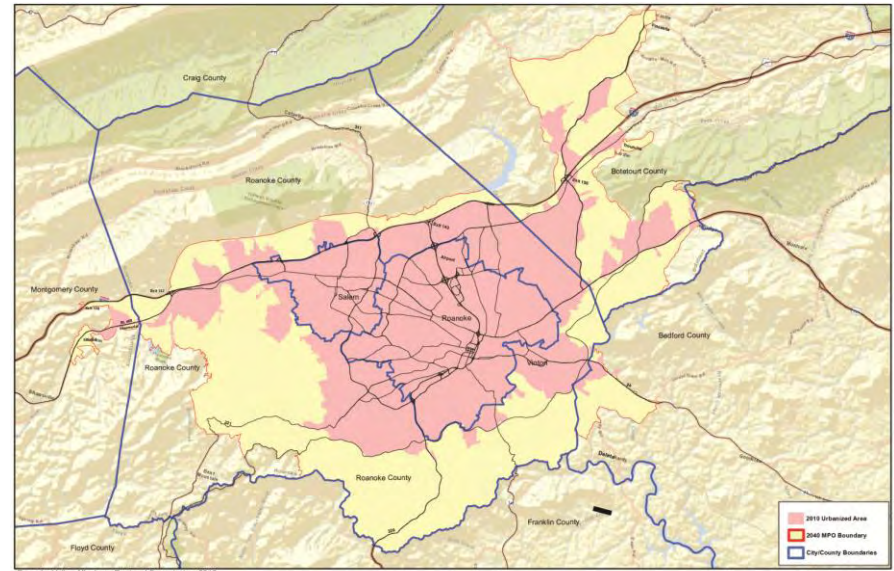


Figure 1: Roanoke Valley TPO 2040 Study Area Boundary

authorize new construction and maintenance activities within public right-of-way, are the ultimate responsible parties for ensuring the implementation of the recommended pedestrian infrastructure improvements. Valley Metro and the Greenway Commission are responsible for working with local governments to pursue pedestrian improvements related to public transit and greenways, respectively.

The RVTPO Policy Board is responsible for approving federal funding for pedestrian projects consistent with the region's pedestrian vision.

¹ An Urbanized Area is a statistical geographic entity, designated by the Census Bureau, consisting of a central core and adjacent densely settled territory that together contain at least 50,000 people, generally with an overall population density of at least 1,000 people per square mile.

2.0 PEDESTRIAN VISION

The Roanoke Valley is a livable community, proud of its outdoor amenities and recognized for its outstanding quality of life. As such, the residents and employees of the Roanoke Valley envision a safe pedestrian environment where walking is an integral part of daily life; nearby destinations are well-connected by pedestrian facilities that are conveniently located and well-maintained.

The Roanoke Valley will have a pedestrian transportation network that:

- ▲ CONNECTS PEOPLE WITH REGIONAL AND LOCAL ACTIVITY CENTERS;
- ▲ CONNECTS WITH OTHER MODES OF TRANSPORTATION;
- ▲ PROVIDES SAFE ACCOMMODATIONS THAT CONTRIBUTE TO A PERSON'S ABILITY TO WALK SAFELY;
- ▲ ENCOURAGES PEOPLE TO WALK;
- ▲ PROVIDES WALKING FACILITIES DURING NEW RESIDENTIAL AND COMMERCIAL DEVELOPMENTS; AND,
- ▲ LIKE OTHER TRANSPORTATION MODES, IS CONSTRUCTED AND MAINTAINED AS A NATURAL, ROUTINE PART OF THE REGIONAL TRANSPORTATION SYSTEM.

2.1 Regional Values

Overwhelmingly, Roanoke Valley citizens value walking and feel that walkability (how friendly our region is to walking) is important. When considering the ability to walk, the Roanoke Valley values safety, accessibility, health and mobility.

▼ SAFETY

It is important to be able to walk somewhere safely.

▼ ACCESSIBILITY

It is important to be able to walk around one's neighborhood and to walk to nearby destinations such as jobs, schools, libraries, and grocery stores.

▼ HEALTH

It is important to be able to walk for health and well-being.

▼ MOBILITY

It is important to be able to walk as an alternative to driving, especially since many people do not drive.

When considering how important it is for an area to be walkable, the Roanoke Valley values walkability in the following ways:

▼ DENSITY

Walkability is most important in dense areas; elsewhere it is important where it is wanted and warranted.

▼ SOCIAL CONNECTIONS

Walkability is important because being able to walk around provides a sense of connectedness and community.

▼ ECONOMIC DEVELOPMENT

Walkability is important because it encourages downtown development and development within regional multimodal centers and districts.

Walkability is important because it supports tourism development.

▼ CULTURE

Walkability is important in order to enjoy our regional history.

▼ ENVIRONMENT

Walkability is important for the environment; it reduces the number of vehicles on the road, thus reducing vehicle emissions and air pollution; it reduces the need for parking, as such, impervious surfaces and storm water runoff is reduced.

Walkability is important in order to enjoy our Valley's viewsheds.

2.2 Regional Goals

Given the region's values and vision regarding walking, the technical staff and TPO Policy Board developed the following five goals:

Goal #1: Improve **SAFETY** for pedestrians. More people are seen walking in the Roanoke Valley because they feel safe due to new infrastructure which makes walking safer for people.

Goal #2: Enable **INDEPENDENT MOBILITY**, particularly within multimodal centers and districts, where people do not have to rely on personal vehicles to get from one place to another. Walking is an easy decision because it is a pleasant experience.

Goal #3: Create a region where **ACTIVE LIFESTYLES** are the norm because our land use decisions and investment in transportation infrastructure complement each other and enable a natural tendency for people to walk every day. As a result, people feel healthier, more socially-connected and happy living and working in the Roanoke Valley.

Goal #4: Increase **BUSINESS** in multimodal centers and districts; they are enjoyable places to work and patronize in part because they are in attractive well-connected walkable environments.

Goal #5: Clean the **ENVIRONMENT** by walking for more trips and driving less. The Roanoke Valley is an attainment area for air

quality², and we want it to remain as such even as we continue to grow in population. As more citizens walk to accomplish everyday tasks, they are able to enjoy the Valley's beautiful environment.

3.0 PLAN DEVELOPMENT PROCESS

The Pedestrian Plan's development began with a review of past work, including policies and plans, related to walking and pedestrian improvements. The Pedestrian Plan benefitted from the input of citizens, local technical staff, and decision-makers throughout its development. The combination of these perspectives defined the region's values towards walking, its vision and goals. Technical staff used citizen input and the previous plans information to formulate the Pedestrian Plan's infrastructure recommendations and strategies. The final Pedestrian Plan is adopted by the TPO Policy Board, which represents the seven jurisdictions that encompass the urban Roanoke Valley.

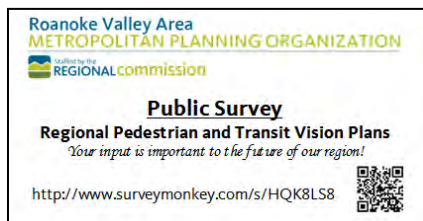
3.1 Citizen Input

The public had several opportunities to provide input to the Pedestrian Plan. Citizen input provides the rationale for planning and making investments in pedestrian infrastructure and was valuable in the development of the Plan.

² An attainment area for air quality is an area that meets the primary or secondary ambient air quality standard for the pollutant.

3.1.1 Public Survey

Over a four month period from September–December 2013, citizens had the opportunity to provide feedback regarding why they value walking, how often and why they walk, and where they think improvements to pedestrian infrastructure are needed. Citizens shared their most pressing thoughts on walking with decision-makers. Surveys were conducted in person, on paper, and electronically. Citizens were notified of the survey opportunity via numerous sources which are listed in Appendix B along with the survey results. In addition to the public survey, coordination with other meetings and events enabled greater input.



3.1.2 Downtown Roanoke Plan Public Open House

The City of Roanoke maintains plans for each neighborhood in the City. Concurrent with the Pedestrian Plan, the City has been undertaking an update to the Downtown Roanoke Plan. On September 11, 2013, a public open house was held to allow citizens to provide feedback on their desires for the future of Downtown Roanoke. At that event, staff provided displays and administered the public survey via paper, computer, and personal interviews with participants.

3.1.3 Senior Citizens Coordinating Council Open House

On September 27-28, 2013, the Senior Citizens Coordinating Council conducted an Open House at Greene Memorial Methodist Church featuring member non-profit organizations and information sessions for the public. The event provided an opportunity for staff to talk with citizens and staff from other organizations about the Pedestrian Plan. People noted locations

where pedestrian facilities are needed on large maps. Many people also filled out a public survey during the two-day event.

3.2 Transportation Technical Committee

The RVTPO Transportation Technical Committee served as the Pedestrian Plan’s Steering Committee. Updates, group discussions, and decisions took place during regularly scheduled monthly meetings of the TTC in addition to the typical agenda. Additionally, on several occasions throughout the Plan’s development, staff met individually with local government staff to review technical details and recommendations. The Committee was provided content for their review a week prior to meetings for review. Below is the timeline of TTC activities which has resulted in the Pedestrian Plan.



SEPTEMBER 2013

Review/Comment of Public Involvement Plan

Group activities on pedestrian values answering the questions:

Values: Is walkability important to our community, why/why not?

Vision: What do we want the future to be?

Goals: What goals should the region have for walkability?

OCTOBER 2013

Review of Pedestrian Values and Vision

Update on Public Involvement

Introduction to DRPT's Multimodal System Design Guidelines
Review Map of Existing Activity Density
Discussion of Multimodal Centers and Districts

NOVEMBER 2013

Follow-up on Pedestrian Values and Vision
Group Mapping Exercise: Place Dots on Large Maps Indicating Existing and Emerging Multimodal Centers and Districts

DECEMBER 2013

Review Multimodal Center Typology
Activity on Defining Roanoke Valley Multimodal Centers and Districts

JANUARY 2014

Summary of Completed Public Survey
Detailed Review of Identified Multimodal Centers and Districts

FEBRUARY 2014

Draft Maps of Regional Multimodal Centers and Districts
Distribution of public comments to decision-makers regarding walkability
Draft Walkability Goals
Initial presentation of Existing and Recommended Pedestrian Accommodations

MARCH 2014

Review Final Draft Multimodal Centers and Districts
Review Goals and Performance Measures
Introduction to Multimodal Through Corridors and Placemaking Corridors

Distribution of Large-scale Existing and Proposed Pedestrian Accommodations for review; TTC members were asked:

- 1. Do you agree that the locations identified on the maps per the public comments and previous plan recommendations for proposed intersection, sidewalk, streetscape, off-road, and greenway projects are locations where infrastructure is needed?*
- 2. Where else are on- or off-street pedestrian connections needed, particularly within and between multimodal centers and districts?*

APRIL 2014

Discussion of Draft Pedestrian Strategies
Discussion of Corridor Maps
Small Group Review of Existing and Proposed Pedestrian Accommodations

MAY 2014

Discussion/brainstorming on pedestrian infrastructure funding options and strategies, pedestrian projects prioritization process, implementation responsibilities

JUNE 2014

Draft Maps of Pedestrian Infrastructure Recommendations
Localities were provided tables and maps of the recommended projects and asked to prioritize each project from the locality's perspective based on the determined ranking system of low-medium-high.

AUGUST - DECEMBER 2014

Review of Draft Pedestrian Vision Plan

3.3 TPO Policy Board

The TPO Policy Board had a unique opportunity to help shape the content of the Plan and the course of the planning process through discussions and visioning activities conducted during regular meetings.

SEPTEMBER 2013

Introduction to the Pedestrian Plan process

In pairs, Board Members answered the questions:

Values: Is walkability important to our community, why/why not?

Vision: What do we want the future to be?

Goals: What goals should the region have for walkability?

OCTOBER 2013

Update on Public Involvement

Review of Values and Vision statements

Introduction to DRPT Multimodal System Design Guidelines (Web Movie 2)

Review Map of Existing Activity Density

Discussion and Identification of Multimodal Centers and Districts

JANUARY 2014

Overview of Public Survey response

Update on the development and TTC review of Multimodal Centers and Districts

MARCH 2014

Distribution of public comments to decision-makers regarding walkability

Presentation on public survey responses

Presentation of Multimodal Center and District development

MAY 2014

Update and review of draft goals, strategies, and performance measures

SEPTEMBER 2014

Review of Draft Pedestrian Plan

JANUARY 2015

Review and approval of Final Pedestrian Plan

3.4 Media Coverage

On two occasions, WSLs 10 featured work being undertaken as part of the Pedestrian Plan on TV broadcasts and their online news feed. The October 29, 2013 broadcast advertised the public survey.

Survey to help make Roanoke Valley more walking & public transit friendly

Posted: Oct 29, 2013 4:17 PM EST
Updated: Nov 12, 2013 4:17 PM EDT

By Katie Love, Reporter - [bio](#) | [email](#)

Leaders with the Roanoke Valley Alleghany Regional Commission need your help finding ways to make the area more friendly for walkers and public transportation users.

They're asking people in Roanoke, Salem, Vinton, and Bedford, Botetourt, Montgomery and Roanoke counties to take a survey.

The survey is part of the Regional Pedestrian and Transit Vision Plans.

The goal is to make walking and public transit easier to use.

"We are now considered a large urban area by state standards," regional planner, Cristina Finch says. "So, as we try to plan for the future as our region continues to grow, we need to start thinking about how people get around our region, not just about driving."

The survey has 25 questions. You can take it [here](#).

The May 27, 2014 broadcast highlighted work to define multimodal centers and districts as well as provided two example locations in the region where pedestrian accommodations are recommended, the area around the Lewis Gale Medical Center and Plantation Road between Exit 146 and Williamson Road.

The May 27 broadcast was also publicized on the Regional Commission's facebook page.

Roanoke Valley shows need for more pedestrian-friendly areas

Posted: May 27, 2014 6:27 PM EST
Updated: Jul 23, 2014 1:28 PM EST

By Katie Love, Reporter - [bio](#) | [email](#)



The Roanoke Valley-Alleghany Regional Commission makes a push to make our region more walkable.

Surveys from more than 500 people in our community points to a need of being more pedestrian-friendly.

The commission identified 25 target areas in the region to either improve or add sidewalks, crosswalks, and stop lights.

It includes Plantation Road in Roanoke, the Lewisgale Hospital area in Salem, and Tanglewood Mall.

"We are trying to help to make the Roanoke Valley a healthier environment," Regional Planner Cristina Finch says. "So the way we work on that is through transportation and making areas more convenient for walking."

The next step is to prioritize which projects should be done first.



Roanoke Valley-Alleghany Regional Commission shared a link.
May 28

The Regional Commission's, Cristina Finch, recently took WSLs 10 on a walk through Plantation Road and other areas in our region to explore the need for pedestrian friendly infrastructure.



Roanoke Valley shows need for more pedestrian-friendly areas
www.wsls.com

The Roanoke Valley-Alleghany Regional Commission makes a push to make our region more walkable. Surveys from more than 500 people in our community points to a need of being more pedestrian-friendly.

Like · Comment · Share

4 1 Share

4.0 WALKING IN THE ROANOKE VALLEY TODAY

4.1 Land Development Patterns

The way in which local governments permit land to be developed plays a significant role in people's ability and willingness to walk. Land in the Roanoke Valley developed prior to the automobile-oriented development boom of the mid-20th century generally features these walking-friendly characteristics:

- ▲ NARROWER STREETS WITH SHORTER CROSSING DISTANCES
- ▲ CONNECTED STREETS
- ▲ SIDEWALKS
- ▲ TREES PROVIDING SHADE ALONG SIDEWALKS
- ▲ BUILDINGS CLOSE TO THE STREET
- ▲ BUILDING FRONT DOORS CONNECTED BY A SIDEWALK TO A SIDEWALK ALONG THE STREET
- ▲ PARKING ON THE STREET, NEXT TO OR BEHIND BUILDINGS

It is unrealistic to expect that all parts of the Roanoke Valley will be retrofitted or newly developed to be pedestrian active places. The region is mountainous and often the landscape causes significant challenges to developing walkable environments. However, places like San Francisco show that where there is an interest and a demand, walkable environments can be created in any terrain.

In the Roanoke Valley, much land has already been developed at low densities with the intent that people should only drive to get to and from those locations. Trying to retrofit these areas to provide walking infrastructure is an expensive and difficult task. Unfortunately, adding pedestrian infrastructure to an

automobile-oriented development may meet safety goals, but often results in an environment that is still less walking-friendly than if the location were developed with pedestrians in mind from the beginning.

In the example shown in Figures 2 and 3, two types of development exist along the same street. Both developments feature sidewalks and decorative lighting, yet the number of people who walk in these places varies greatly. The reason is solely due to the land development patterns. The buildings in Figure 2 are closer to the sidewalk with front doors accessible from the main sidewalk. The road is more narrow thus easier to cross, and vehicle parking exists on-street, next to, or behind buildings.

In contrast, the buildings in Figure 3 are located farther from the sidewalk, and parking lots are built in between sidewalks and buildings. The road is wider and designed primarily for the movement of vehicles with no on-street parking.

Figure 2 clearly shows a place that was developed for people while the environment in Figure 3 was developed for cars.



Figure 2: East Main Street, Salem



Figure 3: West Main Street, Salem

New developments within the Roanoke Valley urban area are being designed and constructed for people, acknowledging that people enjoy walking to places. The picture below shows how the Daleville Town Center, a mixed-use development in Botetourt County, is being developed for people and marketed for its walkability.



Figure 4: New mixed-use development designed for people walking, Daleville

The City of Roanoke, as part of its revised zoning process, now requires new commercial buildings to be constructed near the street with parking to the side or rear, making the business easily accessible to people from their car or from the sidewalk. One example is the New Horizons building recently constructed on Melrose Avenue shown in the following figure.



Figure 5: New development easily accessible by multiple modes, Roanoke

During the site's development, City staff worked with the developer to ensure that pedestrian connections (via a sidewalk and a staircase) were made from the building's front door to the main sidewalk which also connects to a sheltered bus stop. The parking was conveniently located to the side of the building. The

result is an attractive business, visible to passersby, that is easy to access via many modes of transportation.

Local governments have a great responsibility to make conscious decisions about what they are permitting within their boundaries including the types of development, where they are located, their design and configuration on a site, and if they include pedestrian connections to and along adjacent roads and off-road transportation corridors.

identify where walking for trips is possible and likely. The proximity of people to places is one key determinant of whether or not someone would walk.

As shown in Figure 6, much of the Roanoke Valley is low density with 10 or fewer people per acre. In many of these areas, it is not likely that people would choose to walk to get somewhere due to the longer travel distances. A focus on the areas with higher concentrations of residents and employees guides the recommendations for pedestrian infrastructure. In reviewing the activity density, along with local knowledge of destinations and the relationship between residential areas and businesses, technical staff defined regional multimodal centers and districts in which a key concept is how easy is it to walk within those places either now or desired in the future. Figures 7 and 8 show the region's multimodal centers and districts. The legend in Figure 8 indicates an intensity classification for Multimodal Centers from P1 (Rural or Village Center) to P-6 (Urban Core).

4.2 Activity Density

As part of a long-range planning exercise, the desire to make some parts of the Roanoke Valley friendlier for walking led to a review of the density of people throughout the region. The distance between where people reside or work and where they need or want to go is a critical factor in people's willingness to walk to accomplish that trip. Transportation investments in pedestrian infrastructure are most warranted where they have the potential to make walking trips easy for many people.

To help identify the region's multimodal centers and districts, the concept of activity density was mapped. Activity density is defined in the Multimodal System Design Guidelines to be the number of residents plus employees per acre. This concept can be applied to any place in the Commonwealth. The purpose of mapping activity density is to show where the concentrations of people, and thus activity, are located, which therefore helps to

Figure 6: Snapshot of Regional Activity Density

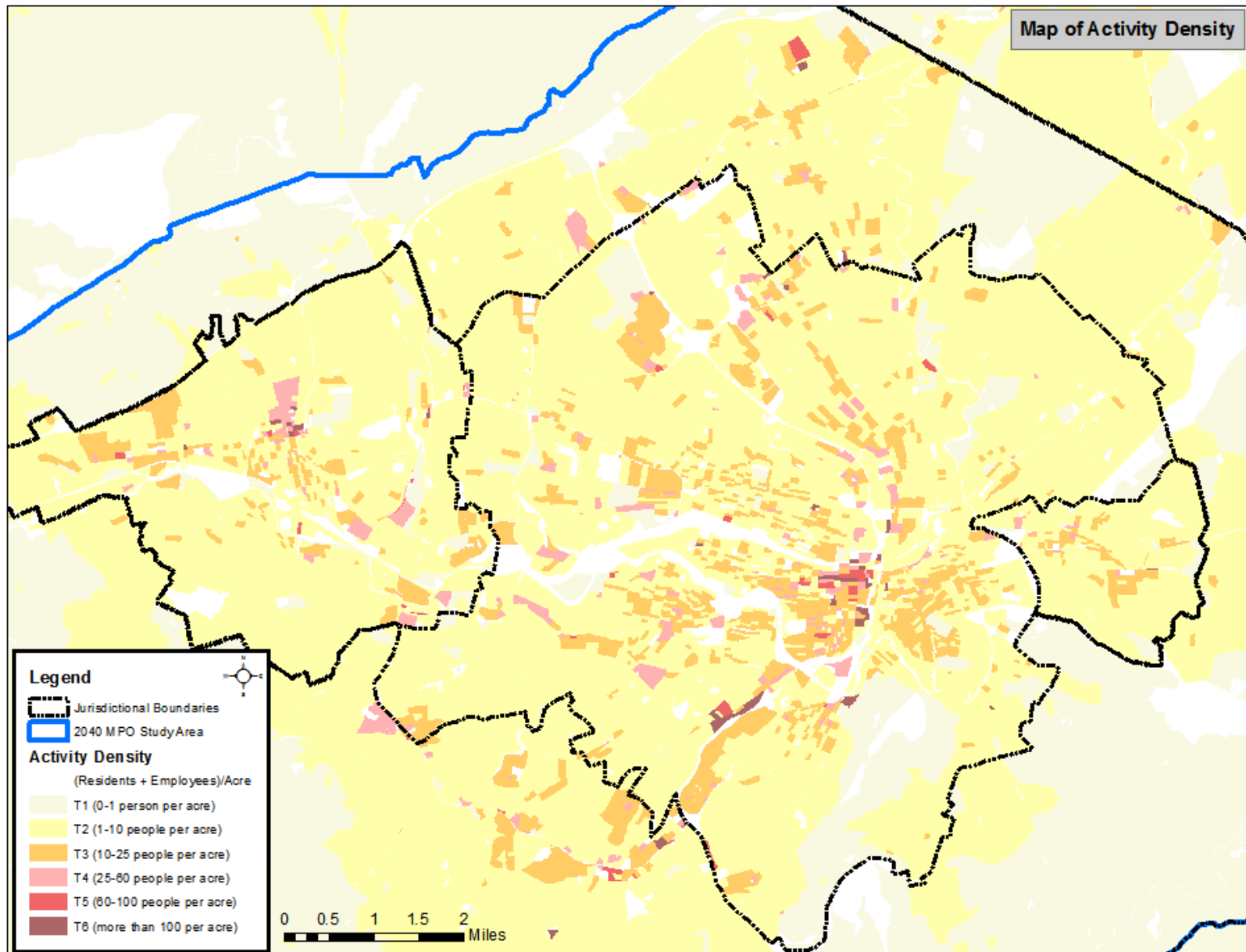


Figure 7: Snapshot of Regional Multimodal Centers and Districts

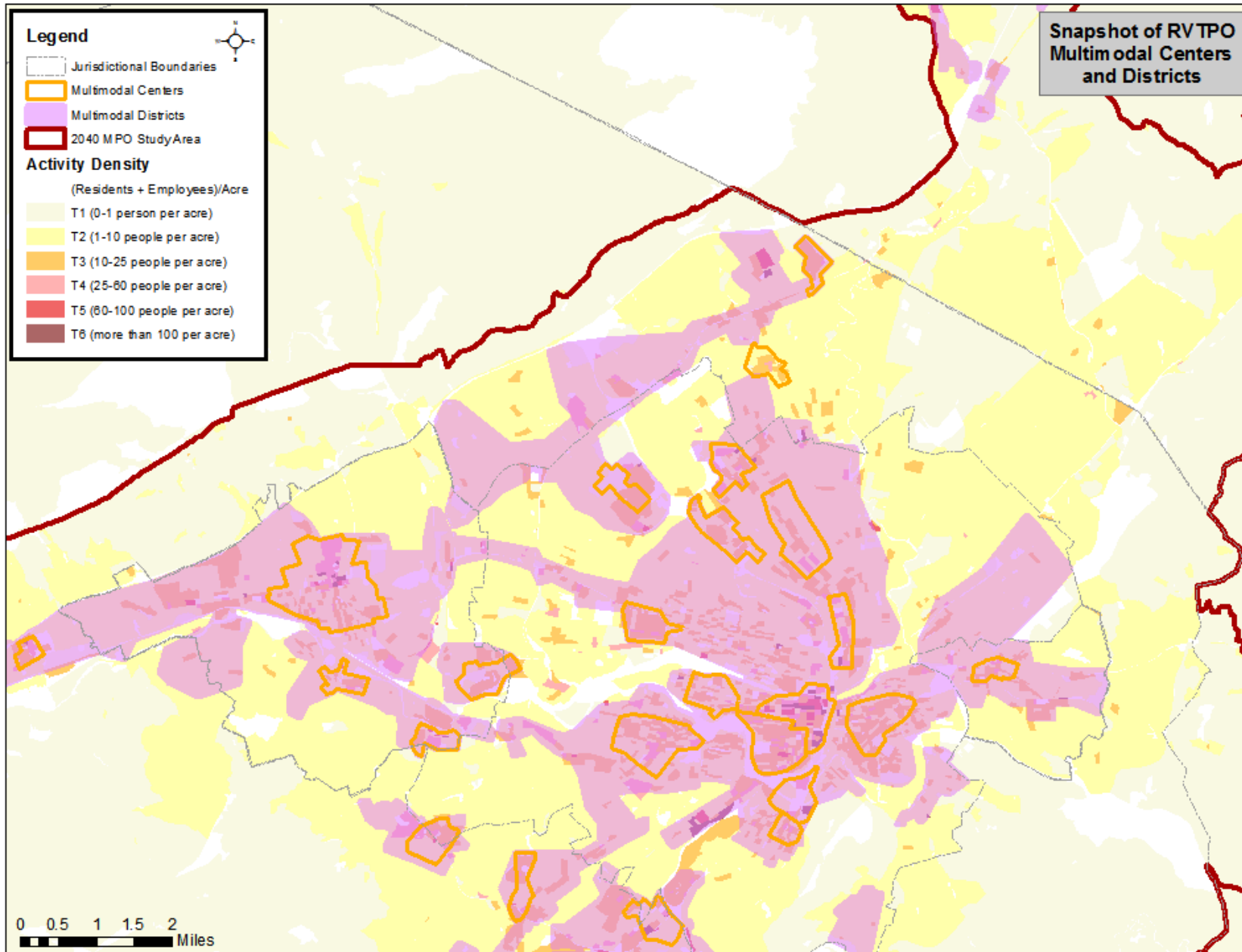
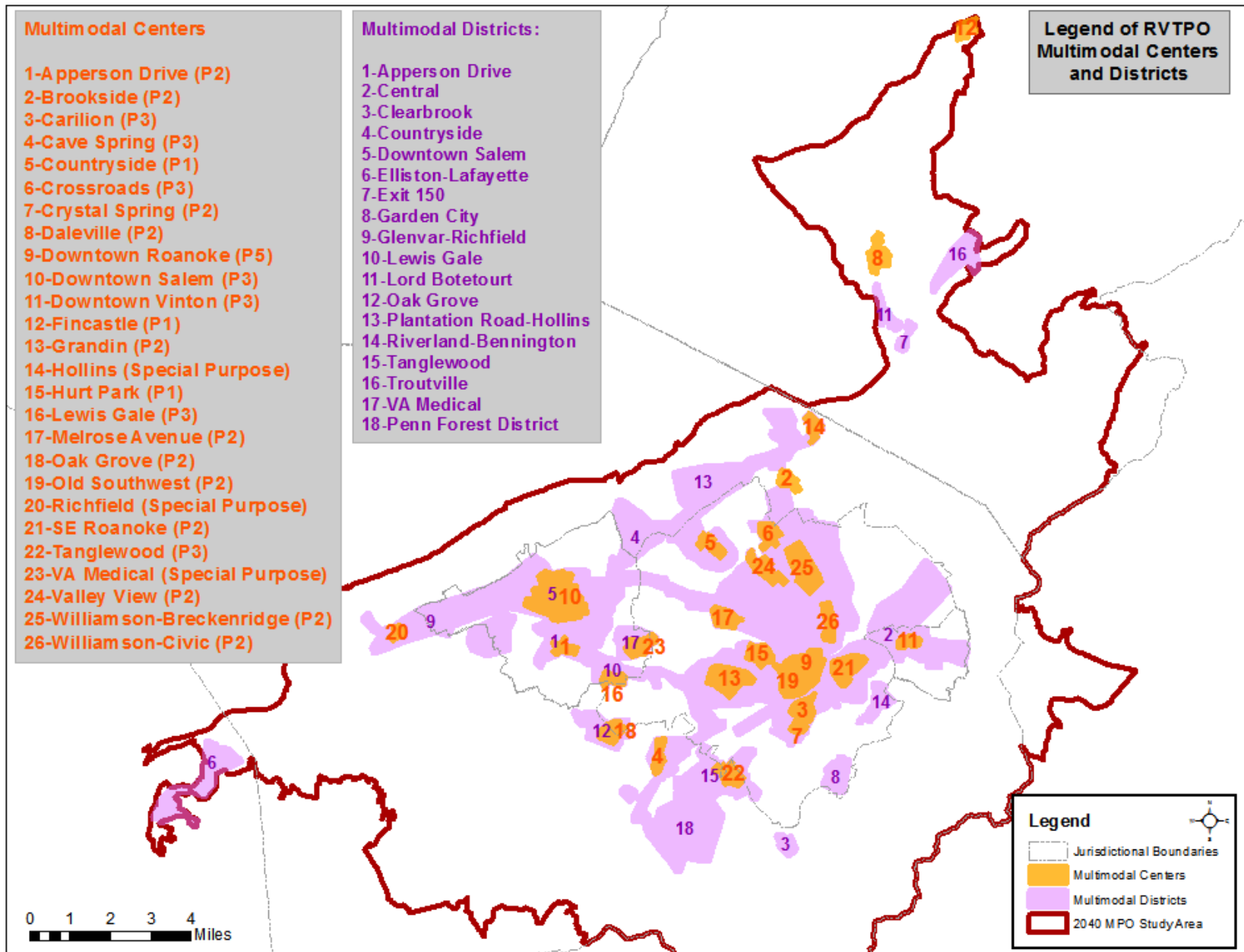


Figure 8: Legend of Regional Multimodal Centers and Districts



4.3 Existing Pedestrian Infrastructure

While there are many words used to describe the surface on which people walk, for the purpose of the Pedestrian Plan, a simple hard surface versus natural surface distinction is made among existing accommodations. The purpose of this distinction is the hard surface accommodation can be used by anyone including people using mobility devices such as walkers and wheelchairs, whereas a natural surface accommodation may not be accessible to everyone. A hard surface accommodation is stable and slip resistant such as concrete or asphalt; a natural surface accommodation may consist of dirt or wood chips.

*Is it a Sidewalk?
Trail?
Greenway?
Pathway?
Shared-Use Path?
Multi-Use Path?
Multi-Use Trail?*

Many times it is obvious where additional infrastructure is needed due to the presence of a dirt path along a road. Other times the need for an accommodation is less obvious because people may be walking on roadway shoulders or through parking lots which do not display worn paths. People can often safely walk on local streets which feature no designated walking facility when safety precautions are taken such as drivers operate at safe speeds, walkers wear reflective gear and walk opposite to traffic, etc.

In addition, pedestrian amenities such as crosswalks, curb ramps, and pedestrian signals exist throughout the Roanoke Valley and are in the process of being inventoried and mapped.

4.4 Interaction between Travel Modes

Every traveler is a pedestrian at some point during their trip. The following sections relate the pedestrian to other primary transportation modes.

4.4.1 Pedestrian-Transit

Adequate pedestrian facilities, such as sidewalks, landing pads, and curb ramps enable people to ride public transit because they allow people to physically access bus stops and wait for the bus in a safe location. Without pedestrian facilities, some people will access the bus stop even under poor conditions; other people will instead drive their car, call for paratransit services, depend on another person for a ride, or not travel at all.

Paratransit services support people with disabilities who cannot use the fixed-route system. These services are very costly because the service can only support a few trips per hour when compared with fixed-route service. However, it is impractical to suggest that people with disabilities try using the fixed-route service when they cannot physically get there in a safe way. Fixed-route service provides the option of freedom and mobility on one's own schedule that paratransit service does not allow, which is the main motivation for people to choose fixed-route over paratransit. Many bus stops are not accessible due to lack of infrastructure. An investment in pedestrian access to the region's bus stops is needed.

People are more likely to choose riding public transit when they feel safe walking to the bus stop, crossing the street, and waiting for the bus. Pedestrian amenities at transit stops such as benches or shelters are essential because they make riding public transit a more comfortable and enjoyable experience. In some places where benches are not provided, people have resorted to building one themselves as shown in Figure 9.



Figure 9: Makeshift pedestrian facilities at bus stops

Figure 10 below shows a bus stop in front of Edinburgh Square, a retirement community in North Roanoke County. The location is one of many bus stop pairs in the region that lack adequate facilities including sidewalk connections, landing pads and curb ramps.

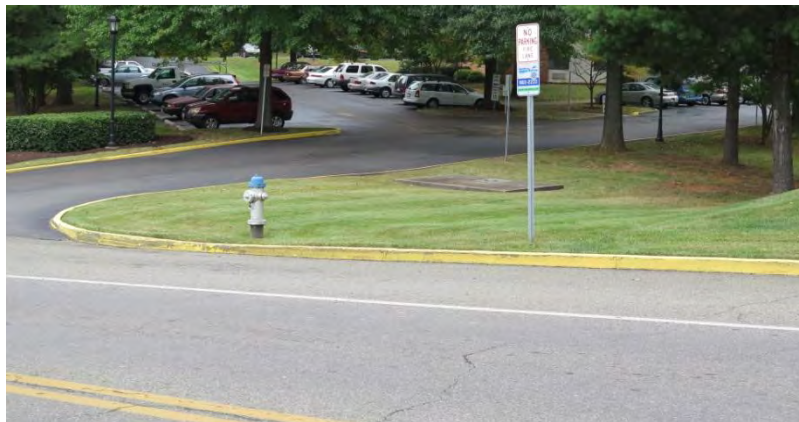


Figure 10: Bus Stop at Edinburgh Square, Roanoke County

In many places throughout the region, crosswalks are striped at unsignalized locations often specifically for crossings near

schools or churches. To facilitate an integrated multimodal system, crosswalks to bus stops or to connect bus stop pairs should also be provided. Where crosswalks are marked, curb ramps are also needed. Figure 11 shows a crosswalk near a school and at a bus stop in need of a curb ramp.



Figure 11: School Crossing, 9th Street and Montrose Avenue, City of Roanoke

Figure 12 shows the need to connect pedestrian accommodations given that the curb ramps are located the corner and the crosswalk is midblock in front of the church. A bus stop is also present in front of the church.



Figure 12: Church Crossing, Washington Avenue near N. Poplar Street, Vinton

New pedestrian accommodations constructed next to bus stops should always consider accessibility, per the Americans with Disabilities Act (ADA), and incorporate landing pads at the bus stop. Such additions are a small increase in the overall cost of a project and can be accomplished easily during construction. Figure 13 shows a new sidewalk that will entail additional work to make the bus stop accessible because the space between the sidewalk and the curb at the bus stop was not paved and no curb ramp was installed to accommodate wheelchairs crossing at the intersection.



Figure 13: Wise Avenue bus stop—pedestrian access coordination, City of Roanoke

Along streets where transit service is provided and on-street parking exists, a common conflict is the ability for a pedestrian to get from the bus stop onto the bus without having to walk between or around parked cars. If the bus stop does not generate sufficient activity, it may be preferable to relocate the bus stop and provide the space for parking. However, where bus stops generate activity and it makes sense to have them in a particular location, parking must be removed to allow people with disabilities to use the bus stop. Anywhere a bus stop exists, adequate space must be provided for the bus to pull up to the bus stop.

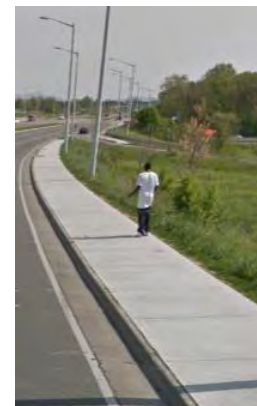
A valuable resource for identifying the improvements needed at bus stops is the Bus Stop Accessibility Study completed by the Regional Commission in September 2013. The Study reviewed the most active bus stops based on their Bus Stop Activity Index,

a factor of ridership and frequency of usage, as well as bus stops that were near high activity paratransit pick-up locations and recommended pedestrian improvements.

4.4.2 Pedestrian-Bicycle

Bicyclists and pedestrians are often lumped together for good reason as oftentimes infrastructure is constructed to accommodate both types of travelers in the same space. In the Roanoke Valley, this is most often done on paved off-road facilities, commonly referred to as greenways. Although it is provided less frequently, the same accommodation can be located along roadways where a wide paved space is constructed for both bicyclists and pedestrians. The Multimodal System Design Guidelines generally recommend a shared space separated from vehicle traffic along higher speed and volume roads classified as Multimodal Through Corridors. The City of Roanoke’s Street Design Guidelines also recommend shared spaces along arterial streets.

When the City of Roanoke provided pedestrian accommodations along Hershberger Road, a six-lane arterial that crosses over an interstate, the engineers designed a wider-than-typical sidewalk on one side to also accommodate bicycles. Due to the location, it was not desirable to accommodate bicycles on the street; instead, the engineers took advantage of the maximum amount



of space available to coordinate improvements for both types of travelers. It is imperative that projects be approached with a holistic mindset to accomplish as many improvements as possible, particularly if the additional cost is not burdensome.

Figure 14: Hershberger Road bike/pedestrian facility, City of Roanoke

In other communities, shared bicyclist/pedestrian spaces are visibly marked. Such markings are helpful to instruct people that bicyclists and pedestrians are permitted to use the accommodation and to provide guidance on where each should travel.



Figure 15: Marked shared bike/pedestrian facility, France

On-road bike accommodations have also become a place where people using motorized scooters will travel. Where sidewalks do not exist or are not accessible, people using mobility devices are required by law to travel in the direction of traffic, which often takes place on a roadway shoulder or in a bicycle lane. Places where this is occurring are good indications that new or improved pedestrian infrastructure may be needed.

4.4.3 Pedestrian-Vehicle

Every driver is a pedestrian as they walk from their origin to their vehicle and from their vehicle to their destination. During site design of parking lots, in addition to providing a connection to the primary building, it is important for designers to evaluate the nearby destinations and the routes that pedestrians will likely take to get there so that infrastructure can be incorporated into the facility's construction. When pedestrian accommodations are not considered in the design of parking lots and their connection to destinations, the result is locations inaccessible for people with disabilities, dirt paths worn from foot traffic, or

additional short-distance vehicle trips. The ability for people to park their vehicle and walk the rest of the way is especially critical in Multimodal Centers and around regional venues where driving for short trips is not possible or desirable.

As mentioned in the Pedestrian–Transit section, a natural component of walking is the need to cross the street to get to one's destination. In the previous example, the destination was a bus stop, but more commonly, the destination is a building. The picture below shows a person with a temporary disability traveling from their car to a nearby building. Fortunately, sidewalks and ramps exist to assist him as he travels.

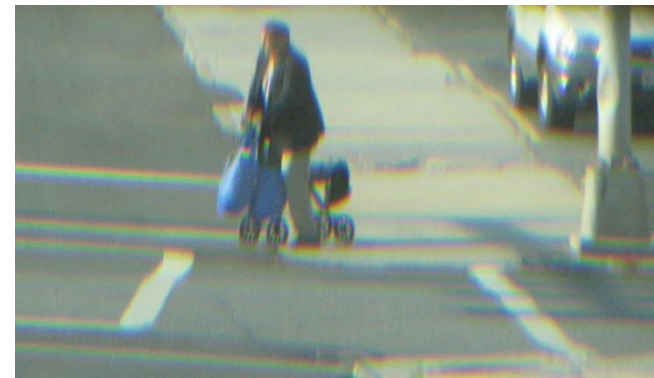


Figure 16: Traveling with a temporary disability, Downtown Roanoke

In order to avoid crashes, it is useful if drivers know where to expect to see pedestrians so they know to reduce their speed or stop. High activity crossings or places where pedestrian visibility is desired often feature simple amenities such as marked crosswalks, walk/don't walk signals, flashing warning lights, High-Intensity Activated Crosswalk (HAWK) signals, or pedestrian signs. Intersections and marked crosswalks are common places where drivers expect to see pedestrians. At unmarked locations, pedestrians crossing the street assume more risk and responsibility for avoiding vehicles. The Manual on Uniform Traffic Control Devices provides the national standards on when

and how to provide markings, signs, and traffic signals along public roads including those related to pedestrians.

5.0 PREVIOUSLY ADOPTED PEDESTRIAN-RELATED DOCUMENTS AND POLICIES

5.1 Regional Plans Review

Several regional plans were reviewed and influenced the content and recommendations of this Plan including the Constrained Long-Range Transportation Plan (2011), Congestion Management Plan (2014), Roanoke Valley Conceptual Greenways Plan (2007), Bikeway Plan (2012), Route 419 Corridor Plan (2010), and the Study on Pedestrian Access to Commercial Centers (2006).

5.2 Local Plans Review

Local plans were also reviewed to identify adopted policies, recommendations, and projects related to pedestrian facilities. This review encompassed a wide variety of planning areas from locality-wide comprehensive plans to plans for village centers and neighborhoods. Staff looked for references to each of the 12 topics listed below. A matrix of the topics referenced in the plans can be found in Table 1.

- 1. Bicycle Accommodation:** Plan identified a need for bike lanes, bikeways, bicycle safely, sharrows, or off road path specifically for bicycle use.
- 2. Crosswalks:** Plan identified the need for a crosswalk at specific locations; general statement about the need for crosswalks.

3. Design Guidelines: Plan made reference to Federal, State, or local design guidelines or plan recommended the development and adoption of guidelines related to pedestrian needs.

4. Intersection Improvements: Plan identified the need for improvements at specific intersections; plan made a general statement about the need for intersection improvements related to pedestrians.

5. New or redevelopment required/suggested improvements: Plan identified a requirement, either adopted or recommended, for new development to include provisions for pedestrians and/cyclists.

6. Pedestrian Safety: Plan identified a specific or general reference to improving pedestrian safety.

7. Sidewalk: Plan identified a need for sidewalk installation or improvements at specific locations or made a general statement about the need for sidewalks.

8. Streetscape: Plan identified a need for streetscape improvements at specific locations or made a general statement about the need for streetscapes (trees, signage, benches, lighting, etc.).

9. Traffic Calming/Speed Reduction Measure: Plan identified a need for traffic calming or speed reduction at specific locations or made a general statement about the need for traffic calming.

10. Traffic Signal: Plan identified a need for traffic signal improvements at specific locations or made a general statement about the need for pedestrian signals.

11. Trail/Greenway: Plan identified locations for trails/greenways or made a general statement of need for additional trails/greenways.

12. Village Centers Adopted or Proposed: Plan recommended an area to be considered a village center or similar small planning area.

5.3 Existing Ordinance Review

Local zoning and subdivision ordinances are local government tools to regulate land development. Such ordinances for local governments in the Roanoke Valley were reviewed to identify adopted regulations related to pedestrian facilities. A list of the ordinances reviewed is below followed by the findings from the ordinance review. The purpose of this review is to help local governments identify where improvements in their ordinances can be made to better accommodate pedestrians and provide examples of language from other local governments in the region.

- ▼ [BEDFORD COUNTY SUBDIVISION ORDINANCE, 2000](#)
- ▼ [BEDFORD COUNTY ZONING ORDINANCE, 1999](#)
- ▼ [BOTETOURT COUNTY SUBDIVISION ORDINANCE, 2009](#)
- ▼ [BOTETOURT COUNTY ZONING ORDINANCE, 2002](#)
- ▼ [MONTGOMERY COUNTY SUBDIVISION ORDINANCE, 1991](#)
- ▼ [MONTGOMERY COUNTY ZONING ORDINANCE, 1999](#)
- ▼ [CITY OF ROANOKE SUBDIVISION ORDINANCE, 2007](#)
- ▼ [CITY OF ROANOKE ZONING ORDINANCE, 2013](#)
- ▼ [ROANOKE COUNTY SUBDIVISION ORDINANCE, 2002](#)
- ▼ [ROANOKE COUNTY ZONING ORDINANCE, 1999](#)
- ▼ [CITY OF SALEM SUBDIVISION ORDINANCE, 2005](#)
- ▼ [CITY OF SALEM ZONING ORDINANCE, 2005](#)
- ▼ [TOWN OF VINTON, SUBDIVISION ORDINANCE](#)
- ▼ [TOWN OF VINTON, ZONING ORDINANCE, 1995](#)

5.3.1 Bedford County

BEDFORD COUNTY SUBDIVISION ORDINANCE, 2000

Article 6 - Street and Sidewalks

6.4.7 In business and industrial developments, the streets and other accessways shall be planned in connection with the grouping of buildings, location of rail facilities, and the provision of alleys, truck loading and maneuvering areas, and walks and parking areas so as to minimize conflict of movement between the various types of traffic, including pedestrian.

Division 2 - General Street Design Standards

6.7 Adoption of state highway department standards.

All design standards of the Virginia Department of Transportation are hereby adopted by reference; such design standards shall govern streets dedicated to public use unless otherwise specified by this ordinance.

Division 5 - Curb, Gutter and Sidewalks

6.24 Sidewalks.

In all townhouse or multi-family developments or in any developments with a density of greater than three units per acre sidewalks are required on both sides of the road.

BEDFORD COUNTY ZONING ORDINANCE, 1999

Does not address pedestrian, sidewalk, etc.

5.3.2 Botetourt County

BOTETOURT COUNTY SUBDIVISION ORDINANCE, 2009

Sec. 21-27. Provisions for nonresidential development.

(b)(2) Streets shall be adequate to accommodate the type and volume of traffic anticipated to be generated thereon, and shall comply with current department of transportation standards.

Sec. 21-134. Streets.

(a) General requirements. Except where specifically waived elsewhere herein, or permitted by the zoning ordinance, each lot within a subdivision shall be served by a publicly dedicated and state maintained street. New streets shall conform to the standards and regulations of the state department of transportation and to this section. All approvals and inspections of streets will be coordinated with the Virginia Department of Transportation, the Botetourt Comprehensive Plan and any applicable proffers or special exception conditions.

BOTETOURT COUNTY ZONING ORDINANCE, 2002

Article II. - District Regulations Generally

Division 7. Planned Unit Development (PUD)

Sec. 25-188. Special review procedures

(c)(3) The existing and proposed pedestrian circulation system, including sidewalks, trails and bike paths, and the relationship with the vehicular circulation system, indicating proposed treatments of points of conflict.

Division 8. Traditional Neighborhood District (TND)

Sec. 25-203. Size and designated areas.

(b)(4) Buffer areas may be required. Although connectivity of streets, sidewalks, and pathways is generally preferred, buffer areas may be required when necessary to separate the TND from adjacent properties zoned for residential or agricultural uses, and may be included within one or more of the core, edge or workplace areas.

Sec. 25-207. Commercial and industrial lot and building requirements.

(f) Required yards for commercial uses.

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

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

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

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

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

Sec. 25-208. Civic use requirements.

(b) Required yards for civic uses.

1. Front. Minimum: None. A sidewalk of at least eight (8) feet shall be provided along all lot frontages in which the setback is less than fifteen (15) feet. Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

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

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

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

Sec. 25-210. Streets, alleys, paths, blocks and parking.

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

(e) Sidewalks. In the core area, sidewalks shall be provided on both sides of the street. Paved area of sidewalk in core area shall be not less than six (6) feet wide, with total sidewalk area width not less than twelve (12) feet. In the edge area and in workplace areas, sidewalks shall be provided on both sides of the street. Paved area of sidewalk in edge and workplace areas shall be not less than four feet wide, with total sidewalk area width not less than eight (8) feet.

(f) Pedestrian and/or bicycle routes. Pedestrian and bicycle routes shall be provided to connect all uses, so that pedestrians and bicyclists can move comfortably and safely from any site within the TND to any other site within the TND. Pedestrian traffic shall be accommodated through the provision of sidewalks and paths. Bicycle traffic shall be accommodated through the provision of designated, well-marked bicycle lanes and/or paths suitable for bicycle traffic.

Article IV. - Supplemental Regulations, Division 1. Use Regulations

Sec. 25-445. Large format retail uses.

(2) Access.

a. Entrances to the site must be kept to a minimum, and must be placed in such a way as to maintain safety, efficient traffic circulation, and to limit the impact on any adjacent properties and land uses.

b. Parking aisles leading to customer entrances must be separated by pedestrian walkways with paved sidewalks, low intensity lighting, and landscape strips planted with grass and/or shrubs, between the parking surface and the pedestrian sidewalk.

c. Paved sidewalks, a minimum of eight (8) feet in width, must be provided along the facades of buildings with customer entrances or building facades abutting customer parking spaces. When provided outside of the primary building envelope, vending machines, newspaper/magazine stands and similar vending facilities must be within vestibules or in kiosks designed consistent with the architecture of the principal structure, and constructed using the same finish materials.

5.3.3 Montgomery County

MONTGOMERY COUNTY SUBDIVISION ORDINANCE, 1991

Sec. 8-152. New streets.

(a) Public streets. New public streets are permitted in all subdivisions. Public streets shall be designed and constructed in accordance with the minimum standards of the Virginia Department of Transportation, except that the surface pavement layer shall be asphalt concrete. All site related improvements required by VDOT or the county for vehicular ingress and egress, including but not limited to traffic signalization and control shall also be designed and constructed in accordance with the minimum standards of Virginia Department of Transportation. Street construction plans must be approved by the Virginia Department of Transportation prior to approval of the final plat.

MONTGOMERY COUNTY ZONING ORDINANCE, 1999

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

(1)e. A system of relatively narrow, interconnected streets with sidewalks, bikeways, and transit that offer multiple routes for motorists, pedestrians, and bicyclists and provides for the connection of those streets to existing and future developments.

(5) TND Subarea Standards and Uses.

(a) Neighborhood Core Requirements

3. Crosswalks shall be incorporated within the project, at intersections where new streets are proposed, within parking lots, or other needed pedestrian connections subject to VDOT approval. Crosswalks shall be designed to be an amenity to the development, e.g. heavy painted lines, pavers, edges, and other methods of emphasizing pedestrian use, including bulb-outs and other pedestrian designs to shorten walking distances across open pavement. Medians may be used in appropriate areas to encourage walking and to act as a refuge for crossing pedestrians;

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

(ii)(d) Required yards for commercial uses.

1. Front. Minimum: None. A sidewalk of at least eight (8) feet shall be provided along all lot frontages in which the setback is less than fifteen (15) feet. Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

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

3. Rear. Minimum: Thirty-five (35) feet when served by a rear alley; no rear setback required when the rear of the lot also functions as a primary access point for pedestrian traffic. Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

10. Streets, alleys, sidewalks, street trees, street furnishing and utilities.

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

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

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

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

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

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

1. In order to minimize light pollution, light shall be directed downward to the immediate area being lighted and away from any living quarters.

2. Street lights shall be dark sky compatible. Lighting shall be designed and installed to be fully shielded (full cutoff) and shall have a maximum lamp wattage of two hundred fifty (250) watts HID (or lumen equivalent) for commercial lighting, 100 watts incandescent, and twenty-six (26) watts compact fluorescent for residential lighting (or approximately one thousand six hundred (1,600) lumens). In residential areas, light should be shielded such that the lamp itself or the lamp image is not directly visible outside the property perimeter.

3. Floodlights or directional lights (maximum one hundred (100)-watt metal halide bulbs) may be used to illuminate alleys, parking garages and working (maintenance) areas, but must be shielded or aimed in such a way that they do not shine into other lots, the street, or direct light out of the TND.

4. Floodlighting shall not be used to illuminate building walls (i.e. lights should not be placed on the ground so that a beam of light is directed upward).

5. Site lighting shall be of a design and height and shall be located so as to illuminate only the lot.

6. No flashing, traveling, animated, or intermittent lighting shall be visible from the exterior of any building whether such lighting is of temporary or long-term duration.

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

Sec. 10-32.1. Traditional Neighborhood Development Infill District.

(8) Lot and setback standards:

(ii) Lot standards for non-residential uses and mixed use buildings

(d) Required yards for commercial uses.

1. Front. Minimum: None. A minimum eight (8) foot wide sidewalk shall be provided along all lot frontages in which the setback is less than fifteen (15) feet. Maximum: None; however, all building setbacks shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

2. Side. Minimum: None, unless adjacent to a residential structure in which case a minimum setback of ten (10) feet' shall be required. Maximum: None; however, all building setbacks

shall be designed so as to achieve the purpose and intent of the district to create streets that are framed by buildings and thus comfortable for pedestrians.

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

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

(12) Site and building design

(b) Site design—Non-residential, mixed use and multi-family units.

3) Clear pedestrian pathways shall be provided between buildings on the same lot and between buildings on adjacent lots to ensure a continuous pedestrian pathway throughout the district;

4) Crosswalks shall be incorporated within the project, at intersections where new streets are proposed, within parking lots, or other needed pedestrian connections as approved by the County, VDOT or the County's designee. Crosswalks shall be designed to be an amenity to the development, e.g. heavy painted lines, pavers, edges, and other methods of emphasizing pedestrian use. Bulb-outs and other pedestrian designs may be used to shorten walking distances across open pavement. Medians may be used in appropriate areas to encourage walking and to act as a refuge for crossing pedestrians;

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

Sec. 10-34. PUD-COM Planned Unit Development-Commercial District.

(f) Streets.

1. Streets serving dwellings shall be subject to the standards of the PUD-RES district.

2. Public streets shall be designed and constructed in accordance with the minimum standards of the Virginia Department of Transportation.

Special Districts

Sec. 10-35. PUD-RES Planned Unit Development-Residential District.

(7) Use Limitations

(f) Streets.

1. Streets serving single-family attached dwellings, multifamily dwellings, commercial and office uses may be dedicated to public use or may be retained under private ownership. Not more than three (3) single-family dwellings may be served by a single pipestem access easement or driveway directly connected to a public street.

2. Public streets shall be designed and constructed in accordance with the minimum standards of the Virginia Department of Transportation.

5.3.4 City of Roanoke

ROANOKE CITY SUBDIVISION ORDINANCE, 2007

Section 3 1.1-400. Standards for streets.

(a) The specific street design standards herein apply to streets with a projected Average Daily Traffic (ADT) of 4,000 or less. For street design and construction standards not explicitly set forth herein, and any street with a projected ADT which exceeds 4,000, the applicable standards of the VDOT Subdivision Street Design Requirements, 2005, shall apply.

(b) Whenever a subdivision is classified as a major subdivision, the subdivider shall provide street improvements as set forth in Table 400-1 below.

(c) Curb and gutter, planted strips, street trees, and sidewalks shall be provided on both sides of a new street. Where lots are being established on only one side of a new street, and where topographic conditions would preclude future establishment of lots on the undeveloped side of the street, sidewalks shall not be required on the side of the street where no lots are being created. Where a subdivision takes place only on one side of an existing street, such improvements shall be required only on the side on which the subdivision takes place.

(d) Required street improvements shall have minimum dimensions as set forth in Table 400-2 below.

ROANOKE CITY TABLE 400-1. REQUIRED STREET IMPROVEMENTS

CONDITION/LOCATION	IMPROVEMENTS REQUIRED
<p>Subdivision which requires creation of a new street in the following zoning districts: RA, R-1, R-7, R-5, R-3, RM-1, RM-2, RMF, and ROS.</p> <p>Subdivision along an existing street, within the following zoning districts: R-7, R-5, R-3, RM-1, RM-2, and RMF.</p>	<ul style="list-style-type: none"> • Street paving • Curb and gutter • Planted strip • Large deciduous street trees • Street lighting • Sidewalks
<p>Subdivision within the following zoning districts: CN, CG, CLS, MX, D, I-1, I-2, IN, and AD.</p>	<ul style="list-style-type: none"> • Street paving • Curb and gutter • Large deciduous street trees, except the Subdivision Agent may approve small deciduous trees in the CN or D district where the area available is inadequate for large trees. • Planted strip or extended width sidewalk • Street lighting • Sidewalks
<p>Subdivision along existing street in an RA, R-12, or ROS district.</p>	<ul style="list-style-type: none"> • Street paving • Curb and gutter • Street trees
<p>Subdivision on a private street in a MXPUD, PUD or INPUD district.</p>	<ul style="list-style-type: none"> • Requirements for asphalt street paving, curb and gutter, planted strips, street trees, street lighting, and sidewalks shall be specified on a PUD development plan approved by City Council.

ROANOKE CITY TABLE 400-2. REQUIRED STREET IMPROVEMENTS:

SPECIFICATIONS AND DIMENSIONS FOR LOCAL STREETS

<u>TYPE OF IMPROVEMENT</u>	<u>STREETS WITH PROJECTED ADT LESS THAN 1,500</u>	<u>STREETS WITH PROJECTED ADT 1,500 TO 4,000</u>
Minimum right-of-way width	50 feet	58 feet
Minimum paved way. Parking on both sides of the street	26 feet	34 feet
Minimum width of planted strip or extended-width sidewalk (back of curb to edge of sidewalk)	6 feet	6 feet
Minimum width of sidewalk	4 feet in the R-12 and R-7 districts; 5 feet in all other districts	5 feet
Curb design	VDOT CG-6	VDOT CG-6
Maximum pedestrian crossing distance ¹	26 feet	20 feet
Maximum street grade	16%	16%
Maximum grade of intersection approach	5%	5%
<i>1. This regulation shall apply only to a newly-created street</i>		

(e) A reduced-width right-of-way may be permitted where the sidewalk and planted strip are located on private properties within a public access easement running parallel to the right-of-way line, and perpetual maintenance of the sidewalk and planted strip is provided for by an owners' association.

CITY OF ROANOKE, ZONING ORDINANCE, 2013

Section 36.2-318 Pedestrian access requirement applies in Districts CN, CG, CLS, IN, and UF

Sec. 36.2-318. Pedestrian access.

In districts where indicated as applicable in Section 36.2-316, designated pedestrian pathways of a minimum unobstructed width of five (5) feet shall be provided and clearly defined from the public sidewalk, or the public right-of-way where there is no public sidewalk, to the public entrance of any principal building. Such pedestrian pathways shall be handicapped accessible, surfaced with concrete, asphalt, bituminous pavement, brick or stone pavers, or a permeable paver system, and shall be distinguished and separated from driveways and parking spaces by landscaping, berms, barriers, grade separation or other

means to protect pedestrians from vehicular traffic. Where any such walkway crosses a motor vehicle travel lane, raised crosswalks shall be provided.

Sec. 36.2-332. Neighborhood Design Overlay District (ND).

(a) Purpose. The Neighborhood Design Overlay District (ND) is intended to promote quality City design by coordinating the development of designated Rehabilitation and Conservation Areas. The City finds and determines that the standards of the ND Overlay District promote compatibility between buildings and structures in the City's traditional neighborhoods, maintain property values, and promote pedestrian-friendly, walkable streets.

(c) Design standards. In considering an application for a zoning permit, the Zoning Administrator shall apply the following standards for construction of, an addition to, or the exterior modification of a dwelling in the ND:

(g) A sidewalk at least three (3) feet in width shall be provided between the front porch of a new dwelling and the street. The sidewalk shall be constructed of an impervious material customarily used for sidewalks in the district.

Sec. 36.2-630. General development standards

The provision and location of all pedestrian and vehicular traffic related facilities, including sidewalks, curbs and gutters, frontage roads, and acceleration and deceleration lanes, shall be as required by the Agent to the Planning Commission, provided that the property's development directly generates the need for such infrastructure and provided further that the infrastructure required is in proportion to the level of pedestrian and vehicular activity generated by the development. Such determination by the Agent shall be based upon a quantifiable need documented by analysis of existing and post-development conditions, such as traffic or drainage studies.

5.3.5 Roanoke County

ROANOKE COUNTY SUBDIVISION ORDINANCE, 2002

Does not address pedestrians, sidewalks, etc.

ROANOKE COUNTY ZONING ORDINANCE, 1999

Sec. 30-82-13.1. Single Family Dwelling, Attached and Detached (Cluster Subdivision Option)

(E) Open space and conservation area requirements.

4. A sidewalk or trail shall be provided to and through the provided open space or conservation areas except for the following areas:

- a. Environmentally sensitive areas that may include locations of species listed as endangered, threatened or of special concern; historic structures and sites; delineated wetlands or riparian zones outside the FEMA study area;
- b. Unsafe areas including but not limited to sink holes, cliffs and areas prone to rock slides; and
- c. Other areas if approved by the zoning administrator.

The location of any such trail shall be clearly marked, and the trail shall be constructed of a surface material that is appropriate to the terrain, and distinguishable to the user.

Sec. 30-91-2.3. Location of Parking.

(C) All required off-street parking spaces shall be located on the same lot as the structure or use, except under the following conditions:

2. Such required spaces are within five hundred (500) feet walking distance of a building entrance or use and such spaces do not require pedestrians to cross a road with a speed limit of thirty-five (35) miles per hour or greater.

Sec. 30-91-3.5. Shared Parking.

(A) Shared parking is encouraged for different structures or uses, or for mixed uses, in any zoning district. At the applicant's request, shared parking may be provided, subject to the following conditions:

4. Uses sharing the parking facility do not need to be contained on the same lot, but shall be a maximum of five hundred (500) feet from the closest parking space in the parking lot which is to be used and allow for safe, convenient walking for most parkers, including safe pedestrian crossings, signage, and adequate lighting.

Sec. 30-91-6. Stacking Spaces and Drive-Through Facilities.

(A) 1. Stacking spaces and lanes for drive-through stations shall not impede on and off site traffic movements, shall not cross or pass through off street parking areas, and shall not create a potentially unsafe condition where crossed by pedestrian access to a public entrance of a building.

Sec. 30-91-4. Parking Area Design Standards.

Sec. 30-91-4.2. Circulation.

(A) In general, parking areas shall be designed to facilitate unimpeded flow of on-site traffic in circulation patterns readily recognizable and predictable to motorists and pedestrians. Parking areas shall be arranged in a fashion to encourage pedestrian access to buildings, and to minimize internal vehicular movements.

(B) Sidewalks measuring at least five (5) feet in width shall connect all parking areas to building entrances. Sidewalks shall also be located around buildings.

Sec. 30-92-5. Standards and Specifications.

(B) Buffer yards.

1. Buffer yards shall be reserved solely for screening and landscaping. No proposed building, building addition, structure, parking area or any other type of physical land improvement

shall be located in a buffer yard. Notwithstanding the above, a driveway entrance or a public road may cross a buffer yard if it is necessary for safe and convenient access to the building site. In addition, buffer yards may be used for greenways.

5. Where deemed appropriate by the county zoning administrator, buffer yards may be allocated for the present or future use as a greenway.

Sec. 30-92-6. Applicability of Regulations and Requirements.

(C) Parking Areas

1. New parking areas shall include planting islands and landscaped medians in combination with low impact design techniques that are planned, designed and located to channel traffic, facilitate storm water management, improve the appearance of parking areas and define and separate parking areas and aisles. In addition to accommodating vehicles, parking areas shall also provide for safe pedestrian and bicycle circulation.

4. c. Landscaped medians shall include sidewalks measuring at least five (5) feet wide to facilitate safe pedestrian circulation to and from destination(s).

Sec. 30-93-1. Purpose.

(A) 6. Ensure that signs do not obstruct fire-fighting efforts, and do not create traffic hazards by confusing or distracting motorists or by impairing drivers' ability to see pedestrians, obstacles, or other vehicles or to read traffic signs.

Sec. 30-93-4. Prohibited Signs.

(A) 12. Any sign that due to its size, location or height obstructs the vision of motorists or pedestrians at any intersection, or similarly obstructs the vision of motorists entering a public right-of-way from private property.

Sec. 30-100-8. Establishment of Sight Triangles.

(A) To promote visibility for pedestrians and the operators of motor vehicles, a clear sight triangle shall be established at the

intersecting rights-of-way of any two (2) public streets. The legs of this sight triangle shall be twenty (20) feet in length. They shall begin at the point of intersection of the two (2) street rights-of-way, and shall extend twenty (20) feet along each right-of-way line. The triangle shall be formed by connecting the endpoints of these two (2) lines.

5.3.6 City of Salem

CITY OF SALEM SUBDIVISION ORDINANCE, 2005

Sec. 78-614. Coordination of streets with existing streets.

(b) Access points to and from the subdivision and the arrangement of streets within the proposed subdivision and their relationship to adjoining, existing streets shall be such as to minimize the effects of traffic, noise, light and danger to pedestrians and children caused by vehicular traffic to and from the proposed subdivision.

Sec. 78-624. Handicap access.

(a) Curb cut ramps for handicap access shall be provided at each intersection, for all streets within and adjacent to a subdivision, regardless of whether a sidewalk is installed at that location.

CITY OF SALEM ZONING ORDINANCE, 2005

Sec. 106-226.6. Development regulations, all districts.

(E) Streets and sidewalks. Streets and sidewalks in all floodplain districts shall be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings shall be required to minimize flood flows without significantly increasing flood heights or established elevations identified floodplain districts.

Sec. 106-314.2. Mixed use structure.

(B) General Standards:

3. The office or commercial use type must occupy at least the first floor of the structure, and should be configured so as to be pedestrian friendly.

Sec. 106-402.13. Interior landscaping standards for parking lots.

(A) 5. Within the interior of the parking lot, landscaping should be used to delineate vehicular and pedestrian circulation patterns, improve stormwater quality and to promote stormwater management objectives. Clear and legible signs and other techniques should be used to further direct the flow of both vehicular and pedestrian traffic within the lot.

Sec. 106-406.17. Establishment of sight triangles.

(A) To promote visibility for pedestrians and the operators of motor vehicles, a clear sight triangle shall be established at the intersecting right-of-ways of any two public streets. The legs of this sight triangle shall be 25 feet in length. They shall begin at the point of intersection of the two street right-of-ways, and shall extend 25 feet along each right-of-way line. The triangle shall be formed by connecting the endpoints of these two lines.

5.3.7 Town of Vinton

TOWN OF VINTON, SUBDIVISION ORDINANCE

Sec. 3. General requirements for subdivision of land.

(a)(6) Blocks, in general, shall not be longer than 1,000 feet or less than 300 feet between street intersections; provided, however, [that] in instances where topography or existing peculiar conditions require it, a longer or shorter block may be approved by the planning commission. A crosswalk shall be provided between cross streets in blocks 800 feet or more long.

TOWN OF VINTON, ZONING ORDINANCE, 1995

Division 7. CB Central Business District

Sec. 4-33. Intent of district.

Pursuant to the general purposes of this appendix, the intent of the CB central business district is to provide for the day-to-day and specialty shopping and service needs of the community. It is intended to be a compact, densely developed and well-defined area having a strong pedestrian orientation and urban shopping area character that is compatible with adjacent residential neighborhoods. The permitted uses and regulations of the district are intended to promote an attractive pedestrian environment with retail, personal service and office establishments at street level and with minimal disruption from vehicle oriented land uses and features that would detract from a safe, convenient and economically viable pedestrian environment. The district is intended to promote continuity of a storefront character with minimum interruption by driveways and vehicle traffic across public sidewalk areas. The district regulations are also intended to preserve the predominant scale of the central business area, promote retention and appropriate use of existing structures and encourage that new development be compatible with the area.

Division 10. PD Planned Development District

Sec. 4-54. General development standards.

(b)(2) Common open space shall have horizontal dimensions of not less than 50 feet, except areas devoted to pedestrian trails, bikeways or leisure trails shall not be less than ten feet in horizontal dimensions.

(b)(3) Common open space shall be arranged, together with streets and walkways, to provide a continuous and interconnected system which is accessible from all dwelling units within the development without having to cross privately owned property.

Division 12. Public/Open Space District

Sec. 4-63. Uses permitted by right.

(i) Bicycle and pedestrian paths and trails.

6.0 DESIGN GUIDANCE AND REFERENCES

Many local, state, and national references exist to help guide the design of new infrastructure in coordination with the adjacent land use and development density. The following is a sample list of resources.

- ▲ NATIONAL ASSOCIATION OF CITY TRANSPORTATION OFFICIALS URBAN STREET DESIGN GUIDE
- ▲ VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION MULTIMODAL SYSTEM DESIGN GUIDELINES (2013)
- ▲ VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD DESIGN MANUAL
- ▲ VIRGINIA DEPARTMENT OF TRANSPORTATION GUIDELINES FOR THE INSTALLATION OF MARKED CROSSWALKS (2012)
- ▲ MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009)
- ▲ ROANOKE COUNTY DESIGN HANDBOOK (2009)
- ▲ CITY OF ROANOKE STREET DESIGN GUIDELINES (2007)
- ▲ UNITED STATES ACCESS BOARD SPECIAL REPORT: ACCESSIBLE PUBLIC RIGHTS-OF-WAY PLANNING AND DESIGN FOR ALTERATIONS (2007)
- ▲ FEDERAL HIGHWAY ADMINISTRATION SAFETY EFFECTS OF MARKED VERSUS UNMARKED CROSSWALKS AT UNCONTROLLED LOCATIONS (2005)
- ▲ AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS PEDESTRIAN GUIDE (2004)

7.0 PEDESTRIAN INFRASTRUCTURE RECOMMENDATIONS

There are many more pedestrian infrastructure needs than those identified in the Regional Pedestrian Vision Plan. The Plan demonstrates the regional backbone infrastructure needed for pedestrian transportation in the Roanoke Valley. Local governments are encouraged to use the regional pedestrian transportation network to further explore the needed local pedestrian transportation connections within each of the multimodal centers and districts and to future developments as they arise near such multimodal areas and corridors. In particular, further identifying local connections to schools, libraries, bus stops, healthcare facilities, grocery stores, and shopping centers are recommended.

A pedestrian transportation system should be accessible to people of all ages and abilities. However, the Roanoke Valley is home to many well-established trail networks, including an outstanding and growing system of greenways. And the Roanoke Valley Conceptual Greenway Plan includes ADA-compliant and non-compliant facilities. Many of the facilities, both existing and proposed, provide logical connections to the pedestrian transportation system. Due to the regional significance of the Greenways, the Roanoke Valley Conceptual Greenway Plan, as amended, is included by reference in this Pedestrian Plan.

Accommodations which are intended to be compliant with the Americans with Disabilities Act (ADA) are listed in the following tables. Citizen input, previously adopted plans, and technical staff input contributed to these transportation infrastructure recommendations.

7.1 Priorities

The prioritization of projects was considered both regionally and locally.

7.1.1 Regional High Priority Projects

The highest priority pedestrian transportation projects are those that are located within multimodal centers because that is where the greatest concentration of residents and employees are located. One of the criteria for defining multimodal centers was trips within that area could be accomplished by roughly a 10-minute or less walk.

7.1.2 Regional Medium Priority Projects

Medium priority regional pedestrian projects are those located within multimodal districts because it is within these areas that traveling without a car is or should be possible. Walking is a critical component of being able to travel without a car, especially when accessing transit for longer distance trips. As such, pedestrian transportation projects within multimodal districts are given a medium regional priority.

7.1.3 Regional Low Priority Projects

Outside of multimodal districts, the population is less dense with less mix of land uses; walking for transportation is less likely due to the longer distances and increased travel time. For these reasons, pedestrian transportation projects outside of multimodal districts are low regional priorities.

In addition, representatives on the Transportation Technical Committee coordinated with the appropriate staff and prioritized projects within their jurisdiction. This exercise was intended to help localities document their local pedestrian priorities and strategize the order in which projects could be pursued via the various funding opportunities available. To prioritize projects, staff considered the following factors:

- ▼ ALREADY “ON THE BOOKS” IN TRANSPORTATION IMPROVEMENT PROGRAM (TIP), SIX-YEAR IMPROVEMENT PROGRAM (SYIP), LONG-RANGE TRANSPORTATION PLAN (LRTP)
- ▼ LOCATED IN A MULTIMODAL DISTRICT OR CENTER
- ▼ PROVIDES A CONNECTION BETWEEN MULTIMODAL CENTERS AND DISTRICTS
- ▼ PRIORITY IN ANOTHER PLAN
- ▼ PROXIMITY TO HIGH ACTIVITY GENERATORS
- ▼ SAFETY ISSUE
- ▼ CITIZEN DEMAND
- ▼ POLITICAL SUPPORT
- ▼ REGIONAL PROJECT (2 OR MORE LOCALITIES IMPACTED)
- ▼ COMPLETES OR LINKS EXISTING FACILITIES
- ▼ EXISTING SHORT-TERM OPPORTUNITY, NOW OR NEVER

7.2 Recommendation Types

The recommended improvements are grouped into three categories: intersection, hard surface, and streetscape. The three categories are general to allow for further detailing of improvements during project development and design. The three categories can broadly be described as follows.

7.2.1 Intersection Recommendations

Intersection recommendations are noted in the maps with a line which indicate complete intersection or point locations, not necessarily direction of travel or precise improvement location. These locations denote where pedestrians are likely to cross the street, the existing infrastructure is insufficient, and as a result, some type of improvement is needed. The appropriate

accommodations at each of these locations may involve different elements.

In cases where the recommendation is related to accessing transit via one or a pair of bus stops, these locations are unique in that they represent where a transportation mode change occurs and a pedestrian becomes a transit rider and vice versa. For some bus stops, the improvement could involve moving the bus stop to a more accessible location.

All intersection recommendations need to be accessible for people with disabilities and needed accommodations may include curb ramps, crosswalks, pedestrian refuges, pedestrian signals, signage, bus stop landing pads, benches, shelters, etc.

7.2.2 Hard Surface Recommendations

This Plan provides hard surface recommendations for transportation accommodations that are accessible to people with disabilities (compliant with the Americans with Disabilities Act) and entail a hard surface that is stable and slip resistant. The most common hard surfaces are concrete and asphalt though other materials could be used to accomplish an ADA compliant facility. Hard surface recommendations may be provided in common terms such as sidewalks, greenways, and shared-use paths.

Accompanying each hard surface recommendation, where feasible, it is desirable to plant trees along the accommodation to provide shading. Where possible, accommodations should be separated from vehicle traffic by means of a planting strip along roads or located completely off-road.

7.2.3 Streetscape Recommendations

Streetscapes typically include more amenities than simply a hard surface accommodation. Streetscapes have a greater relationship with the adjacent buildings and may include elements such as wider walkways, benches, landscaping, trees,

tree wells, on-street dining or shopping spaces, trash receptacles, etc.

More information regarding each recommendation is included in the “Description” column of the tables. Maps showing the recommendations are provided after the tables. It is possible that not all recommendations are displayed on the maps. Therefore, the maps should be used as a reference and the tables as the complete listing of recommendations.

Table 2: Botetourt County Pedestrian Transportation Projects

<i>Botetourt County</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
52	Blue Ridge Greenway	2	Trail connection	Low	Botetourt County staff	N/A
53	Botetourt/Roanoke Co Greenway Connector	2	Trail connection	Medium	Botetourt County staff	22
100	Catawba Rd and Etzler Rd	2	Sidewalk along Catawba and Etzler Rd to Greenfield Elementary	Medium	Botetourt County staff/TTC	10
101	Catawba Rd from Rt. 220 to Glebe Rd	2	Sidewalk on Catawba Road from Glebe Road to Rt 220	Medium	Botetourt County staff/TTC	10
199	Glade Creek Greenway County line to BRP line	2	Greenway hard surface	Low	Roanoke Valley Greenway Plan 2007	N/A
202	Glebe Road from Orchard Lake to Catawba Rd	2	Sidewalk along Glebe Rd from Rt 220 to Catawba Road	Low	Botetourt County staff/TTC	10
203	Glebe Road from Rt 220 to Orchard Lake	2	Sidewalk along Glebe Rd from Rt 220 to Catawba Road	Low	Botetourt County staff/TTC	10
204	Glebe Road to Greenfield Connector	2	Trail connection	High	Botetourt County staff	10
306	New Road from Exit 150 ramp to U.S. 220	2	Sidewalk	High	Exit 150 improvement project	22
374	Rt 11 and Rt 220 at I-81 Exit 150	3	Sidewalk and streetscape	High	Ped/Transit Public Survey 2013	22
375	Rt 11 Appalachian Trail crossing	1	Pedestrian improvements at Appalachian Trail crossing	High	RVARC staff	30
377	Rt 11 from Rt 811 to Campus Drive (Hollins Univ)	2	Pedestrian connection	High	Botetourt County staff/TTC	19
378	Rt 11 in Troutville	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	30

<i>Botetourt County</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
379	Rt 220 and Town Blvd/Marketplace Dr	1	Pedestrian crossing improvements	High	RVARC staff	<u>10</u>
380	Rt 220 Appalachian Trail crossing	1	Pedestrian crossing signage	High	Botetourt County staff/TTC	<u>22</u>
383	Rt 220 from Azalea to Tinker Mill	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>22</u>
384	Rt 220 from Greenfield to Glebe Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>10</u>
385	Rt 220 from Market Ridge to Azalea	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>22</u>
386	Rt 220 from Market Ridge to Glebe Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>10</u>
389	Rt 220 Tinker Mill Rd to Rt 11	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>22</u>
464	Town Blvd/Marketplace Drive	2	Pedestrian connection	High	RVARC staff	<u>10</u>

Table 3: Montgomery County Pedestrian Transportation Projects

<i>Montgomery County</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
373	Rt 11 / Rt 460 from Lafayette St to North Fork Rd	2	Off-road path	Low	Route 11/460 Corridor Plan	<u>15</u>

Table 4: Roanoke County Pedestrian Transportation Projects

<i>Roanoke County</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
58	Brambleton Ave at Colonial Ave	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>
59	Brambleton Ave at Electric Road east side	1	Pedestrian intersection improvements	High	RVARC staff	<u>5</u>
60	Brambleton Ave at Harris Ave	1	Pedestrian intersection improvements	Low	Roanoke County staff	<u>4</u>
61	Brambleton Ave at Pleasant Hill Dr	1	Pedestrian intersection improvements	High	RVARC staff	<u>5</u>
62	Brambleton Ave at Ranchcrest Dr	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>5</u>
67	Brambleton Ave from Electric Rd to Garst Mill Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>5</u>
68	Brambleton Ave from Garst Mill Rd to Red Rock	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>5</u>
55	Brambleton Ave-Rosecrest/Mudlick Gwy to Electric Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>5</u>
88	Starkey Rd from Merriman to Buck Mountain Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>26</u>
99	Carvin Creek Greenway	2	Greenway hard surface	Low	Roanoke Valley Greenway Plan 2007	<u>8</u>
102	Chapparral Dr from 419 to Merriman Rd	2	Sidewalk	Medium	Roanoke County staff	<u>26</u>
103	Colonial Avenue and Electric Rd	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>5</u>
106	Colonial Avenue at Ogden Rd	1	Pedestrian intersection improvements	Low	RVARC staff	<u>29</u>

<i>Roanoke County</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
114	Colonial Avenue from Ogden to Electric Rd	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>29</u>
115	Colonial Avenue from Rt 419 to Brambleton	2	Sidewalk	Low	Roanoke County staff	<u>5</u>
533	Cotton Hill Rd from Rt 221 to Monet Dr	2	Local street pedestrian connection	High	Roanoke County staff	N/A
126	Cove Rd from 419 to Green Ridge Rd	2	Pedestrian connection	Low	Roanoke County staff	<u>20</u>
127	Cove Rd from Green Ridge to Peters Creek	2	Pedestrian Improvements	Medium	Ped/Transit Public Survey 2013	<u>20</u>
130	Cresthill Dr - Mud Lick Greenway to Garst Mill Rd	2	Pedestrian connection	High	RVARC staff	<u>4</u>
135	Daugherty from West Main to school	2	Sidewalk	Low	Roanoke County staff	<u>27</u>
156	Feather Rd from Washington to Hardy Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>14</u>
179	Friendship Lane from Plantation to Tinker Crk Gwy	2	Pedestrian connection from Plantation to Hollins University	High	Roanoke County staff	<u>19</u>
180	Ft Lewis Church Rd to Roanoke River Greenway	2	Pedestrian connection from Ft Lewis Church road to RRG	Low	Roanoke County staff	<u>27</u>
193	Garst Mill Rd and Brambleton Ave southside	1	Pedestrian intersection improvements	High	RVARC staff	<u>4</u>
195	Garst Mill Rd from Halevan Rd to county line	2	Sidewalk	Medium	Roanoke County staff	<u>4</u>
196	Garst Mill Rd from Oakcliff Dr to Brambleton Ave	2	Sidewalk	High	Ped/Transit Public Survey 2013	<u>4</u>
197	Garst Mill Rd from Oakcliff Dr to Halevan Rd	2	Sidewalk	High	Ped/Transit Public Survey 2013	<u>4</u>

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200	Glade Creek Greenway from Berkley to County Line	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	14
227	Hershberger Rd at Edinburgh Square	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	24
228	Hershberger Rd at Friends Way	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	24
247	Keagy Rd from Sugar Loaf Mtn to Rt 419 Electric Rd	2	Sidewalk	Medium	Roanoke County staff	25
261	Lick Run Greenway Valley Park to Woodhaven	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	33
262	Lick Run Greenway Valley Pt to Thirlane	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	33
296	Merriman Rd from Starkey to Library	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	26
297	Merriman Rd from Chaparral to Knowles	2	Pedestrian improvements	Medium	Roanoke County staff	26
298	Merriman Rd from Chaparral to Library	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	26
299	Merriman Rd from Knowles to Rt 221	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	5
301	Mountain View Rd from Washington to BRP	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	14
302	Mudlick Creek Greenway Crystal Ck to Cresthill	2	Greenway hard surface	Low	Roanoke Valley Greenway Plan 2007	5
309	Ogden Road from Electric to Colonial	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	29
330	Penn Forest Blvd from Colonial to Starkey	2	Sidewalk	Low	Roanoke County staff	29

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331	Peters Creek Rd and Barrens Rd	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>3</u>
335	Peters Creek Rd and Williamson Rd intersection	1	Signalized pedestrian crossing	High	Hollins Area Plan 2008	<u>3</u>
336	Peters Creek Rd from Barrens Rd to Wood Haven	2	Sidewalk	Medium	Roanoke County staff	<u>3</u>
339	Peters Creek Rd from Williamson Rd to Barrens Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>3</u>
345	Plantation Rd and Williamson Rd intersection	1	Signalized pedestrian crossing	High	Hollins Area Plan 2008	<u>19</u>
347	Plantation Rd at Walmart NH Market/Food Lion	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>24</u>
348	Plantation Rd from I-81 to Williamson Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>19</u>
350	Plantation Rd from Williamson Rd to Richardson	2	Sidewalk	Medium	Roanoke County staff	<u>19</u>
351	Plantation Rd, Gander Way and Friendship Lane	1	Signalized pedestrian crossing	High	Hollins Area Plan 2008	<u>19</u>
352	Postal Dr / Berry and Electric Road	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>5</u>
367	RR Grwy - East County	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>28</u>
369	RR Grwy - Poor Mountain Rd to Grn Hill Park	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	<u>27</u>
376	Rt 11 from Co Line to Campus Drive	2	Pedestrian connection	Medium	Botetourt County staff/TTC	<u>19</u>
381	Rt 220 Alternate and Crumpacker	1	Intersection improvements	Medium	Roanoke County staff	N/A
382	Rt 220 Alternate from Rt 460 to county line	2	Pedestrian improvements	Medium	Roanoke County staff	<u>2</u>

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387	Rt 220 South from 419 to Old Rocky Mtn Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>29</u>
388	Rt 220 South from Stable to Will Carter	2	Sidewalk	Low	Roanoke County staff	<u>6</u>
390	Rt 221 from Cotton Hill Rd to Chatsworth	2	Pedestrian connection	Low	Roanoke County staff	N/A
393	Rt 419 Electric Rd and Grandin Road	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>25</u>
395	Rt 419 Electric Rd and I-81	2	Sidewalk	Low	Roanoke County staff	<u>20</u>
397	Rt 419 Electric Rd and Keagy Rd	1	Pedestrian intersection improvements	Medium	Roanoke County staff	<u>25</u>
398	Rt 419 Electric Rd and Ogden Rd	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>
399	Rt 419 Electric Rd and South Peak	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>
401	Rt 419 Electric Rd and Starkey Rd	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>
402	Rt 419 Electric Rd at Tanglewood area	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>29</u>
404	Rt 419 Electric Rd from City Limit to Cove Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>20</u>
405	Rt 419 Electric Rd from Colonial to 3600 Electric	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>29</u>
409	Rt 419 Electric Rd from Ogden to city limit	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>29</u>
410	Rt 419 Electric Rd from Stoneybrook to Woodmar	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>25</u>

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411	Rt 419 Electric Rd from Wentworth to Stoneybrook	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>25</u>
412	Rt 419 Electric Rd from Woodmar to Keagy	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>25</u>
413	Rt 419 Electric Rd I-81 to Rt 311	2	Sidewalk	Low	Roanoke County staff	<u>20</u>
414	Rt 419 from Brambleton to Postal	2	Install sidewalks	High	Ped/Transit Public Survey 2013	<u>5</u>
415	Rt 419 from Colonial to Hidden Lane	2	Install sidewalks	High	Ped/Transit Public Survey 2013	<u>5</u>
416	Rt 419 from Hidden Lane to Brambleton Ave	2	Install sidewalks	High	Ped/Transit Public Survey 2013	<u>5</u>
417	Rt 419 from Keagy to Salem	2	Sidewalk	Low	Roanoke County staff	<u>25</u>
418	Rt 419 from Postal to Wentworth	2	Install sidewalks	Medium	Ped/Transit Public Survey 2013	<u>5</u>
419	Rt 419 from Promenade Park to railroad bridge	2	Pedestrian connection	Medium	419 Plan	<u>29</u>
420	Rt 419 Tanglewood/Elmview	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>
421	Rt 419 West Main and Alleghany	1	Intersection improvements	High	Roanoke County staff	<u>27</u>
422	Rt 419 West Main and Daugherty	1	Intersection improvements	High	Roanoke County staff	<u>27</u>
423	Rt 460 /West Main St - Alleghany to County line	3	Install sidewalk, streetscape	High	Glenvar Community Plan 2012	<u>27</u>
424	Rt 460 /West Main St, Daugherty to Alleghany	3	Install sidewalk, streetscape	High	Glenvar Community Plan 2012	<u>27</u>
425	Rt 460 /West Main St, Daugherty to Ft Lewis Church	3	Install sidewalk, streetscape	High	Glenvar Community Plan 2012	<u>27</u>
426	Rt 460 from Blue Hills Dr to Rt 220 Alternate	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>2</u>
450	Starkey Rd and Ogden Rd	1	Pedestrian intersection improvements	High	Roanoke County staff	<u>29</u>

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451	Starkey Rd from Electric Rd to Hunting Hills Dr	2	Sidewalk	High	Roanoke County staff	<u>29</u>
452	Starkey Rd from Hunting Hills Dr to Merriman	2	Sidewalk	High	Roanoke County staff	<u>26</u>
453	Starkey Rd from Ogden Rd to 419	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>29</u>
458	Thirlane Rd from existing sidewalk to Wood Haven	2	Sidewalk	Low	Roanoke County staff	<u>33</u>
459	Thompson Memorial - Mtn Heights Dr to Rt 311	2	Sidewalk	Low	Roanoke County staff	<u>20</u>
460	Thompson Memorial - Mtn Heights Dr to Salem Limits	2	Sidewalk	High	Roanoke County staff	<u>20</u>
462	Tinker Creek Greenway county line to I-81	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	<u>19</u>
493	Washington Ave - Goode Park Rd to William Byrd HS	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>14</u>
503	West Main from Ft Lewis to Technology	2	Sidewalk	Medium	Roanoke County staff	N/A
518	Williamson Rd from Abney to Clubhouse	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>3</u>
519	Williamson Rd from Abney to Roanoke City	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>3</u>
520	Williamson Rd from Clubhouse to Middleton	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>3</u>
521	Williamson Rd from Hollins Campus to Plantation Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>19</u>
522	Williamson Rd from Middleton to Greenway Dr	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>3</u>

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524	Williamson Rd from Peters Creek to Greenway Dr	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>3</u>
525	Williamson Rd from Plantation to Peters Creek	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>3</u>
530	Wood Haven from Peters Creek to Valley Pointe	2	Sidewalk	Medium	Roanoke County staff	<u>33</u>
531	Wood Haven from Thirlane to Valley Pointe	2	Sidewalk	Low	Roanoke County staff	<u>33</u>

Table 5: City of Roanoke Pedestrian Transportation Projects

<i>City of Roanoke</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
1	10th Street and Courtland Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>35</u>
2	10th Street and Greenhurst Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>35</u>
3	10th Street and Greenland Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>35</u>
4	10th Street and Hunt Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>35</u>
5	10th Street and Moorman Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
6	10th Street and Patterson Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>

City of Roanoke				Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape		
ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
7	10th Street and Rugby Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
8	10th Street and Salem Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	11
9	10th Street and Staunton Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	N/A
10	10th Street from Campbell Ave to Shenandoah Ave	3	Streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	11
11	10th Street from Fairfax Ave to Orange Ave	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	N/A
12	10th Street from Grayson Ave to Williamson Rd	3	Pedestrian improvements	High	Ped/Transit Public Survey 2013	35
13	13th Street SE at Dale Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
14	13th Street SE at Montrose Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
15	13th Street SE from Tazewell to Dale	3	Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment.	Medium	Belmont-Fallon Neighborhood Plan 2003	28
16	13th Street SW at Campbell Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11
17	13th Street SW at Cleveland Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11
18	13th Street SW at Patterson Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11

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ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
19	13th Street SW from Cleveland to Patterson Ave	3	Install sidewalks, streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	11
20	3rd Street and Franklin Rd	1	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	11
21	5th Street and Harrison Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	11
22	5th Street from Loudon Ave to Orange Ave	2	Install sidewalks	Medium	Gainsboro Neighborhood Plan 2010	11
23	9th St SE and Bullitt	1	Intersection safety improvements	Low	Roanoke City staff/TTC	28
24	9th St SE and Jamison	1	Intersection safety improvements	Low	Roanoke City staff/TTC	28
25	9th St SE from Bullitt to Riverland Rd	3	Install sidewalks, streetscape	Medium	Morningside/Kenwood/Riverdale Plan 2003	28
26	9th St SE from Tazewell to Bullitt	3	Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment. Ninth Street should be reconfigured into an urban boulevard.	Medium	Belmont-Fallon neighborhood Plan 2003	28
27	9th Street at Buena Vista Boulevard	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	28
28	9th Street at Dale Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
29	9th Street at Elm Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28

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30	9th Street at Highland Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
31	9th Street at Montrose Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
32	9th Street at Morehead Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
33	9th Street at Pechin Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
34	9th Street at Penmar Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
35	Airport Rd at Nelms Lane	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>8</u>
36	Airport Rd from Barns Ave NW to Municipal	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	<u>3</u>
37	Airport Rd from Towne Square to Municipal	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	<u>8</u>
45	Aviation Dr from Hershberger to Towne Square	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	<u>8</u>
46	Aviation Dr from Towne Square to Municipal	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	<u>8</u>
48	Bennington Street at Brownlee Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>28</u>
49	Bennington Street at Garden City Blvd	1	Intersection safety improvements	Medium	Roanoke City staff/TTC	<u>28</u>
50	Bennington Street at Redwood Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
51	Bennington Street at Riverdale Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>

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56	Brambleton Ave at Ashby Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>4</u>
57	Brambleton Ave at Clifford Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>4</u>
63	Brambleton Ave at Red Rock Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>4</u>
64	Brambleton Ave at Rosewood Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>4</u>
65	Brambleton Ave at Welch Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
66	Brambleton Ave from Brandon to Murray Run	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>18</u>
69	Brambleton Ave from Murray Run to Red Rock	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>4</u>
71	Brandon Ave & Edgewood St Deyerle Village Center	3	Streetscape improvements	Low	Greater Deyerle Neighborhood Plan 2006	<u>18</u>
72	Brandon Ave at Malcolm Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
73	Brandon Ave at Stratford Park	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>18</u>
74	Brandon Ave at Stratford Park	1	Improvements for pedestrians accessing transit	Medium	Roanoke City staff/RVARC staff	<u>18</u>
75	Brandon Ave at The Ridge Apartments	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>18</u>
76	Brandon Ave at Westland Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>18</u>
77	Brandon Ave from Brambleton to 23rd	2	Pedestrian connection	Low	Ped/Transit Public Survey 2013	<u>9</u>

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78	Brandon Ave from Carlton Rd to Edgewood St	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>18</u>
79	Brandon Ave from West City Limit to Carlton	3	Streetscape	Low	Greater Raleigh Court Neighborhood Plan 2007	<u>18</u>
80	Brandon Ave intersection with Brambleton Ave	1	Pedestrian intersection improvements	Low	Greater Raleigh Court Neighborhood Plan 2007	<u>9</u>
81	Brandon Ave intersection with Carter Rd	1	Pedestrian intersection improvements	Low	Greater Raleigh Court Neighborhood Plan 2007	<u>18</u>
82	Brandon Ave intersection with Edgewood	1	Pedestrian intersection improvements	Low	Greater Raleigh Court Neighborhood Plan 2007	<u>18</u>
83	Brandon Ave intersection with Grandin Rd	1	Pedestrian intersection improvements	Low	Greater Raleigh Court Neighborhood Plan 2007	<u>18</u>
84	Brandon Ave/Franklin/McClanahan Intersection	1	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>9</u>
70	Brandon-Main-Sherwood intersection	1	Pedestrian intersection improvements	High	RVARC staff	<u>9</u>
85	Broadway Ave and Franklin Rd intersection	1	Pedestrian intersection improvements	Low	South Roanoke Neighborhood Plan 2008	<u>9</u>
86	Broadway Ave at Avenham Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
87	Broadway Ave from Longview Ave to Franklin Rd	2	Install sidewalk	Low	South Roanoke Neighborhood Plan 2008	<u>9</u>
89	Burrell St and Douglass Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>35</u>
90	Burrell St from Orange to Liberty	3	Streetscape	Low	Harrison/Washington Park Neighborhood Plan 2003	<u>35</u>
92	Campbell Avenue and 3rd St SW	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>

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93	Campbell Avenue and 5th St SW	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
94	Campbell Avenue and 6th St SW	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
95	Campbell Avenue and 8th St SW intersection	1	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>11</u>
96	Campbell Avenue at 7th St SE	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
97	Campbell Avenue at 8 1/2 St SE	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
98	Campbell Avenue from 7th St SW to 18th St SW	3	Install sidewalks, streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	<u>11</u>
104	Colonial Avenue at Clearfield Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
105	Colonial Avenue at Colonial Hills Office Building	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
107	Colonial Avenue at Pasley Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>29</u>
108	Colonial Avenue at The Roanoker	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>9</u>
109	Colonial Avenue at Towers Shopping Center	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>9</u>
110	Colonial Avenue at Woodland Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>29</u>
111	Colonial Avenue at Wright Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>29</u>
112	Colonial Avenue from 23rd to Dogwood	3	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>9</u>

City of Roanoke				Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape		
ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
113	Colonial Avenue from Dogwood Ln to Hartland Rd	2	Pedestrian improvements	Low	Roanoke City staff	29
120	Cove Rd and Abbott Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
121	Cove Rd and Fairland Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
122	Cove Rd and Lynnhope Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	7
123	Cove Rd and Ranch Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	7
124	Cove Rd and Routt Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	7
125	Cove Rd and Willow Walk Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	7
128	Cove Rd from Lafayette Blvd to Hershberger Rd NW	3	Streetscape safety improvement strategy	Medium	Villa Heights/Fairland Neighborhood Plan 2005	23
129	Cove Rd from Peters Creek to Hershberger Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	7
131	Dale Avenue at 19th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
132	Dale Avenue at Vernon Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
133	Dale Avenue from 19th to 13th	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	28
134	Dale Avenue from Vinton to 19th	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	28
150	Edgewood Street at Westover Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18

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ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
151	Edgewood Street at Windsor Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>18</u>
152	Edgewood Street from Brandon Ave to Memorial Ave	2	Sidewalk along Edgewood	Medium	Roanoke City staff/TTC	<u>18</u>
153	Elm Ave at Ferdinand Ave	1	Pedestrian intersection improvements	Low	Old Southwest Neighborhood Plan 2009	<u>11</u>
154	Elm Ave from Jefferson St to 4th St SE	3	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>11</u>
155	Elm Ave from Jefferson St to Ferdinand Ave	3	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>11</u>
157	Ferncliff Avenue at William Fleming High School	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>7</u>
158	Ferncliff Avenue near Hoback	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>7</u>
159	Franklin Rd and Duke of Gloucester	1	Pedestrian intersection improvements	High	Roanoke City staff	<u>29</u>
160	Franklin Rd at Albemarle Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
161	Franklin Rd at Beechwood Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
162	Franklin Rd at Edinburgh Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>9</u>
163	Franklin Rd at Elm Ave	1	Pedestrian intersection improvements	Medium	Old Southwest neighborhood Plan 2009	<u>11</u>
164	Franklin Rd at Highland Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
165	Franklin Rd at Mountain Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>

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166	Franklin Rd at Penarth Rd	1	Pedestrian intersection improvements	High	RVARC staff	<u>29</u>
167	Franklin Rd at Reserve Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>9</u>
168	Franklin Rd at Roberts Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
169	Franklin Rd at Townside Blvd	1	Pedestrian intersection improvements - consolidate bus stops here	High	Roanoke City staff	<u>29</u>
170	Franklin Rd at Toyota Dealership	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
171	Franklin Rd at U.S. 220	1	Pedestrian intersection improvements	High	RVARC staff	<u>29</u>
172	Franklin Rd at Walnut Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
173	Franklin Rd at Williamson Rd	1	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>11</u>
174	Franklin Rd at Woods Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
175	Franklin Rd corridor Aamco to Willow Oak	2	Install sidewalks	High	Franklin Road/Colonial Avenue 2004	<u>9</u>
176	Franklin Rd from Reserve to 220 Entrance Ramp	2	Pedestrian connection	Low	Roanoke City staff	<u>11</u>
177	Franklin Rd from Rt 220 to Market Ave	3	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>11</u>
178	Franklin Rd from Willow Oak to west city limit	2	Install sidewalks	High	Franklin Road/Colonial Avenue 2004	<u>29</u>

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181	Gainsboro Road and Loudon Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	11
182	Gainsboro Road and Madison Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35
183	Garden City Boulevard at Carico Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
184	Garden City Boulevard at Davenport Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
185	Garden City Boulevard at Findlay Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
186	Garden City Boulevard at Gearhart Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
187	Garden City Boulevard at Hartsook Boulevard	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
188	Garden City Boulevard at Ray Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	17
189	Garden City Boulevard at Thommasson Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
190	Garden City Boulevard between Ray and Victory St	1	Install crosswalk	High	Garden City Neighborhood Plan 2005	17
191	Garden City Boulevard near Yellow Mountain Rd	2	Pedestrian connection	Medium	RVARC staff	17
192	Garden City Greenway Riverside to Imlay	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	17
194	Garst Mill Rd from Grandin Rd to City Limit	2	Pedestrian connection	Low	Roanoke City staff	4
205	Grandin Rd corridor from Airview to Electric	2	Sidewalk	High	Roanoke City staff	25

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206	Grandin Rd corridor from Beverly to Hope	2	Sidewalk	Medium	Roanoke City staff	<u>25</u>
207	Grandin Rd corridor from Hope to Airview	2	Sidewalk	Medium	Roanoke City staff	<u>25</u>
208	Grandin Rd corridor Guilford to Beverly	2	Arterial and collector streets should have ... curb, gutter and sidewalk.	High	Greater Deyerle Neighborhood Plan 2006	<u>18</u>
209	Greenway crossing at Williamson and Elm	1	Pedestrian intersection improvements - evaluate potential to relocate along railroad under Elm	Low	Ped/Transit Public Survey 2013	<u>11</u>
210	Gus Nicks Blvd at Eastern Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>13</u>
211	Gus Nicks Blvd from Orange to Washington St	2	Install missing sidewalks	Low	Hollins/Wildwood Area Plan	<u>13</u>
222	Hershberger Rd and Bean Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>8</u>
223	Hershberger Rd and Hazleridge Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>8</u>
224	Hershberger Rd and Hubert Road/Winsloe Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>8</u>
225	Hershberger Rd and Ordway Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>7</u>
226	Hershberger Rd and Rutgers St	1	Pedestrian improvements	Low	Roanoke City staff	<u>8</u>
229	Hershberger Rd at Valley View Garden Apartments	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>7</u>
230	Hershberger Rd from Cove to Peters Creek Rd	2	Install sidewalks	High	Peters Creek North Neighborhood Plan 2002	<u>7</u>

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ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
231	Hershberger Rd from Williamson Rd to Plantation Rd	3	Install sidewalk, streetscape, crosswalks	High	Williamson Road Area Plan 2004	8
232	Hollins Road and Old Mountain Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	24
233	Hollins Road and Plantation Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	24
234	Hollins Road and Shull Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35
235	Hollins Road at Blue Ridge Behavioral	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	24
236	Hollins Road at Mason Mill Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35
237	Hollins Road at Missouri Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35
238	Hollins Road at Mohawk Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35
239	I-581 north end ped crossing at Valley View	2	Pedestrian crossing from Fairland to Valley View	Low	Roanoke City staff	32
240	I-581 Pedestrian Bridge	2	Pedestrian bridge	Low	VDOT	32
243	Jamison Avenue at 4th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	28
244	Jefferson St at Albemarle Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11
245	Jefferson St from McClanahan to Bullitt	3	Streetscape	Low	Ped/Transit Public Survey 2013	9
248	Kimball Avenue and Rutherford Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	35

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251	King Street at Glade Creek Blvd	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>2</u>
252	King Street at Mecca Street/Atherly Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>13</u>
253	King Street at Parkway House of Prayer	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	N/A
254	King Street from Orange Ave to Gus Nicks Blvd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>13</u>
255	Lafayette Boulevard and Florida Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>23</u>
256	Lafayette Boulevard from Melrose Ave to Cove Rd NW	3	Streetscape safety improvement strategy	Low	Villa Heights/Fairland Neighborhood Plan 2005	<u>23</u>
258	Liberty Rd from I-581 to Plantation Rd	3	Install sidewalk, streetscape, crosswalks	High	Williamson Road Area Plan 2004	<u>35</u>
259	Liberty Rd from Washington Park to I-581	3	Install sidewalk, streetscape	High	Harrison/Washington Park Neighborhood Plan 2003	<u>35</u>
260	Lick Run Greenway along Norfolk Ave	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>11</u>
263	Lick Run Greenway, Frederick to Hershberger	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>32</u>
264	Lick Run Greenway, Hershberger to Peters Creek	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>33</u>
267	Main Street at Kerns Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
268	Main Street at Summit Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>9</u>
273	McClanahan St from Jefferson St to Franklin Rd	3	Streetscape	High	South Roanoke Neighborhood Plan 2008	<u>9</u>

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274	Melrose Avenue & Salem Tpke	1	Pedestrian intersection improvements	Low	Loudon-Melrose/Shenandoah West Neighborhood Plan	23
275	Melrose Avenue and 23rd Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	23
276	Melrose Avenue and 35th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	23
277	Melrose Avenue and Fentress Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
278	Melrose Avenue and Forest Park Boulevard	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	23
279	Melrose Avenue and Gun Club Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
280	Melrose Avenue and Monroe Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
281	Melrose Avenue and Old Country Club Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
282	Melrose Avenue and Overbrook Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
283	Melrose Avenue and Palmetto Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	23
284	Melrose Avenue and Peck Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
285	Melrose Avenue and Van Buren Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
286	Melrose Avenue and Westside Boulevard	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
287	Melrose Avenue from 22nd to Victoria	3	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	23

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288	Melrose Avenue from Pilot to west city limit	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	23
289	Melrose Avenue near Country Club (ABC store)	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	23
290	Memorial Avenue at Brunswick Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	23
291	Memorial Avenue at Chesterfield Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
292	Memorial Avenue at Faquier Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
293	Memorial Avenue at Oxford Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
294	Memorial Avenue at Wasena Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
295	Memorial Avenue at Winborne Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
303	Municipal Rd NW from Airport Rd to Aviation Dr	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	8
304	Murray Run Gwy - Colonial Ave to Fishburn Park	2	Greenway hard surface (could be provided as a sidewalk on Hartland Rd)	Medium	Roanoke Valley Greenway Plan 2007	29
305	Murray Run Gwy - Ogden Rd to Colonial Ave	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	29
307	Ogden Road at Circle Brook	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	29
308	Ogden Road at Honeywood/Windward	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	29

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310	Old Jefferson St from Williamson to Wiley Drive	3	Pedestrian system, streetscape	High	Roanoke City staff/TTC	<u>9</u>
311	Orange Ave /Plantation/Kimball	1	Pedestrian intersection improvements	Low	Ped/Transit Public Survey 2013	<u>35</u>
312	Orange Ave and 10th Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	N/A
313	Orange Ave and 8th Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	N/A
314	Orange Ave at Granby Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>24</u>
315	Orange Ave at Gus Nicks Blvd	1	Pedestrian intersection improvements	Low	RVARC staff	<u>13</u>
316	Orange Ave at Hollins Rd	1	Pedestrian intersection improvements	Low	RVARC staff	<u>35</u>
317	Orange Ave at King Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>2</u>
318	Orange Ave at Plantation Rd	2	Pedestrian connection	Low	13th Street/Hollins Road improvement project	<u>35</u>
319	Orange Ave corridor from Blue Hills to 24th	3	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>2</u>
320	Orange Ave from 10th to I-581	3	Streetscape	Low	Harrison/Washington Park Neighborhood Plan 2003	<u>35</u>
321	Orange Ave from I-581 to Hollins Rd	3	Streetscape	Low	Williamson Road Area Plan 2004	<u>35</u>
323	Patterson Avenue and 8th Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>11</u>
324	Patterson Avenue at 12th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>

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325	Patterson Avenue at 14th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11
326	Patterson Avenue at 16th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	11
327	Patterson Avenue at 18th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	18
328	Patterson Avenue from 10th to 21st St	3	Install sidewalks, streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	11
329	Patterson Avenue from Campbell to 10th St	3	Install sidewalks, streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	11
332	Peters Creek Rd and Food Lion Driveway	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	7
333	Peters Creek Rd and Hershberger Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
334	Peters Creek Rd and Northside HS Drive	1	Pedestrian intersection improvements	Medium	Roanoke County staff	33
337	Peters Creek Rd from Cove to I-581	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	7
338	Peters Creek Rd from Longwood to Cove	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	7
340	Peters Creek Rd near Tennessee Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	23
341	Piedmont St and Riverland from Walnut to 9th St SE	2	Install sidewalks	Medium	Riverland/Walnut Hill Neighborhood Plan 2004	28
342	Plantation Rd and Fleming Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	24
343	Plantation Rd and Huntington Boulevard	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	24

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344	Plantation Rd and Preston Avenue/Columbia Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>24</u>
346	Plantation Rd at CEI-Roanoke	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>24</u>
349	Plantation Rd from Orange to north city limit	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>24</u>
353	Reserve Ave from Jefferson St to Franklin Rd	3	Pedestrian system, streetscape	Low	South Jefferson Redevelopment Plan 2001	<u>9</u>
354	Ring Road	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>32</u>
355	Ring Road at Walmart bus stop	1	Improvements for pedestrians accessing transit	Low	Roanoke City staff	<u>32</u>
356	Riverland Rd /Bennington - 9th St SE to Riverdale	3	Install sidewalks, streetscape	Medium	Morningside/Kenwood/Riverdale Plan 2003	<u>28</u>
357	Riverland Rd from Garden City to Star Trail lot	2	Pedestrian connection	High	Roanoke City staff	<u>28</u>
366	RR Grwy - City Limit to Mud Lick Grwy	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>18</u>
368	RR Grwy - Mud Lick Grwy to Bridge St	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>18</u>
427	Rutgers Street at Crossroad Shopping Center	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>8</u>
428	Rutgers Street from Town Square to Hershberger	3	Install sidewalks, streetscape, crosswalks	Medium	Williamson Road Area Plan 2004	<u>8</u>
429	Salem Avenue and 3rd Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>11</u>
430	Salem Avenue and 6th Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>11</u>

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431	Salem Avenue and 8th Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>11</u>
432	Salem Avenue from 5th St SW to Shaffers Blvd	3	Install sidewalks, streetscape	Low	Hurt Park/Mountain View Neighborhood Plan 2003	<u>11</u>
433	Salem Turnpike and 30th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>23</u>
434	Salem Turnpike and Delta Drive	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>23</u>
435	Salem Turnpike and Delta Drive/24th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>23</u>
437	Salem Turnpike and Westwood Boulevard	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>23</u>
438	Salem Turnpike at Structural Steel Co.	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>23</u>
439	Salem Turnpike from 24th St to 30th	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>23</u>
440	Salem Turnpike from 30th St to city limit	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>23</u>
441	Shenandoah Ave from 5th St to west city limit	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>11</u>
442	Shenandoah Avenue and 36th Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>23</u>
443	Shenandoah Avenue and 6th Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>11</u>
444	Shenandoah Avenue and 8th Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>11</u>
445	Shenandoah Avenue and Cherry Hill Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>31</u>

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446	Shenandoah Avenue and Westwood Boulevard	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>23</u>
447	Shenandoah Avenue at VA Care Center	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>31</u>
448	Shenandoah from city limit to Peters Creek Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>31</u>
454	Tazewell Avenue at 7th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
455	Tazewell Avenue at 9th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
456	Tazewell Avenue SE from RR tracks to 12th St SE	3	Traffic-calming strategies should be incorporated into improvements. The priority should be on installing trees and providing an improved pedestrian environment.	Low	Belmont-Fallon Neighborhood Plan 2003	<u>28</u>
461	Tinker Creek Greenway	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	<u>24</u>
463	Towers Mall Area	3	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>9</u>
465	Town Square Blvd and Airport Rd	1	Pedestrian intersection improvements	Low	Roanoke City staff	<u>8</u>
466	Town Square Blvd and Rutgers St	1	Pedestrian intersection improvements	Low	Roanoke City staff	<u>8</u>
467	Town Square Boulevard at Office Max	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>8</u>
469	Valley View and Ring Road (Red Robin)	1	Pedestrian intersection improvements	Low	Roanoke City staff	<u>32</u>

City of Roanoke				Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape		
ID	LOCATION	TYPE	DESCRIPTION	LOCAL PRIORITY	SOURCE	MAP #
470	Valley View Blvd /Ring Rd connector (Smokey Bones)	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	32
471	Valley View Blvd and Ring Road (Lewis Gale Clinic)	1	Pedestrian intersection improvements	Low	Roanoke City staff	32
472	Valley View Blvd at Mall main entrance	1	Pedestrian intersection improvements	Low	RVARC staff	32
473	Valley View Blvd at Movie Theater	1	Pedestrian intersection improvements	Low	RVARC staff	32
474	Valley View Blvd at Ring Road (Shakers)	1	Pedestrian intersection improvements	Low	RVARC staff	32
475	Valley View Blvd from Edinburgh to Hershberger	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	32
476	Valley View Blvd from Edinburgh to I-581	3	Install sidewalk, streetscape, crosswalks	Low	Williamson Road Area Plan 2004	32
477	Valley View Blvd N Northwest at Best Western	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
478	Valley View Blvd N Northwest at Pier One Imports	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
479	Valley View Blvd NW from Hershberger to Ring Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	32
480	Valley View Mall ped bridge trail	2	Pedestrian connection from I-581 pedestrian bridge to Valley View Ring Road	Low	Roanoke City staff/RVARC staff	32
481	Valley View Ring Rd - Valley View Blvd to Walmart	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	32
482	Valley View Ring Rd at entrance	1	Pedestrian intersection improvements	Low	RVARC staff	32

City of Roanoke				Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
483	Valley View Ring Rd at main entrance	1	Pedestrian intersection improvements	Low	RVARC staff	32
492	Wasena Ave at Main Street intersection	1	Stamped crosswalk across Main St	Low	Wasena Neighborhood Plan 2003	N/A
505	Williamson Rd and 10th Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
506	Williamson Rd and Angell Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
507	Williamson Rd and Bowman Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	32
508	Williamson Rd and Compton Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	35
509	Williamson Rd and Floraland Drive	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
510	Williamson Rd and Forest Hill Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	35
511	Williamson Rd and Hershberger	1	Pedestrian improvements	Low	Roanoke City staff	8
512	Williamson Rd and Liberty Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	N/A
513	Williamson Rd and Lyndhurst Street/Fugate Road	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
514	Williamson Rd and Oakland Boulevard	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	32
515	Williamson Rd and Thurston Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	35
516	Williamson Rd and Wells Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	11

<i>City of Roanoke</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
517	Williamson Rd at Rutherford Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>35</u>
523	Williamson Rd from Orange to north city limit	3	Install sidewalk, streetscape, crosswalks	High	Williamson Road Area Plan 2004	<u>32</u>
526	Wise Avenue and Indian Village Lane	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>28</u>
527	Wise Avenue at 14th Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>28</u>
528	Wise Avenue from Vinton to Campbell Ave	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>28</u>
532	Yellow Mountain Rd near Garden City Blvd	2	Pedestrian connection	Medium	RVARC staff	<u>17</u>

Table 6: City of Salem Pedestrian Transportation Projects

<i>City of Salem</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
38	Apperson Dr and Colorado St junction	3	Streetscape	Medium	City of Salem staff	<u>1</u>
39	Apperson Dr and Riverland Dr	1	Pedestrian intersection improvements	High	RVARC staff	<u>1</u>
40	Apperson Dr at Keagy Road	1	Pedestrian intersection improvements	Medium	City of Salem staff	<u>21</u>
41	Apperson Dr at Yorkshire Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>1</u>
42	Apperson Dr from 419 to city limit	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>21</u>

<i>City of Salem</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
43	Apperson Dr from American Legion to 419	2	Sidewalk	High	City of Salem staff	<u>1</u>
44	Apperson Dr from Colorado to American Legion	2	Sidewalk	High	City of Salem staff	<u>1</u>
54	Braeburn Dr from Ridgewood to Apperson Dr	2	Sidewalk	High	City of Salem staff	<u>21</u>
116	Colorado St from 7th to Rowan	2	Sidewalk	Medium	City of Salem staff	<u>1</u>
117	Colorado St from Rowan to Front	2	Sidewalk	Medium	City of Salem staff	<u>1</u>
118	Commerce Dr and Texas St	1	Crosswalk/signage	High	City of Salem staff	N/A
119	Corporate Blvd from Lynchburg Tpke to Texas St	2	Sidewalk	High	City of Salem staff	N/A
136	Diuguids Dr from West Main St to Green Hill Park	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>34</u>
137	Dry Creek Greenway from Carrollton to West Main	2	Greenway hard surface	Low	Roanoke Valley Greenway Plan 2007	<u>12</u>
138	East 4th Street at Delaware Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>12</u>
141	East Main Street and Bellevue Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>20</u>
142	East Main Street and Lynchburg Turnpike	1	Crosswalk/signal/signage	High	City of Salem staff	<u>20</u>
143	East Main Street and Otter Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>20</u>
144	East Main Street at Brand Avenue	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>20</u>
145	East Main Street at Lakeside Plaza and Goodwill	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>20</u>

<i>City of Salem</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
146	East Main Street at Parkdale Drive	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>20</u>
147	East Main Street at Pinehurst Street	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>20</u>
148	East Main Street from Thompson Memorial to Rt 419	3	Pedestrian improvements and streetscape	High	Ped/Transit Public Survey 2013	<u>20</u>
149	Eddy Ave from Piedmont Avenue to Front Avenue	2	Infill missing sidewalk gaps	Low	RVARC staff	<u>1</u>
198	Gish Branch Gwy from N Mill Rd to Kessler Mill Rd	2	Greenway hard surface	Low	Roanoke Valley Greenway Plan 2007	<u>20</u>
241	Idaho St and Texas St	1	Crosswalk/signal/signage	High	City of Salem staff	<u>12</u>
242	Idaho St from Lynchburg Tpke to Texas	2	Sidewalk	High	City of Salem staff	<u>12</u>
246	Keagy Rd at McDonalds	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>21</u>
249	Kimball St and Franklin to N Buck	2	Pedestrian connection	High	City of Salem staff	<u>1</u>
250	Kimball St from Franklin St to Bowman Ave	2	Sidewalk	Low	City of Salem staff	<u>1</u>
257	Lancing Dr and Margaret from 419 to Apperson	2	Sidewalk	Medium	City of Salem staff	<u>21</u>
265	Lynchburg Tnpk from 419 to city limit	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	N/A
266	Lynchburg Tnpk from 419 to East Main Street	2	Sidewalk	Medium	City of Salem staff	<u>12</u>
269	Main Street from Thompson Memorial to 4th St	3	Streetscape	High	City of Salem staff	<u>12</u>
270	Mason Creek Gwy from East Main St to HRB Trail	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>20</u>

<i>City of Salem</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
271	Mason Creek Gwy from Lburg Tpk to East Main St	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>20</u>
272	Mason Creek Gwy from RR Gwy to Roanoke Blvd	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>21</u>
300	Mill Lane from Tidewater to Carolyn	2	Pedestrian connection	High	City of Salem staff	<u>34</u>
322	Orchard from Apperson to Upland	2	Pedestrian connection	High	City of Salem staff	<u>1</u>
358	Roanoke Blvd and 8th Street	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC Staff	<u>1</u>
359	Roanoke Blvd and Hemlock/VA Center	1	Crosswalk/signal	Medium	City of Salem staff	<u>31</u>
360	Roanoke Blvd at East Salem Elementary	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>31</u>
361	Roanoke Blvd at GE	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>31</u>
362	Roanoke Blvd from Mason Creek Grwy to VA MedCtr Rd	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>31</u>
363	Roanoke Blvd from Mason Creek Gwy to Electric Rd	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	<u>31</u>
364	Roanoke Blvd from Texas to Rt 419 (Electric Rd)	2	Sidewalk	Low	City of Salem staff	<u>31</u>
365	Roanoke Blvd from VA MedCtr Rd to VA CareCtr Rd	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>31</u>
370	RR Grwy - Riverside Drive	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>34</u>
371	RR Grwy - Rotary Park to City Limit	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>21</u>
372	Rt 11 / Rt 460 / West Main St	3	Install sidewalk, streetscape	Medium	City of Salem staff	<u>34</u>
391	Rt 419 and Apperson Dr	1	Crosswalk/signal/signage	High	City of Salem staff	<u>21</u>

<i>City of Salem</i>				<i>Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape</i>		
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
392	Rt 419 Electric Rd and Braeburn	1	Crosswalk/signal/signage	High	City of Salem staff	21
394	Rt 419 Electric Rd and Green Ridge Rd	1	Crosswalk/signal/signage	Low	City of Salem staff	20
396	Rt 419 Electric Rd and Keagy Rd	1	Crosswalk/signal/signage	High	City of Salem staff	21
400	Rt 419 Electric Rd and Springfield Ave	1	Crosswalk/signal/signage	Medium	City of Salem staff	20
403	Rt 419 Electric Rd from Apperson to Roanoke Blvd	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	21
406	Rt 419 Electric Rd from East Main St to City Limit	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	20
407	Rt 419 Electric Rd from Keagy to Apperson	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	21
408	Rt 419 Electric Rd from Lynchburg Tpk to East Main	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	20
436	Salem Turnpike and Electric	1	Crosswalk/signal/signage	High	City of Salem staff	N/A
457	Texas from Idaho to Lynchburg Tpke	2	Sidewalk	High	City of Salem staff	1
468	Union Street from Main to Eddy	2	Pedestrian connection	High	City of Salem staff	1
504	Wildwood Road from W Main St to I-81	2	Pedestrian improvements	Low	Ped/Transit Public Survey 2013	34

Table 7: Town of Vinton Pedestrian Transportation Projects

Town of Vinton		Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape				
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
47	Bedford Road at E Cleveland Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>13</u>
91	Bypass Rd from Hardy Rd to Washington	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>13</u>
139	East Cleveland Avenue at S Blair Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
140	East Cleveland Avenue at S Poplar Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
201	Glade Creek Greenway from Glade to Berkley	2	Greenway hard surface	High	Roanoke Valley Greenway Plan 2007	<u>14</u>
212	Hardy Rd and Clearview Dr intersection	1	Crosswalks	High	Vinton Area Corridors Plan 2010	<u>13</u>
213	Hardy Rd and Niagara Rd intersection	1	Crosswalks	Medium	Vinton Area Corridors Plan 2010	<u>13</u>
214	Hardy Rd and Vinyard Rd intersection	1	Crosswalks	High	Vinton Area Corridors Plan 2010	<u>13</u>
215	Hardy Rd and Wolf Creek Greenway	1	Pedestrian crossing for Wolf Creek Greenway across Hardy Road	High	Vinton staff	<u>14</u>
216	Hardy Rd at Bypass Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>14</u>
217	Hardy Rd at Spruce Street	1	Improvements for pedestrians accessing	Low	Valley Metro/RVARC staff	<u>13</u>

Town of Vinton			Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape			
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
			transit			
218	Hardy Rd at W.E. Cundiff Elementary School	1	Pedestrian crossing at school	High	Vinton staff	<u>14</u>
219	Hardy Rd from Bypass Rd to Cardinal	2	Install sidewalk	Medium	Vinton Area Corridors Plan 2010	<u>14</u>
220	Hardy Rd from Cardinal to Feather Rd	2	Install sidewalk	Low	Vinton Area Corridors Plan 2010	<u>14</u>
221	Hardy Rd from Pollard to Bypass Rd	2	Install sidewalk, eliminate dirt path	High	Vinton Area Corridors Plan 2010	<u>13</u>
449	South Pollard Avenue at Cedar Avenue	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
484	Virginia Ave and 4th St	1	Pedestrian intersection improvements	High	Vinton staff	<u>13</u>
485	Virginia Ave and Pollard St	1	Pedestrian safety intersection improvements	Medium	Vinton staff	<u>13</u>
486	Virginia Ave at 2nd Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
487	Virginia Ave at 3rd Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
488	Virginia Ave from 1st St to west town limit	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>13</u>
489	Walnut Ave and 8th St	1	Intersection improvement at 8th and Walnut, ped, turning, signage	High	Vinton staff	<u>28</u>

Town of Vinton			Type Legend: 1 = Intersection, 2 = Hard Surface, 3 = Streetscape			
<u>ID</u>	<u>LOCATION</u>	<u>TYPE</u>	<u>DESCRIPTION</u>	<u>LOCAL PRIORITY</u>	<u>SOURCE</u>	<u>MAP #</u>
490	Walnut Ave at Booker Avenue	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>28</u>
491	Walnut Ave from Lee St to west town limit	2	Install sidewalk	High	Vinton Area Corridors Plan 2010	<u>28</u>
494	Washington Ave and Bypass Rd intersection	1	Crosswalks	Medium	Vinton Area Corridors Plan 2010	<u>14</u>
495	Washington Ave and Meadow St	1	Crosswalk improvements, signage	Medium	Vinton staff	<u>13</u>
496	Washington Ave and N Blair Street	1	Improvements for pedestrians accessing transit	High	Valley Metro/RVARC staff	<u>13</u>
497	Washington Ave and N Poplar St, church crosswalk	1	Crosswalk improvements, signage	Medium	Vinton staff	<u>13</u>
498	Washington Ave and Pollard intersection	1	Crosswalks	High	Vinton Area Corridors Plan 2010	<u>13</u>
499	Washington Ave at Mitchell Road	1	Improvements for pedestrians accessing transit	Medium	Valley Metro/RVARC staff	<u>13</u>
500	Washington Ave at N Preston Road	1	Improvements for pedestrians accessing transit	Low	Valley Metro/RVARC staff	<u>14</u>
501	Washington Ave from Bypass Rd to Goode Park Dr	2	Pedestrian improvements	Medium	Ped/Transit Public Survey 2013	<u>14</u>
502	Washington Ave from Bypass to Pollard	2	Pedestrian improvements	High	Ped/Transit Public Survey 2013	<u>13</u>
529	Wolf Creek Grwy from Hardy Rd to Gladetown Trail	2	Greenway hard surface	Medium	Roanoke Valley Greenway Plan 2007	<u>14</u>

Figure 17: Guide to Pedestrian Recommendation Maps

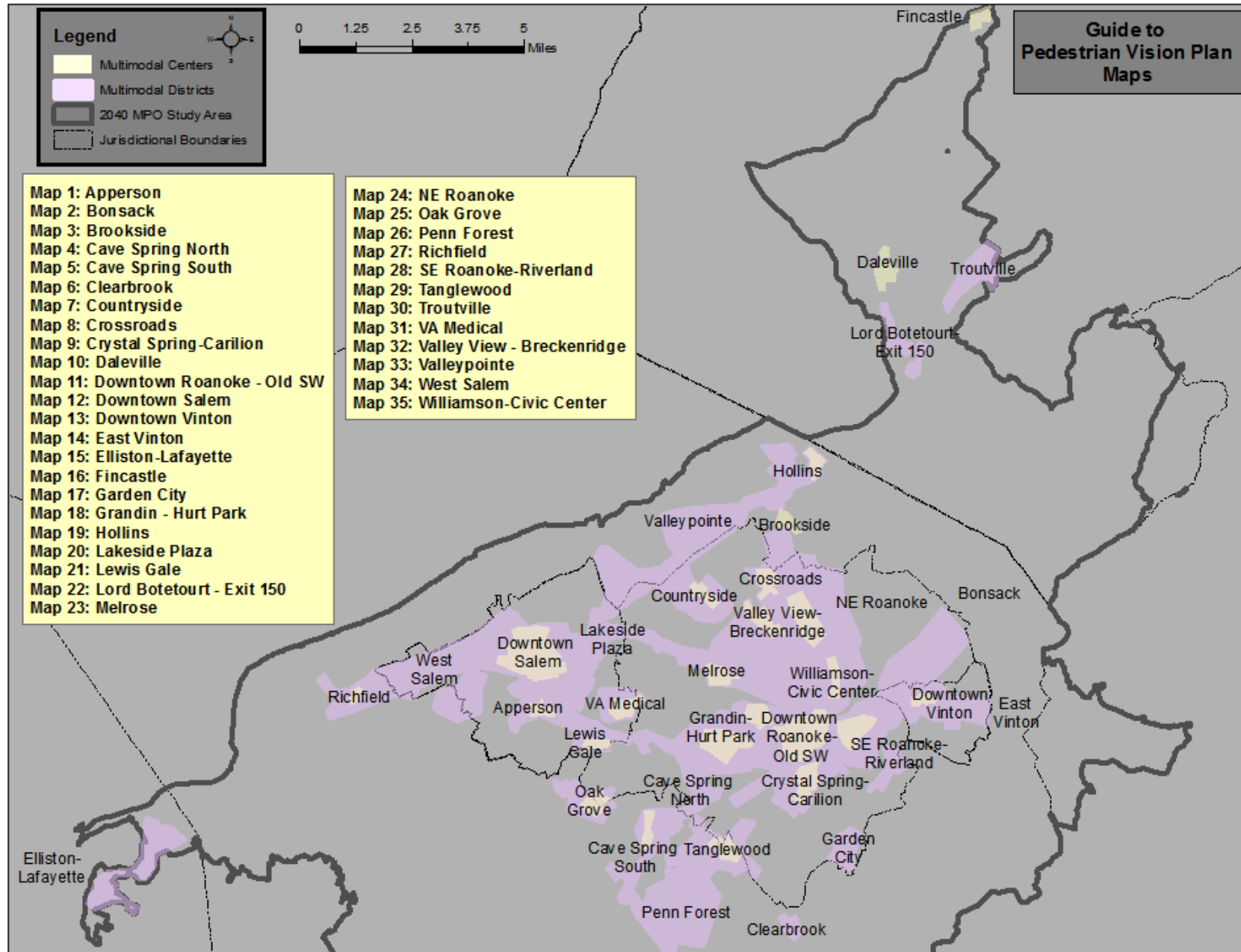
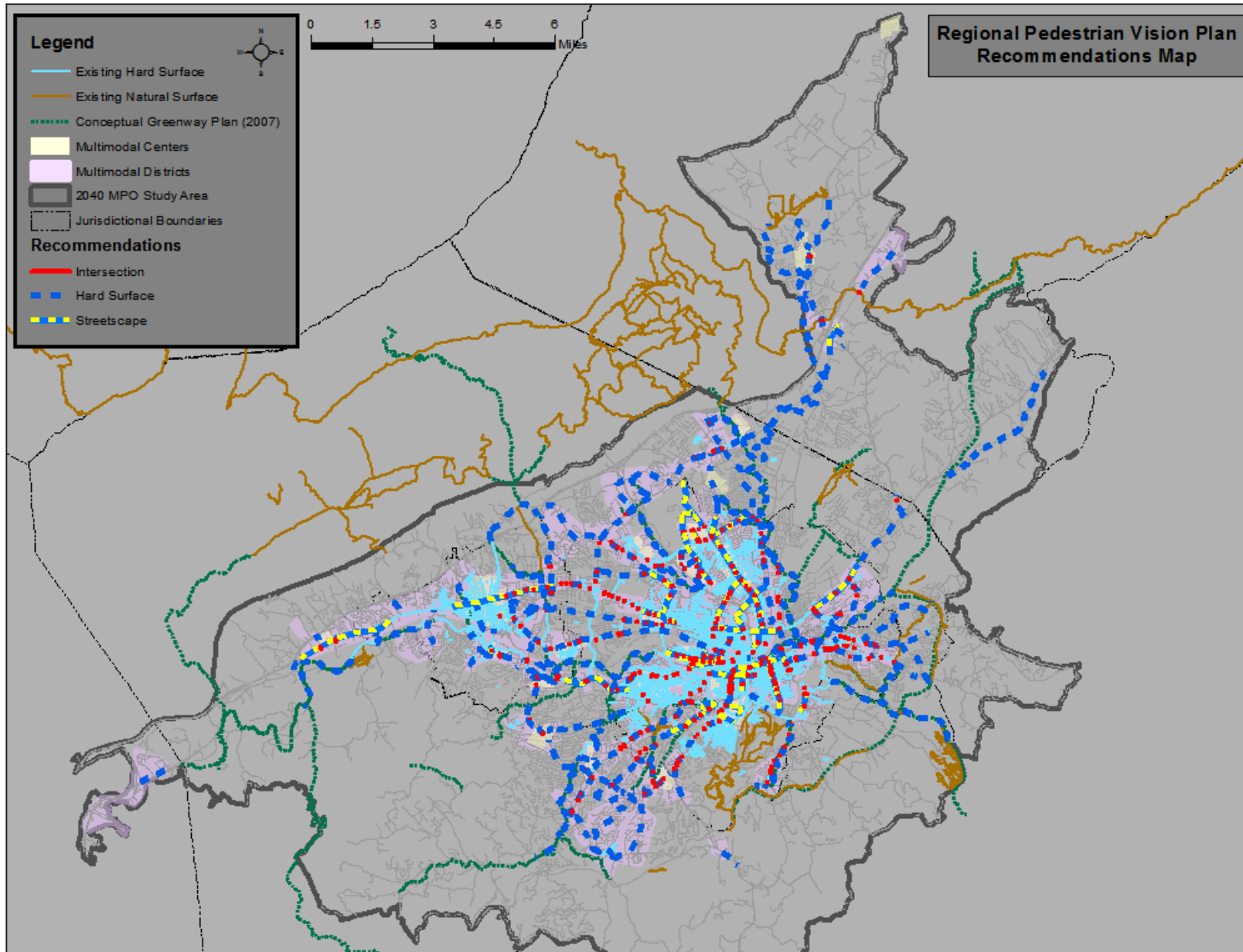
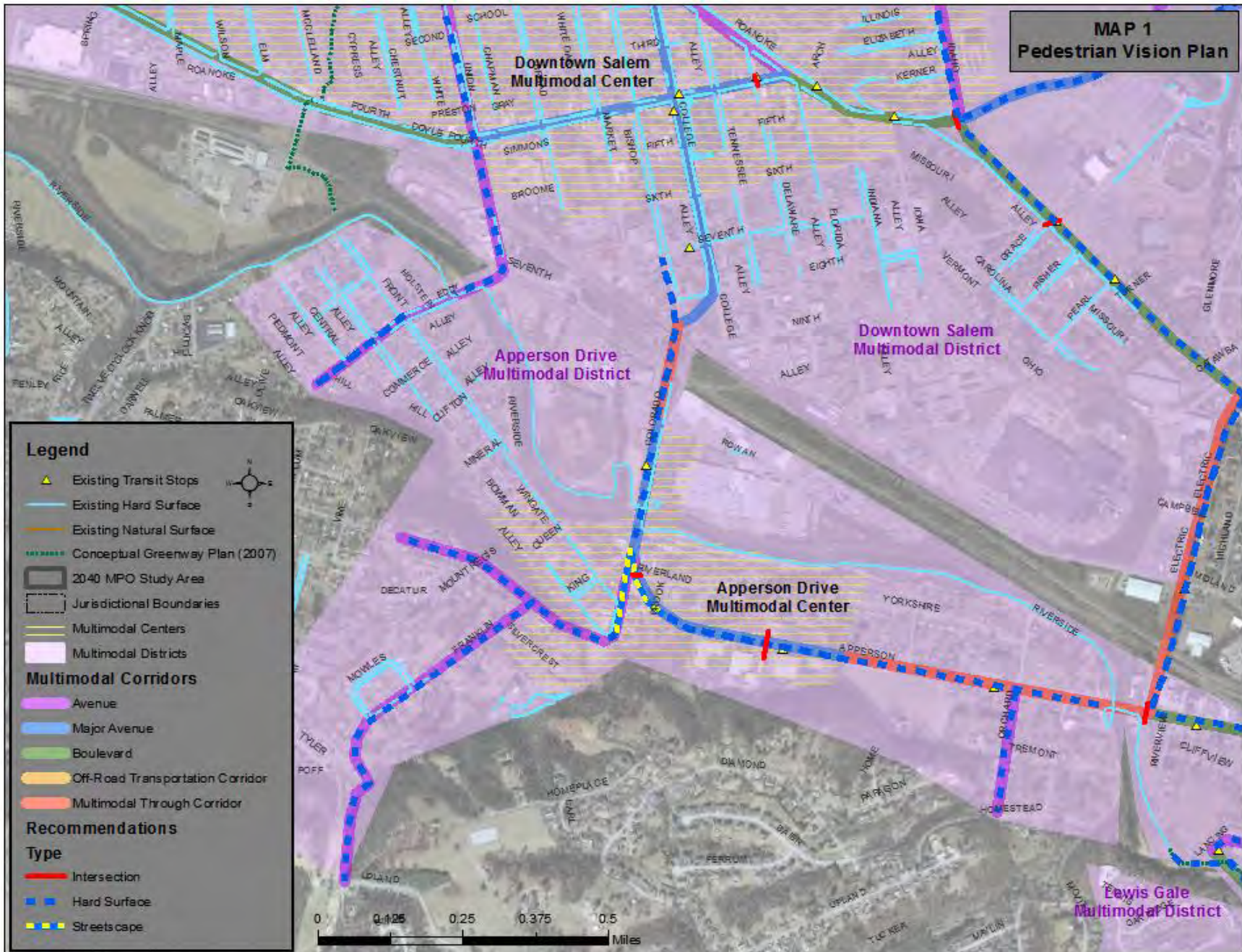
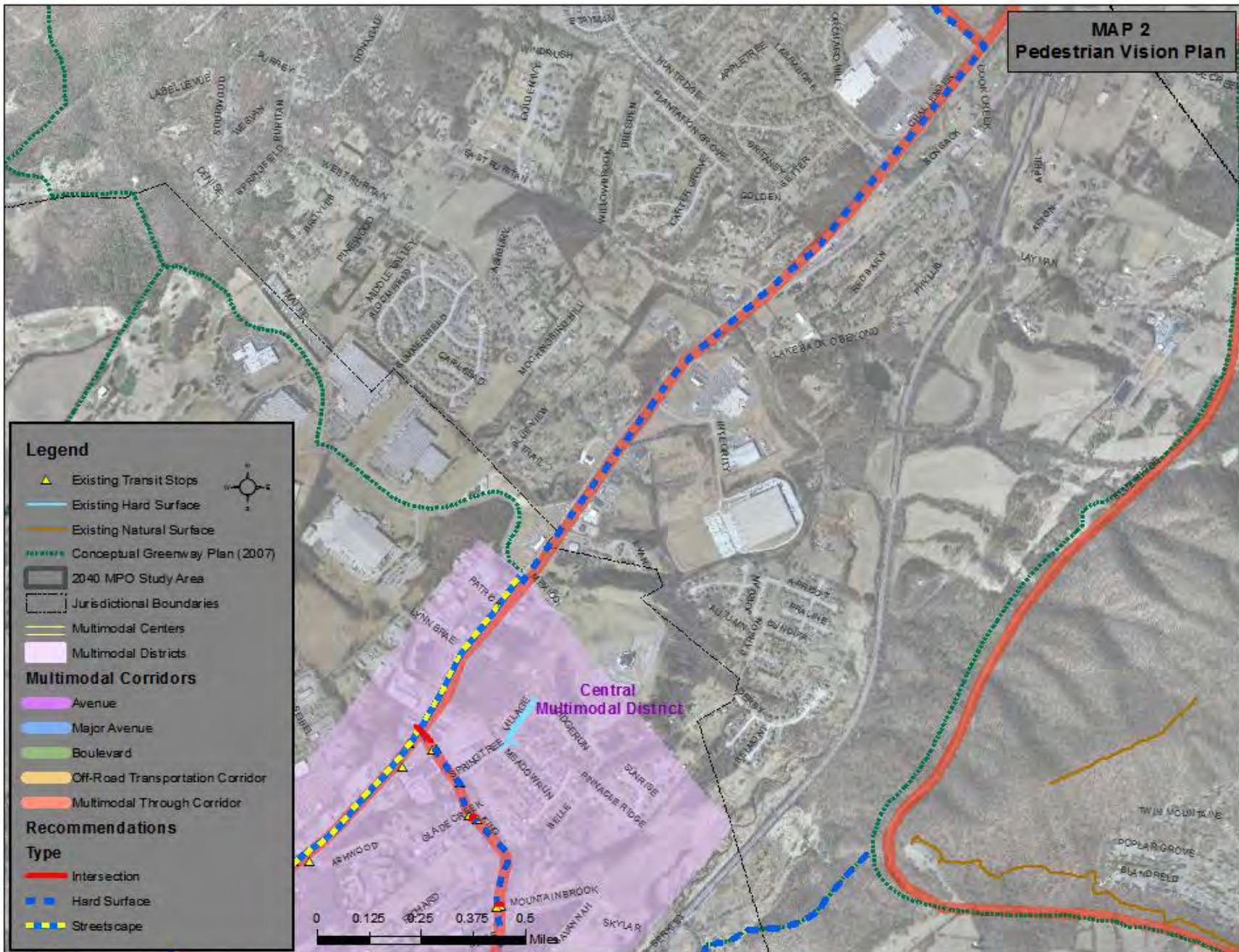
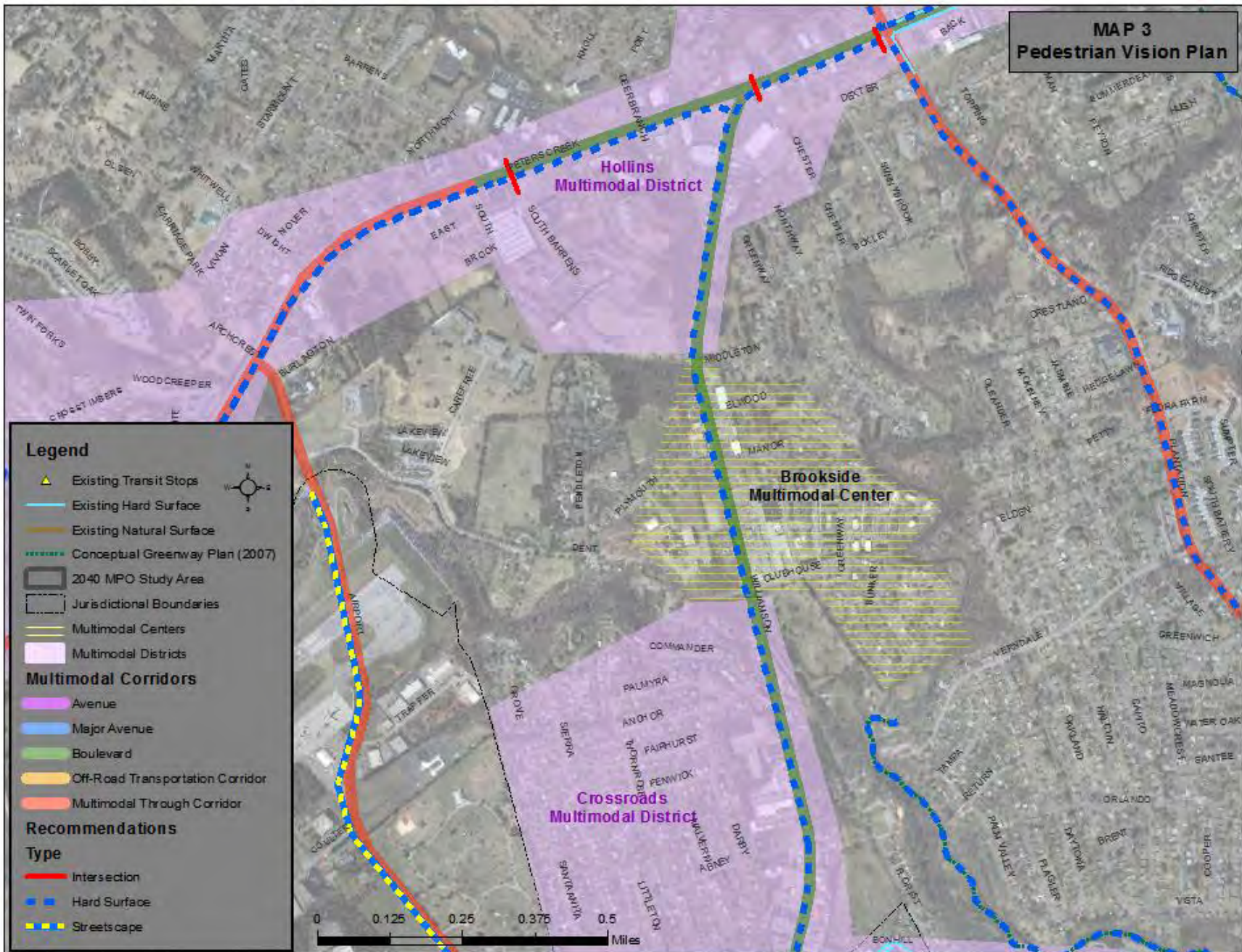


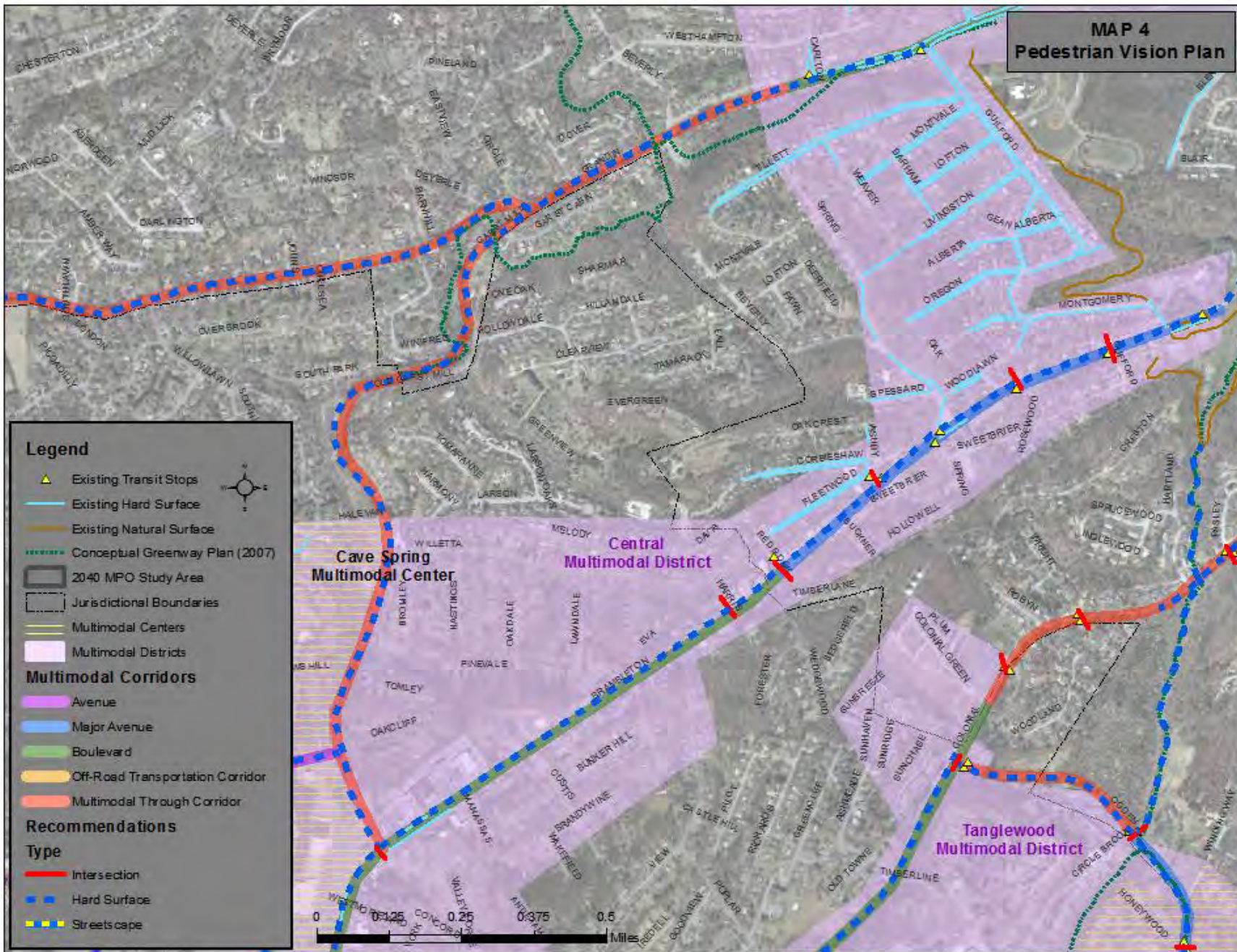
Figure 18: Map of Regional Pedestrian Transportation Infrastructure Projects

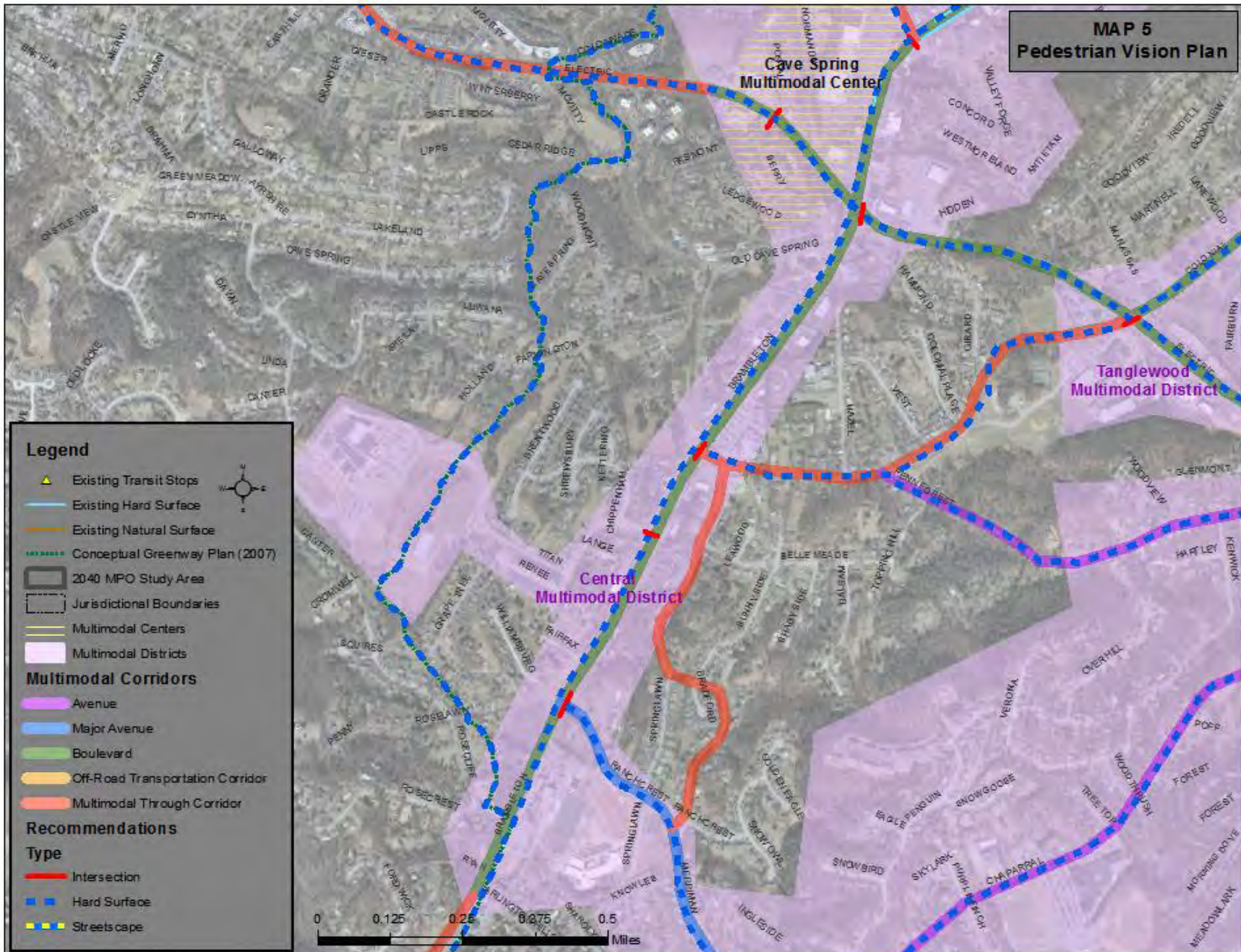


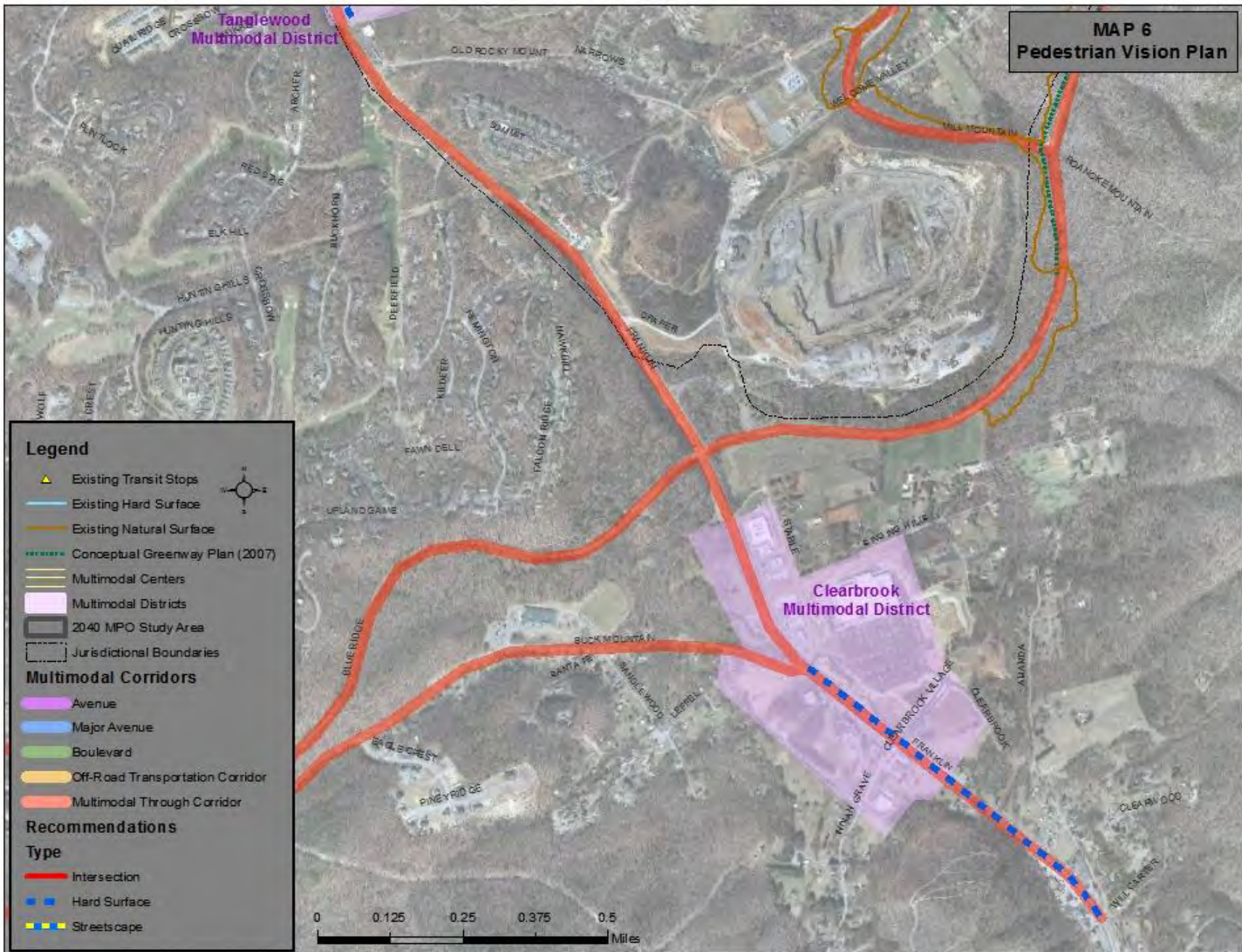


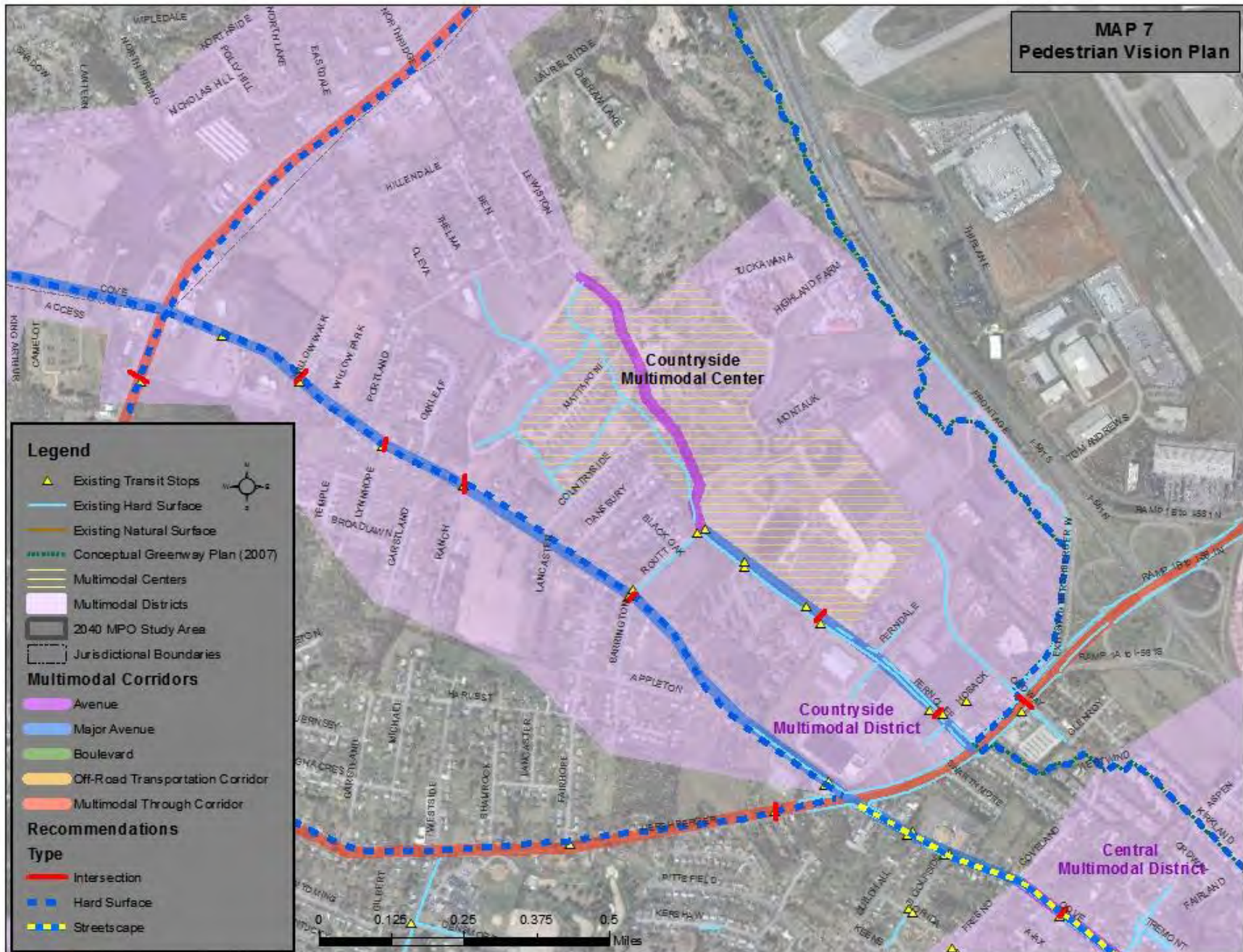


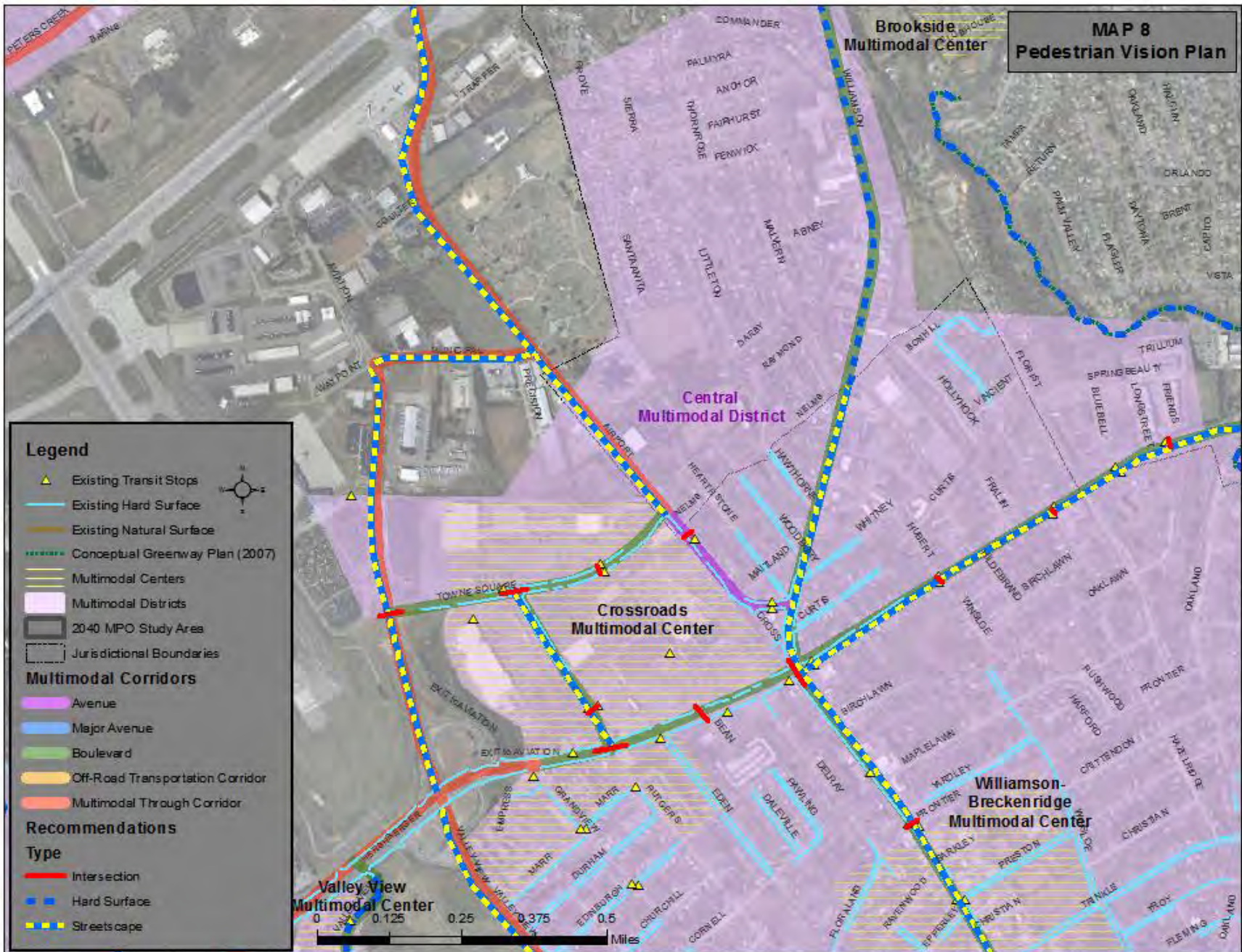


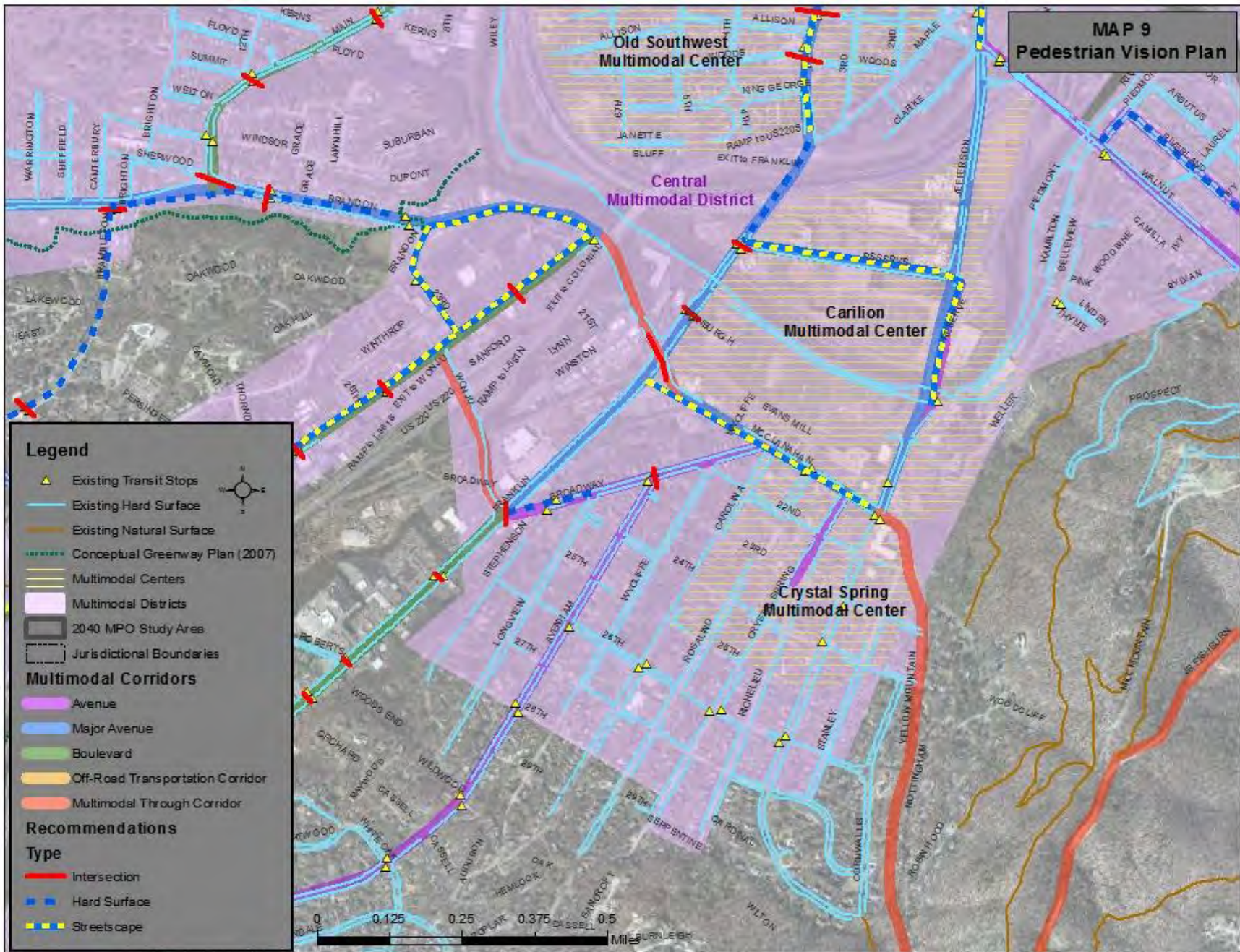


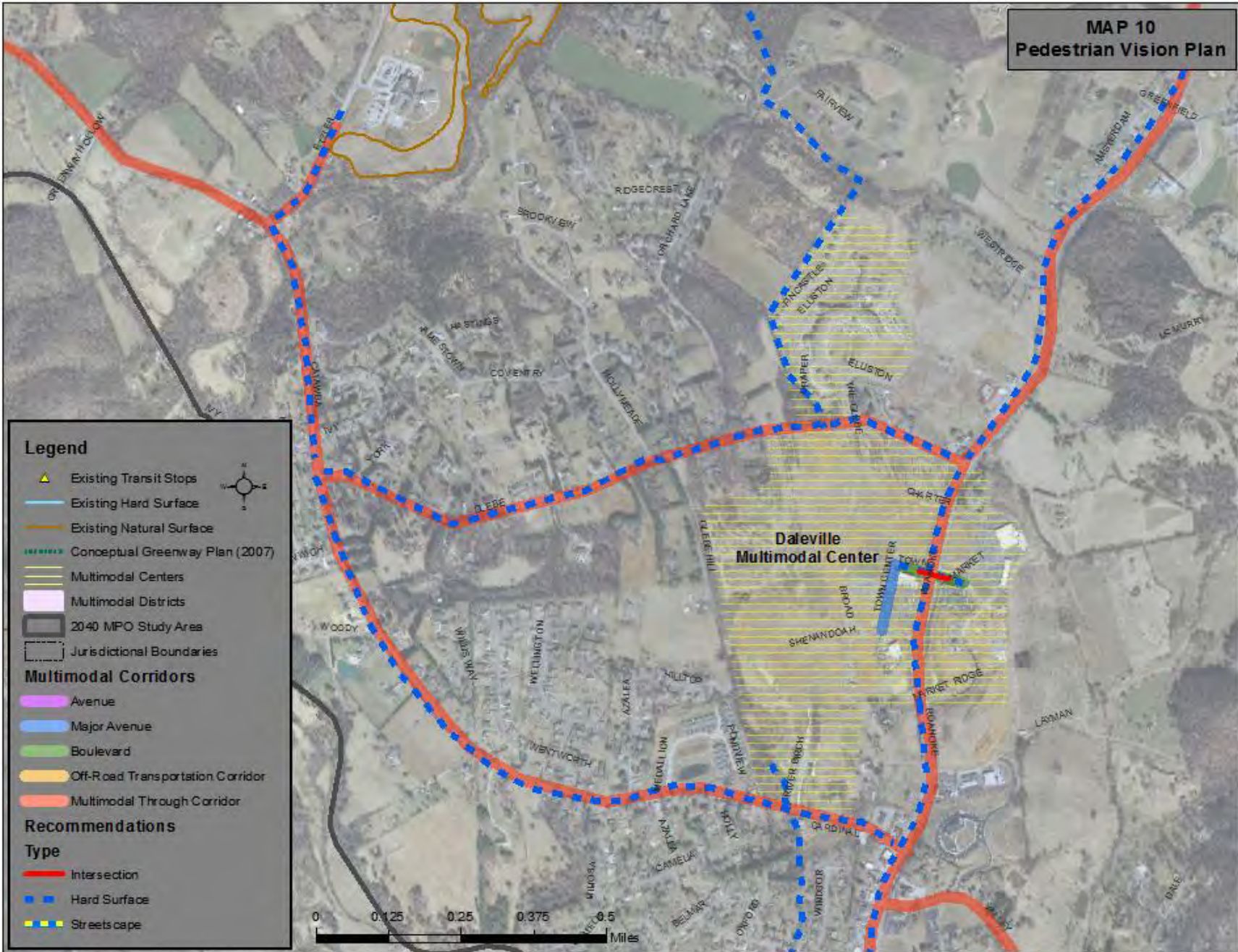




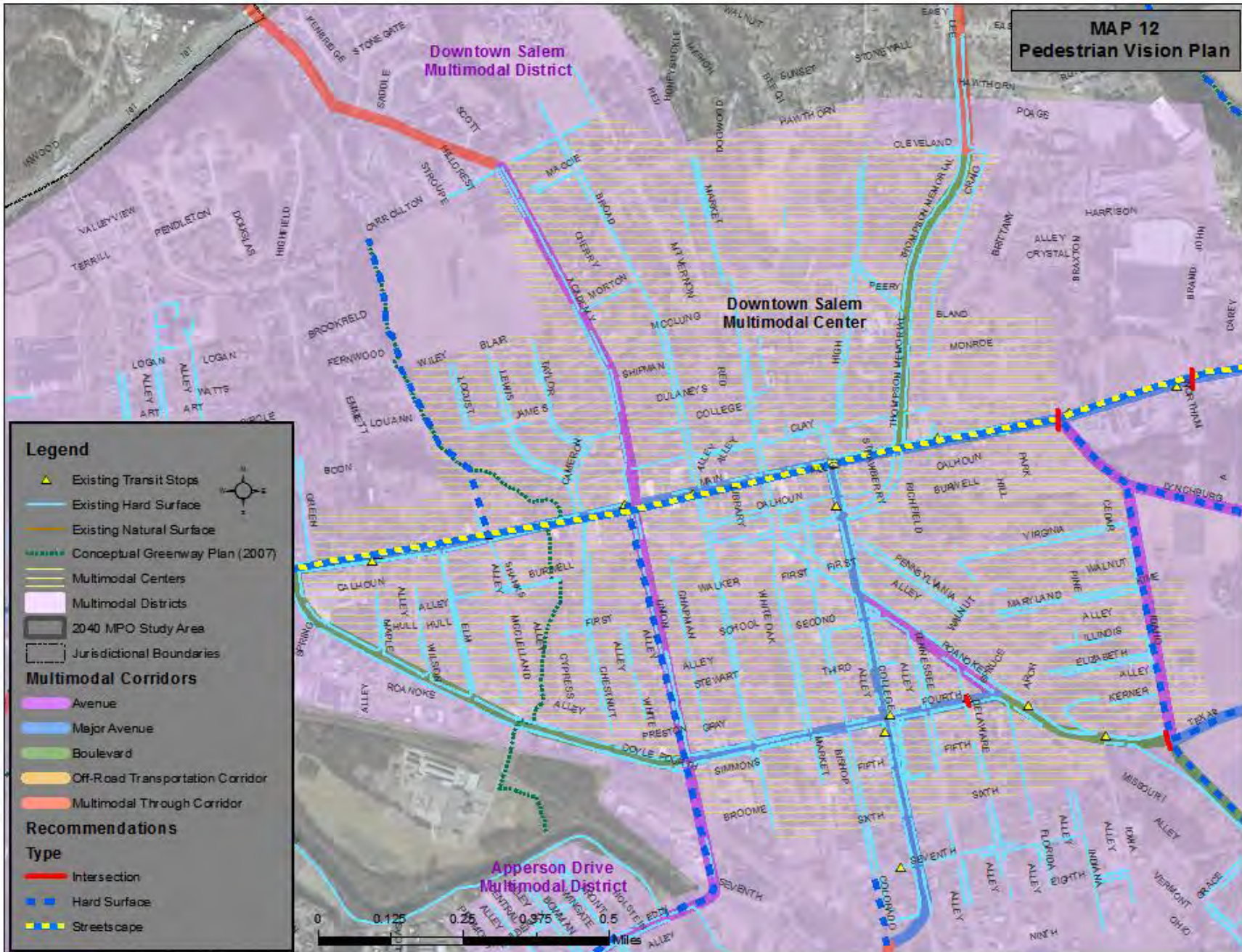


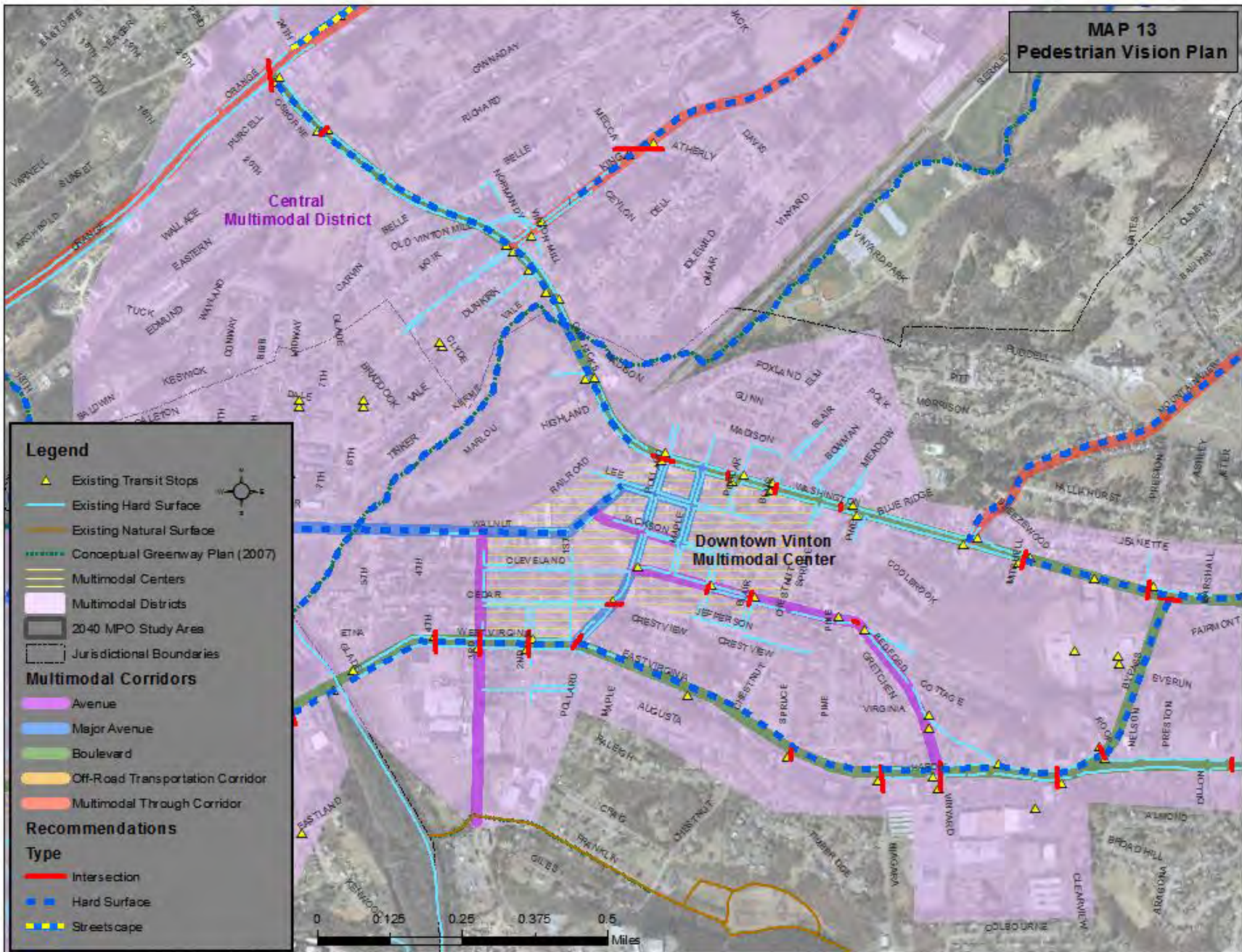


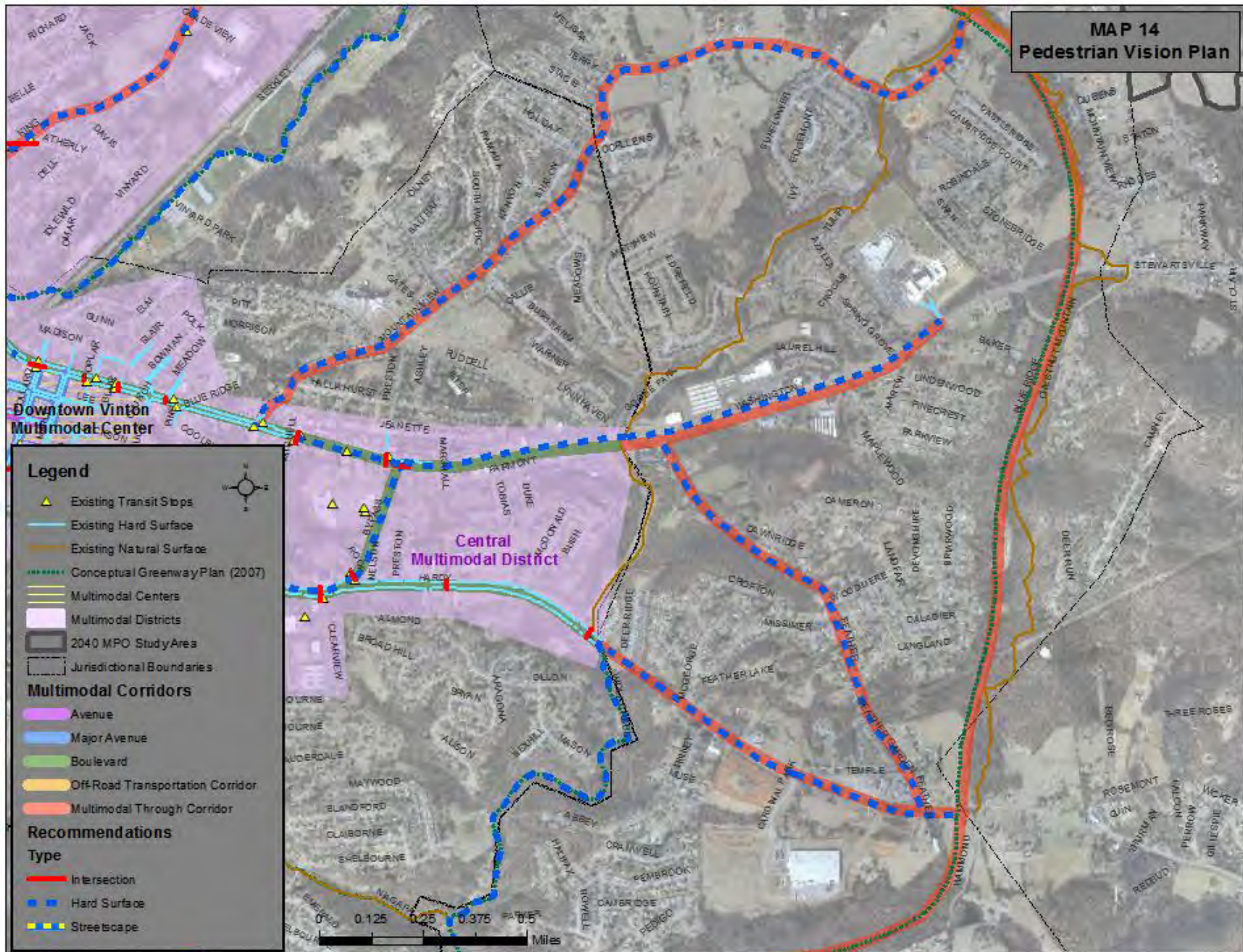




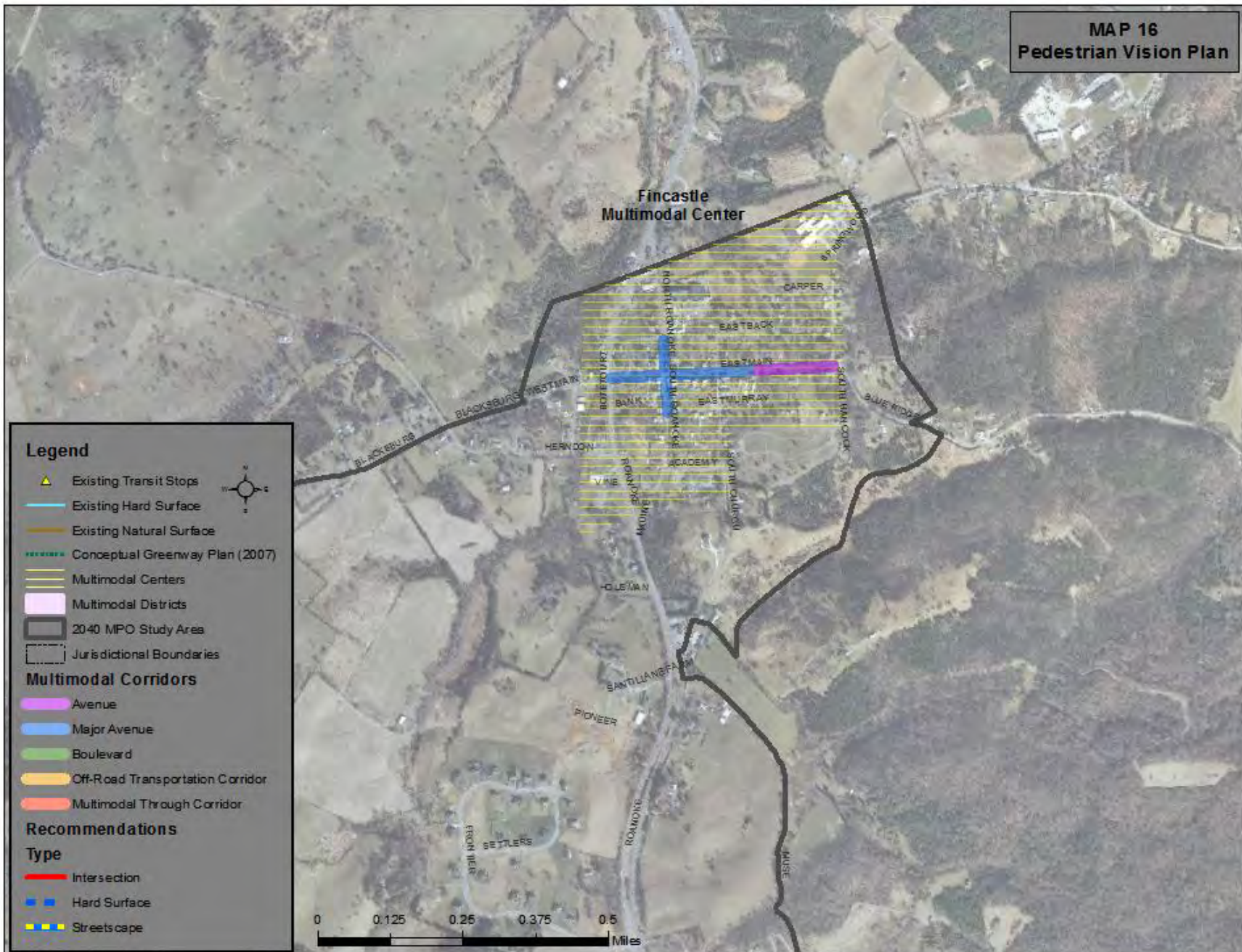


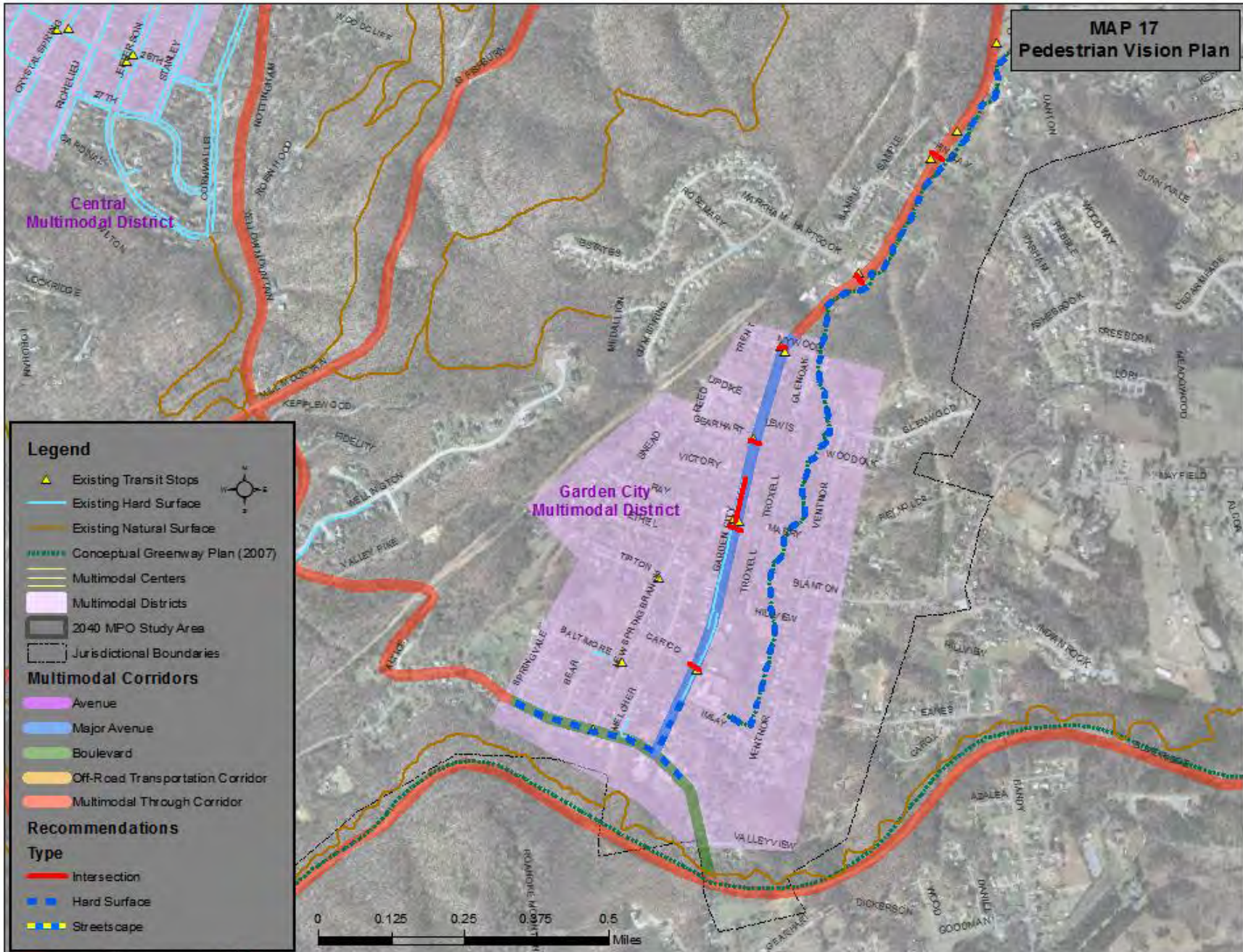


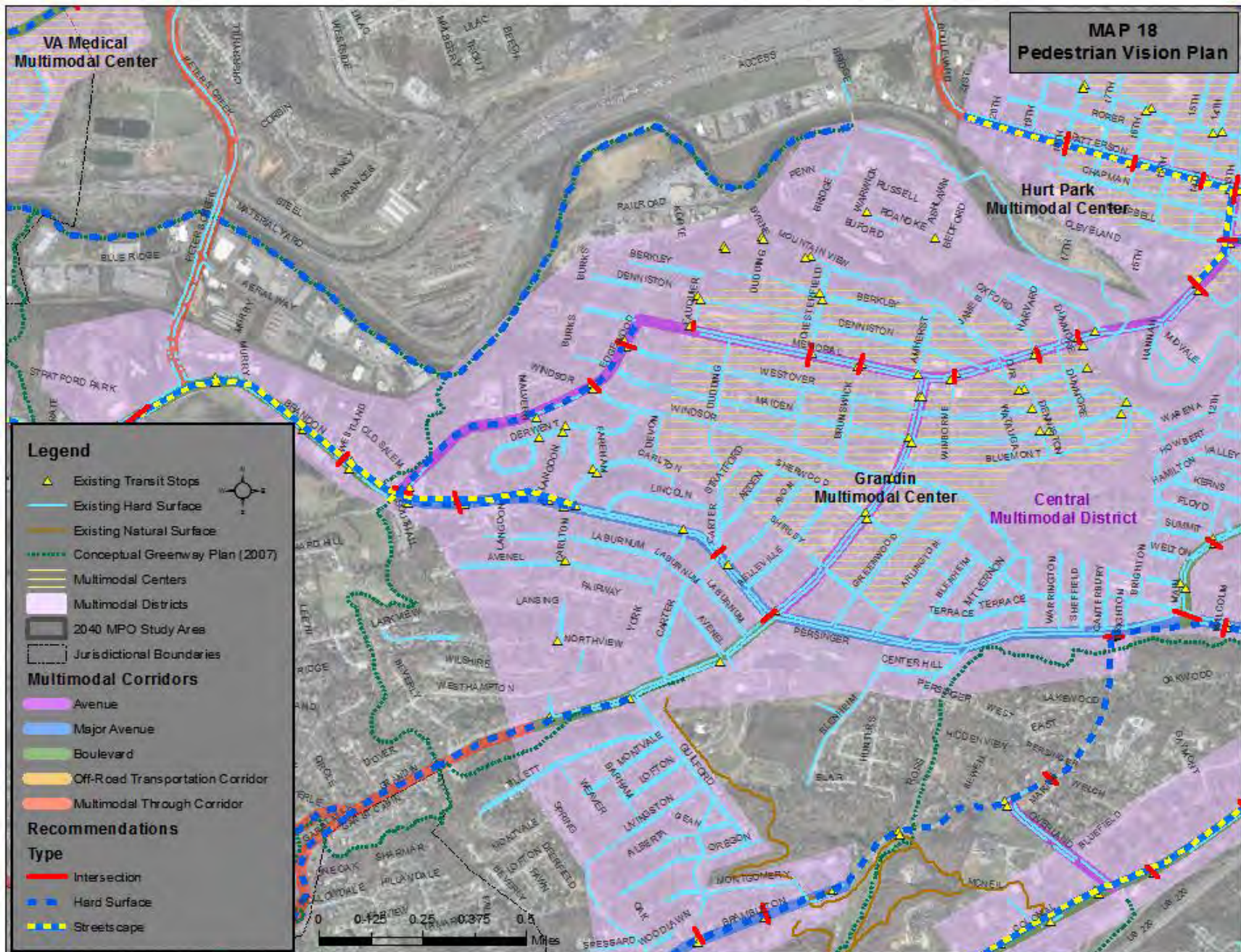


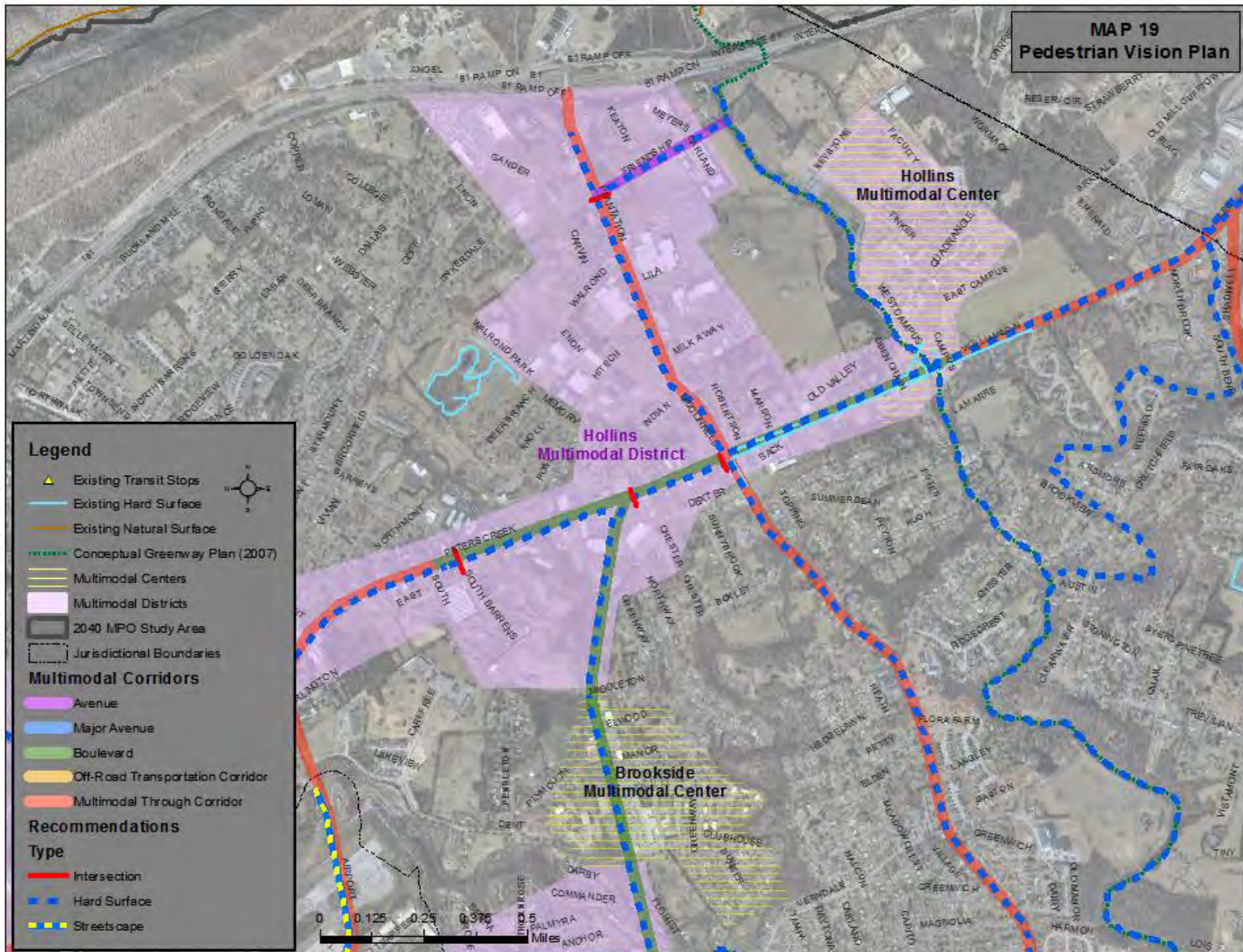


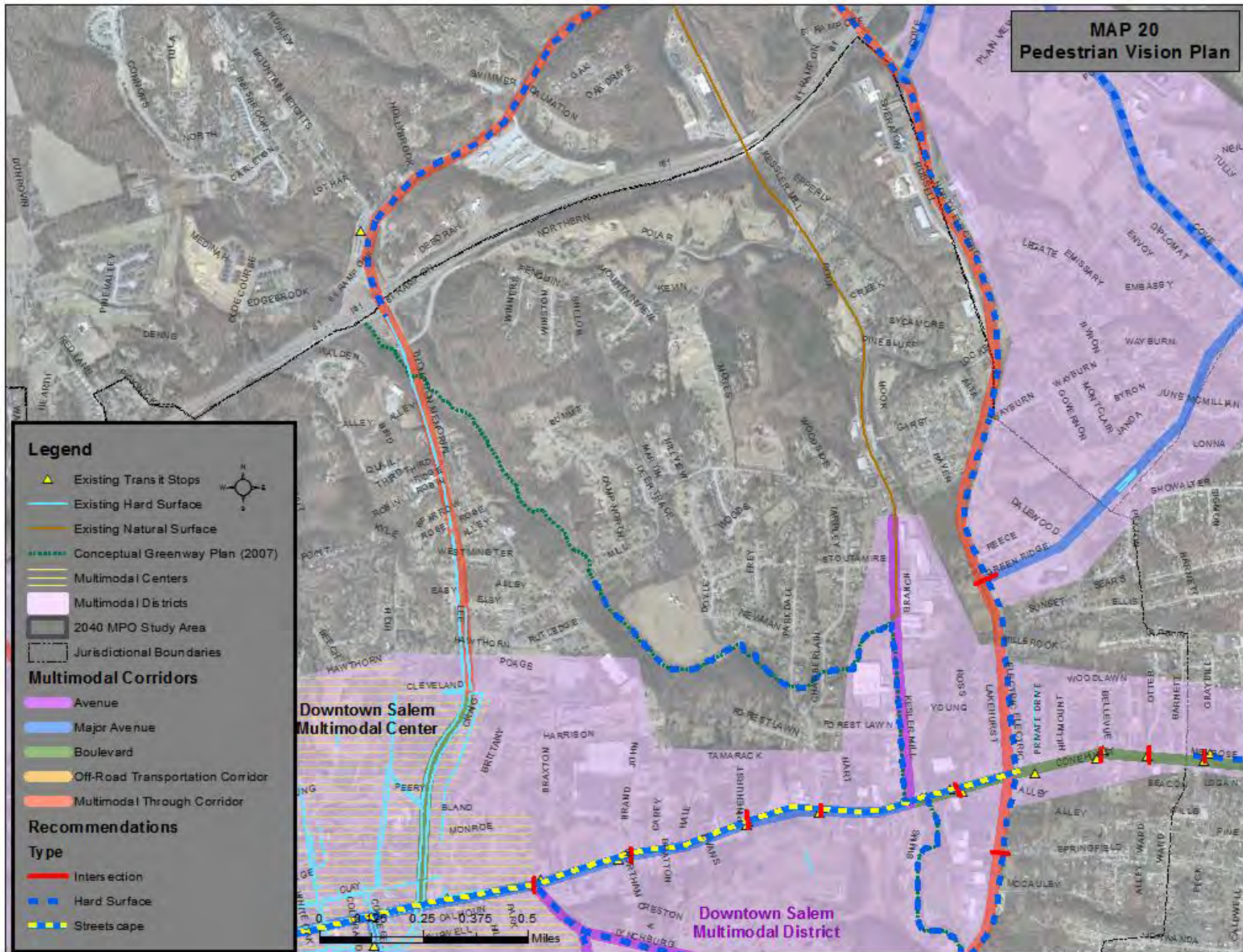
MAP 16
Pedestrian Vision Plan

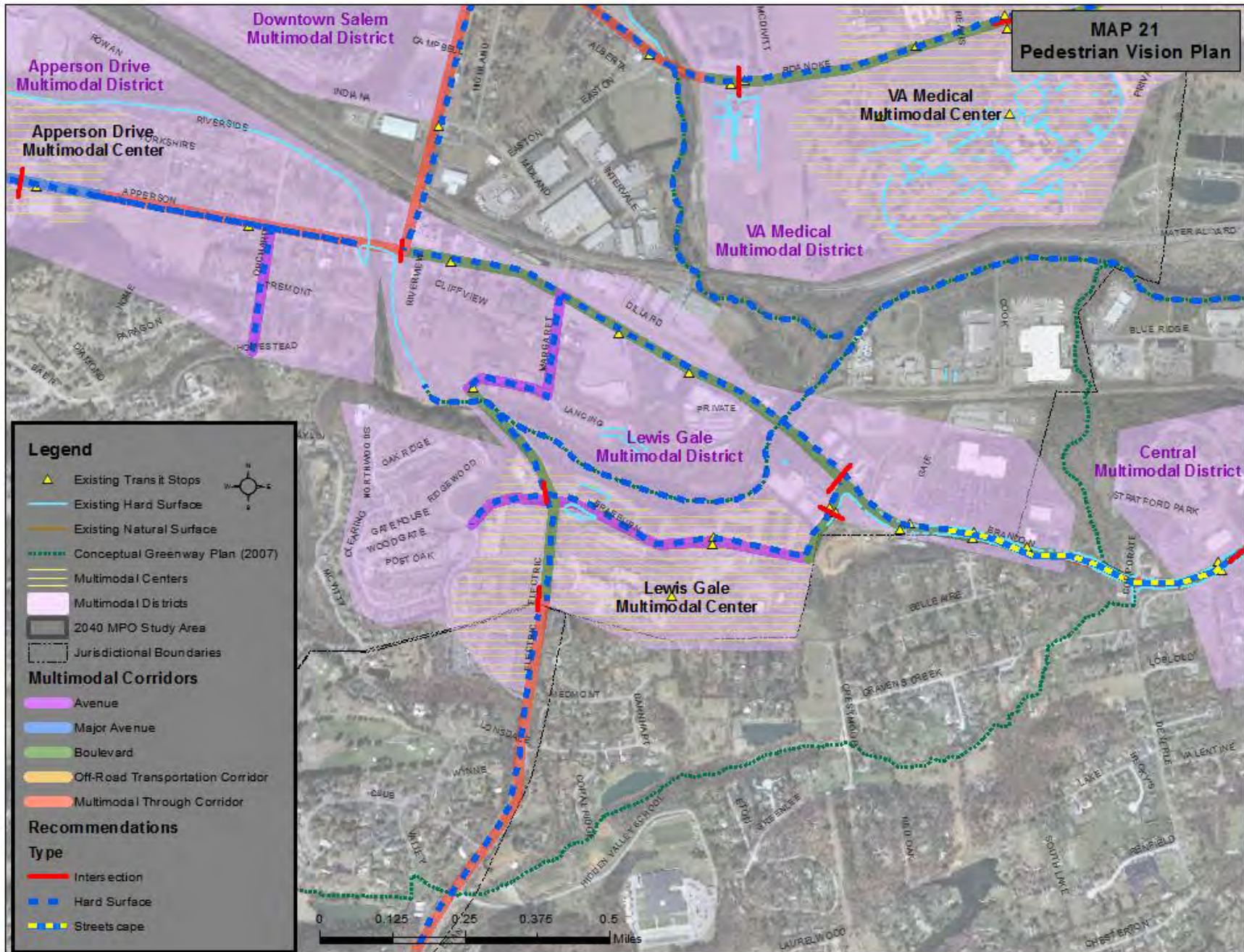


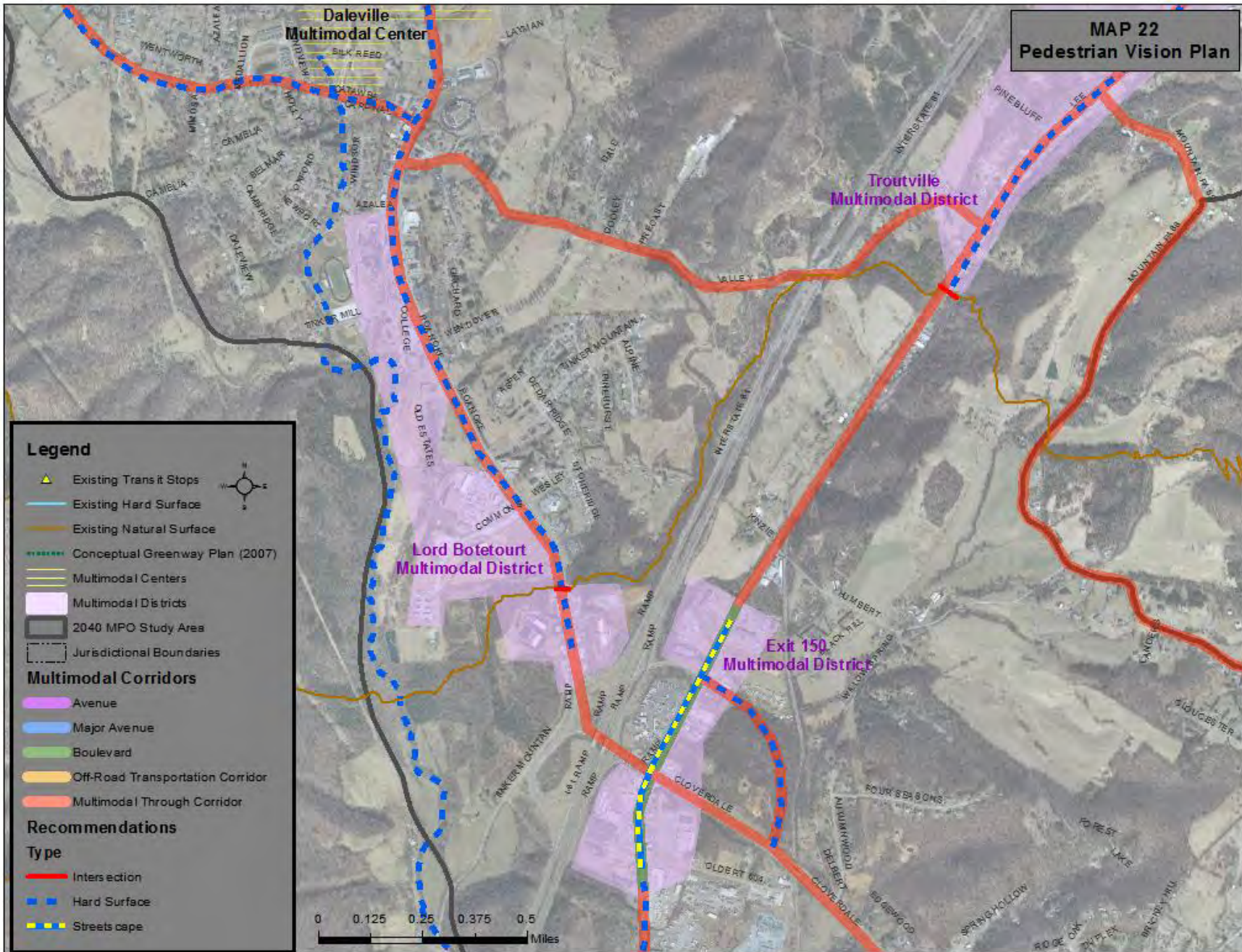


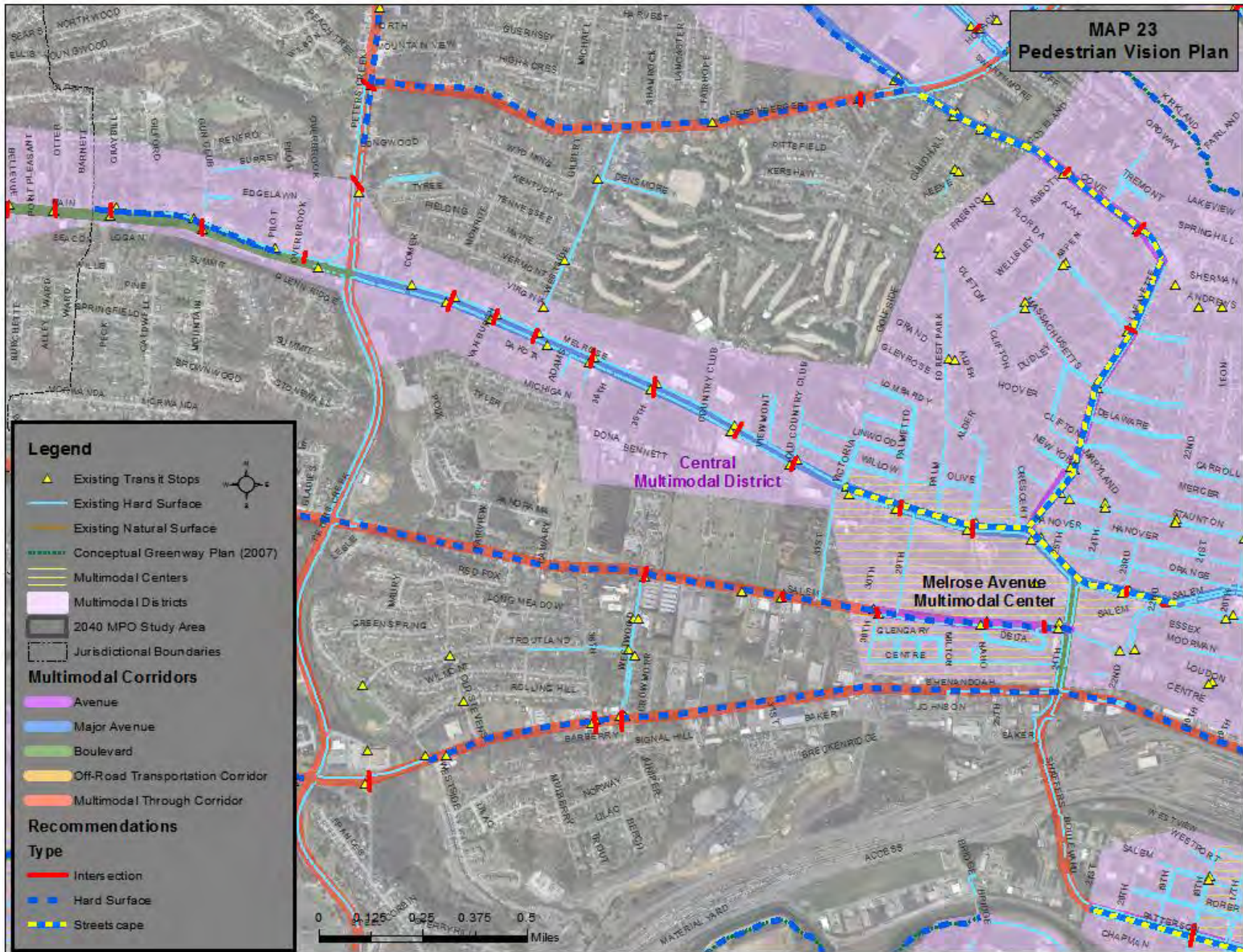


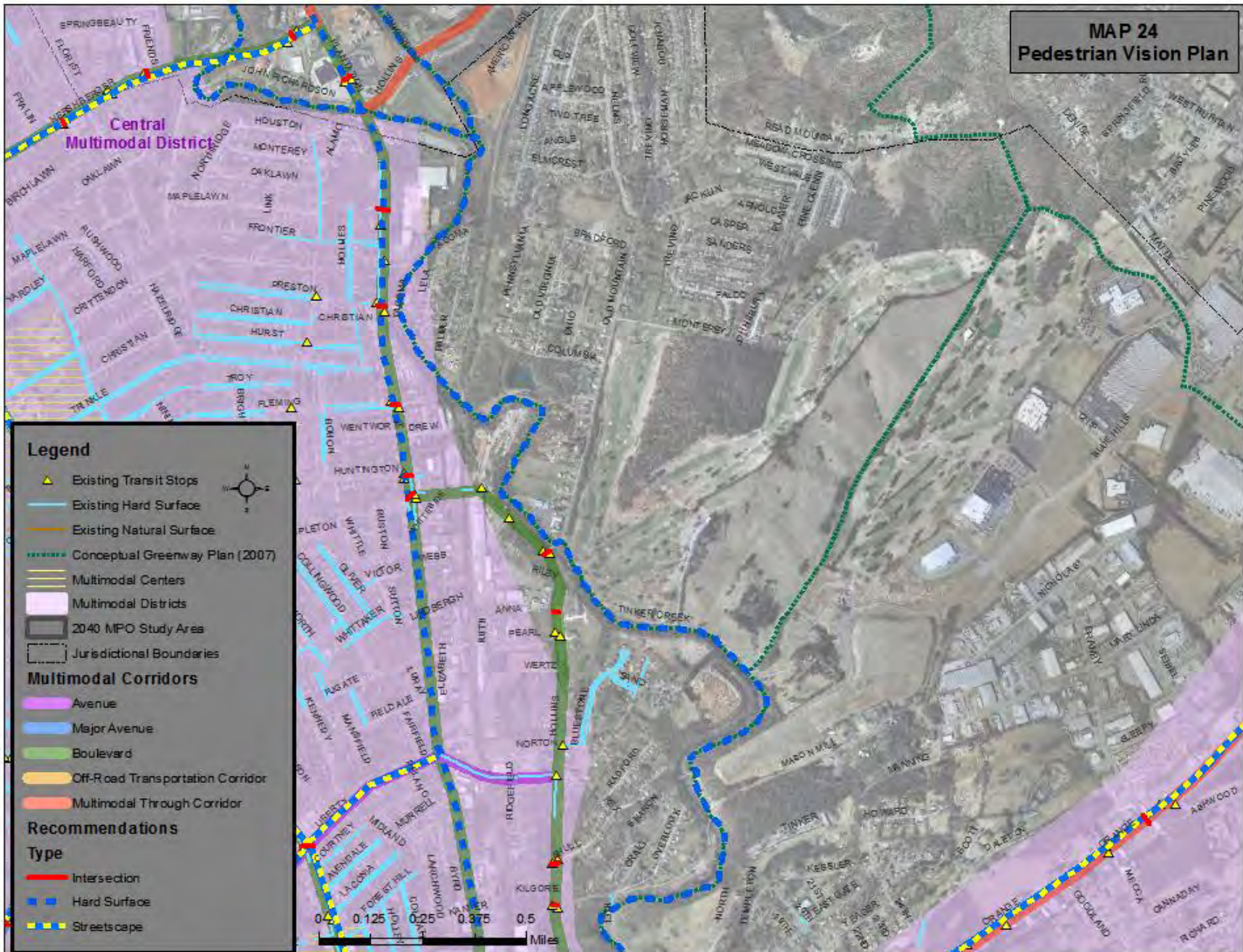


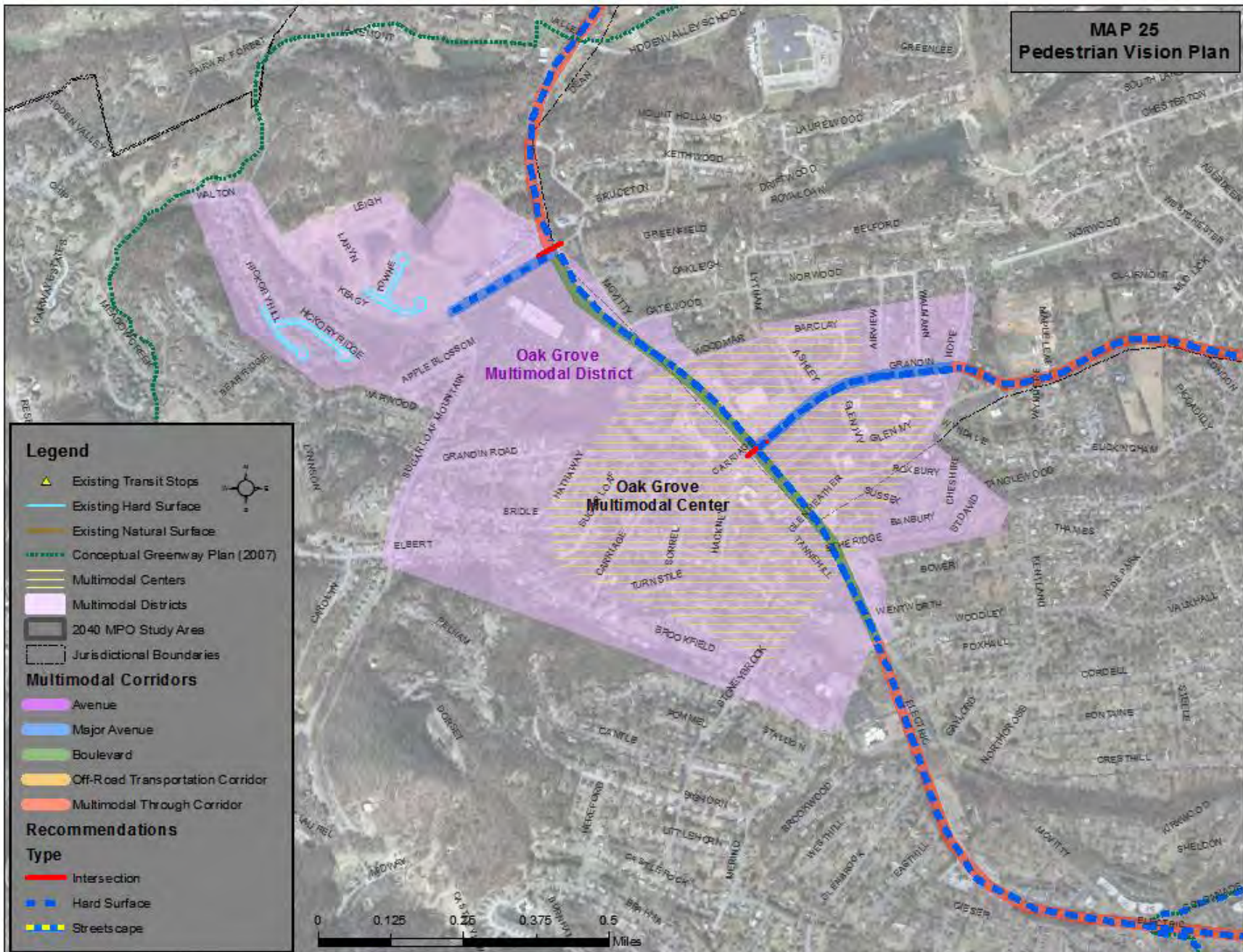


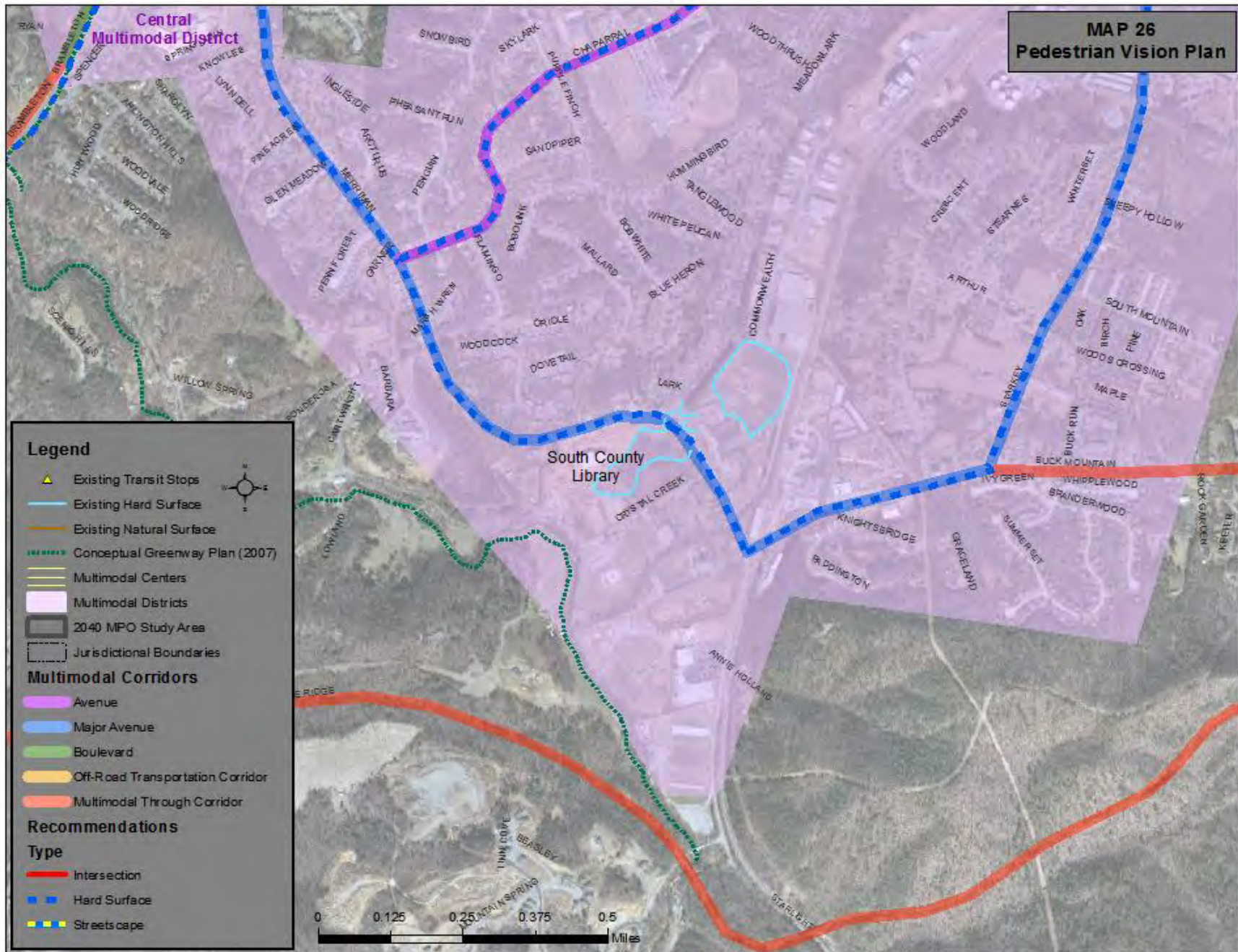


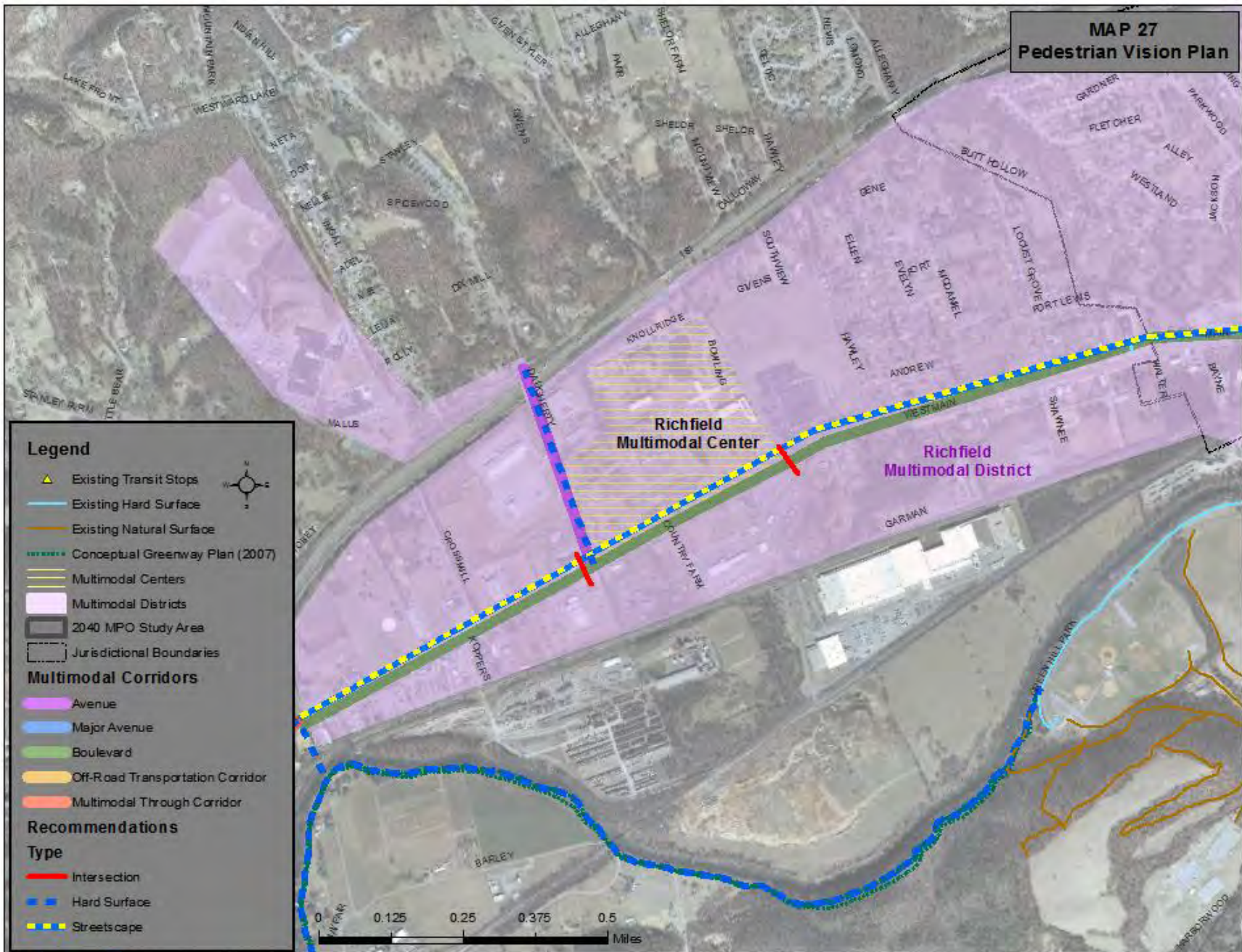


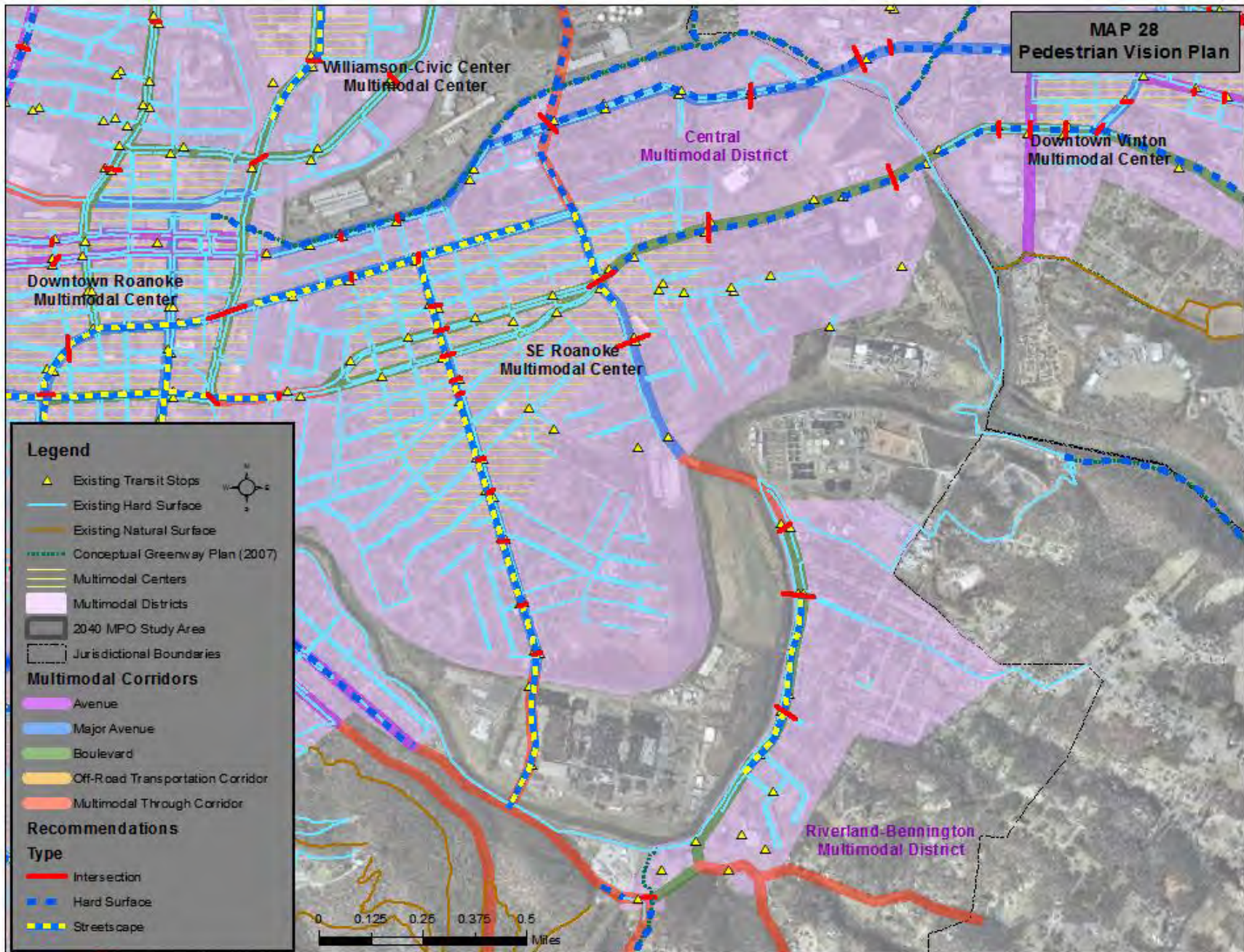


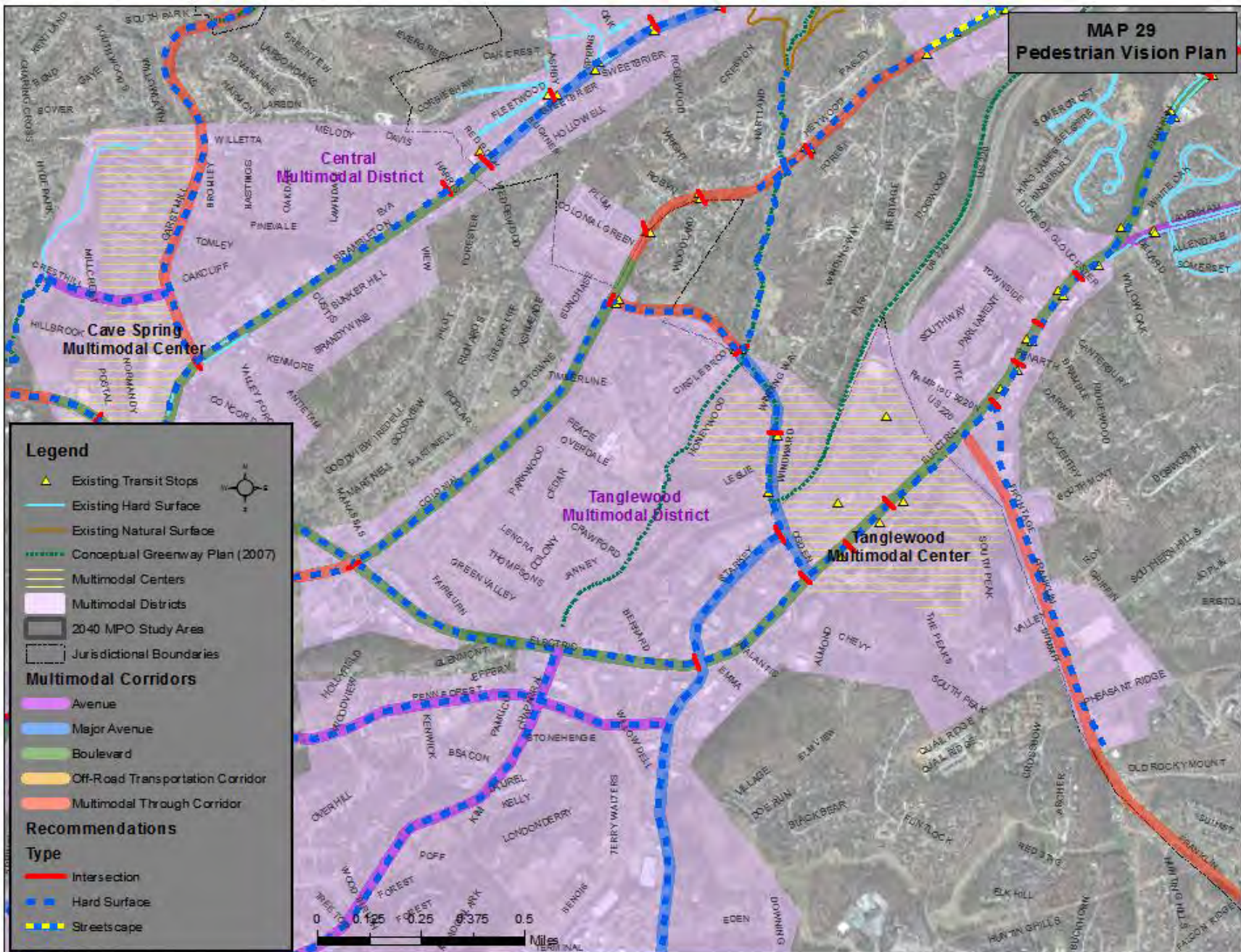


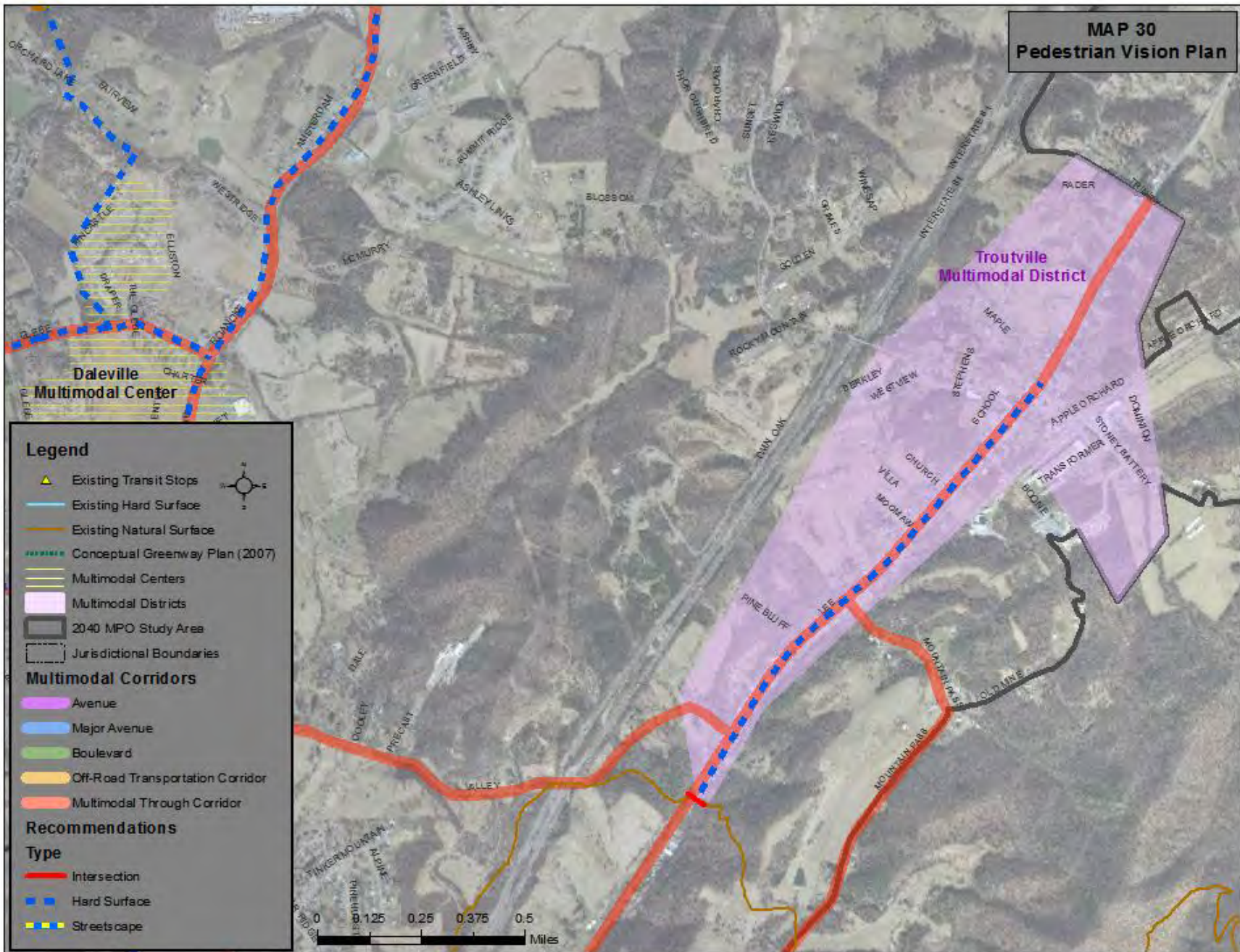


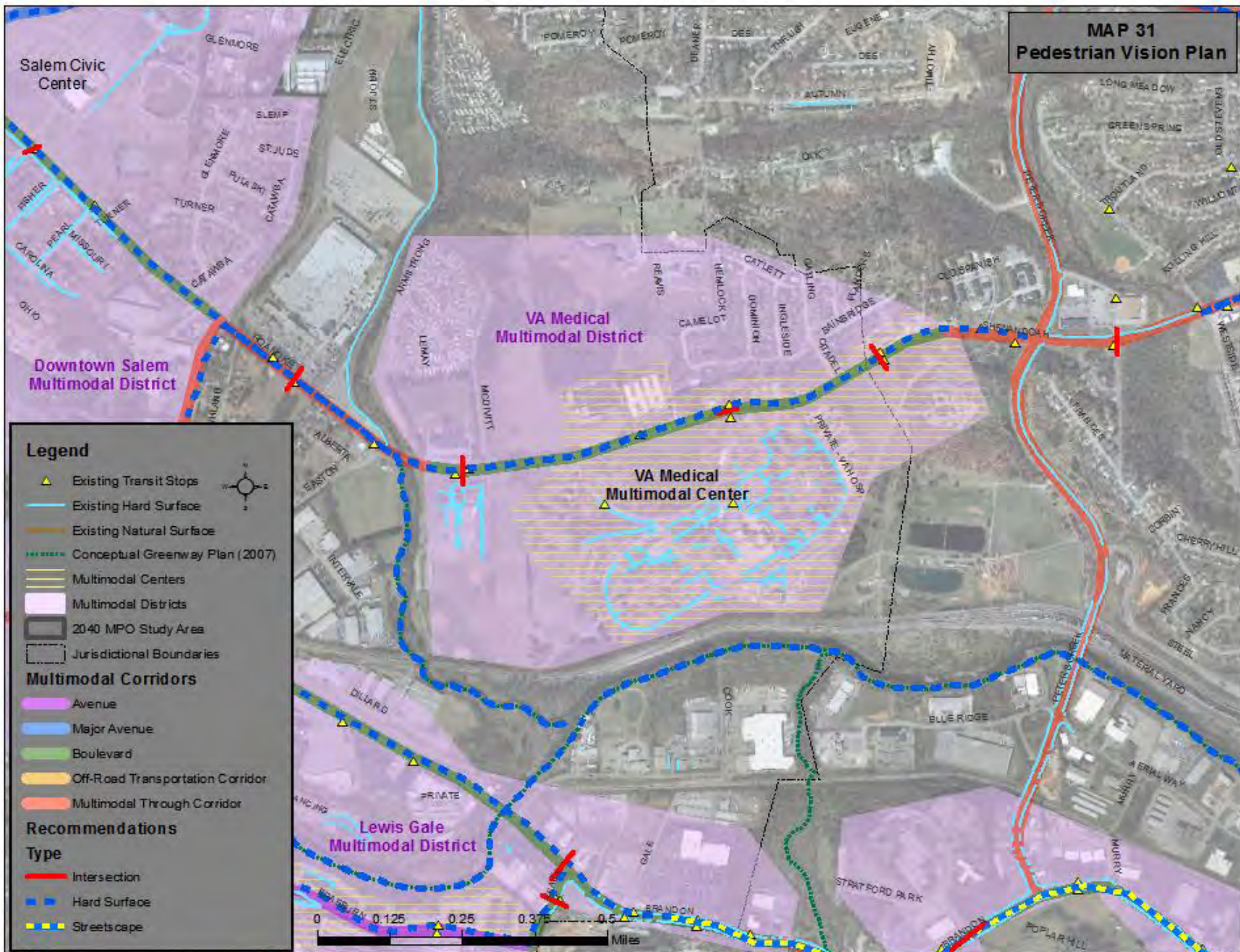


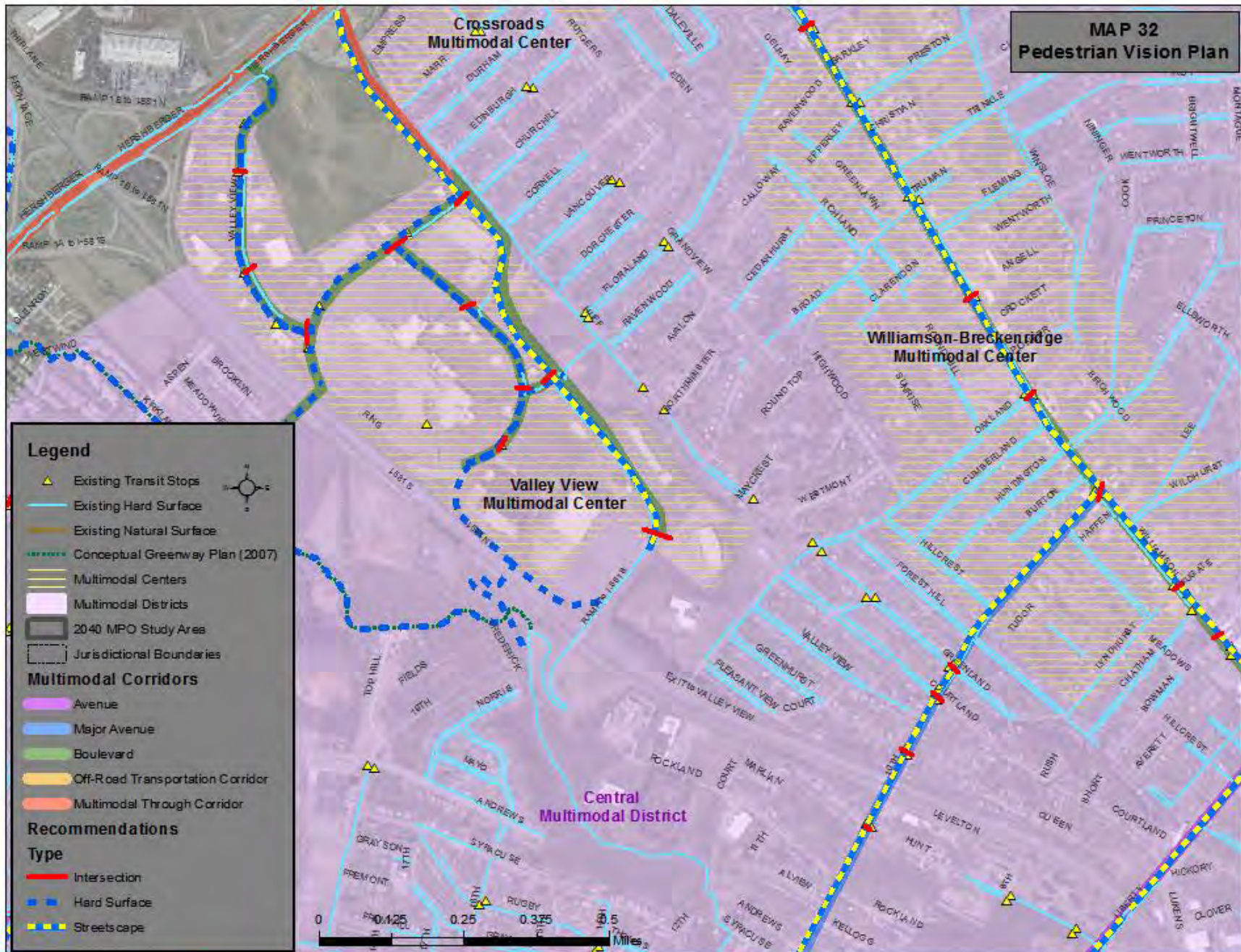


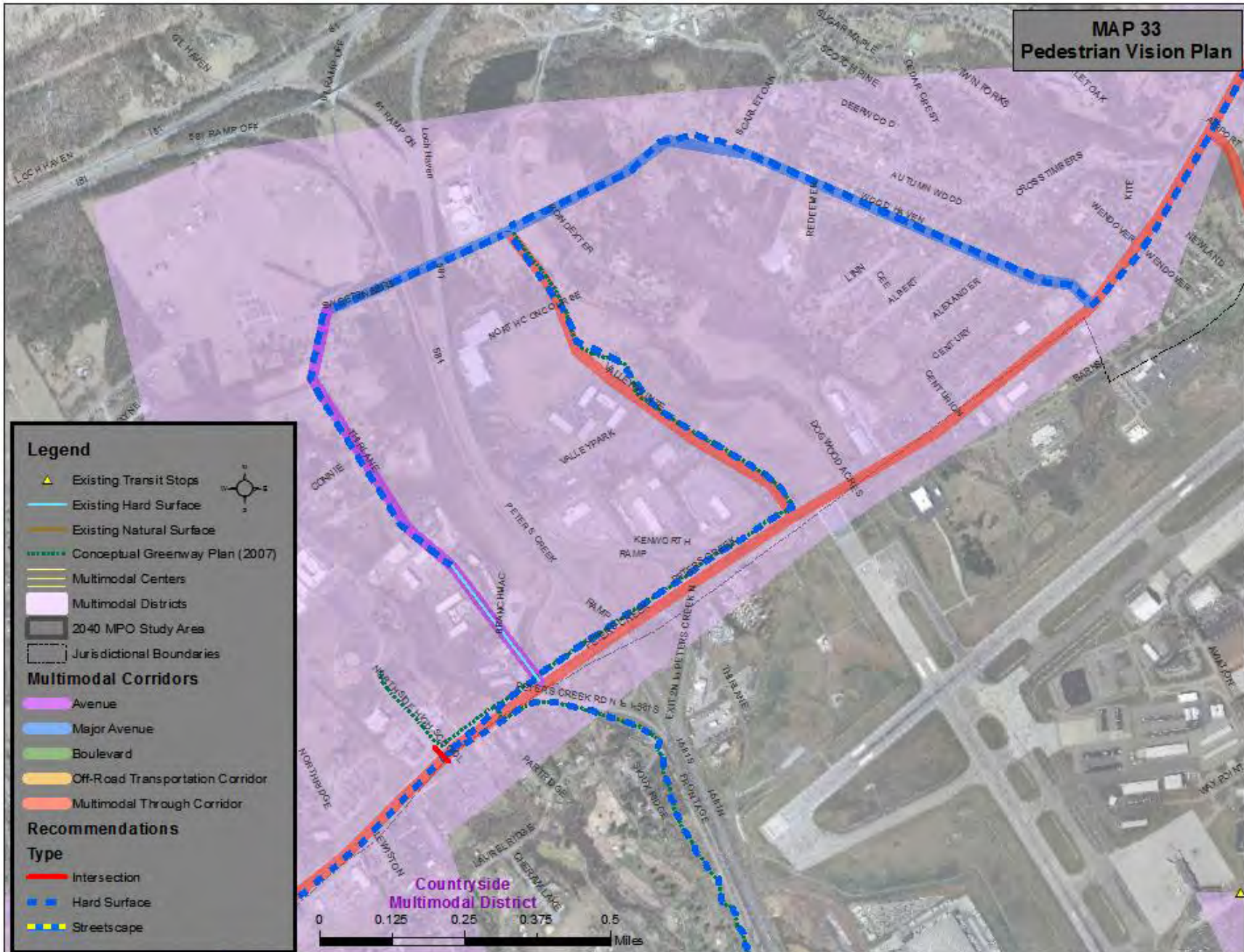


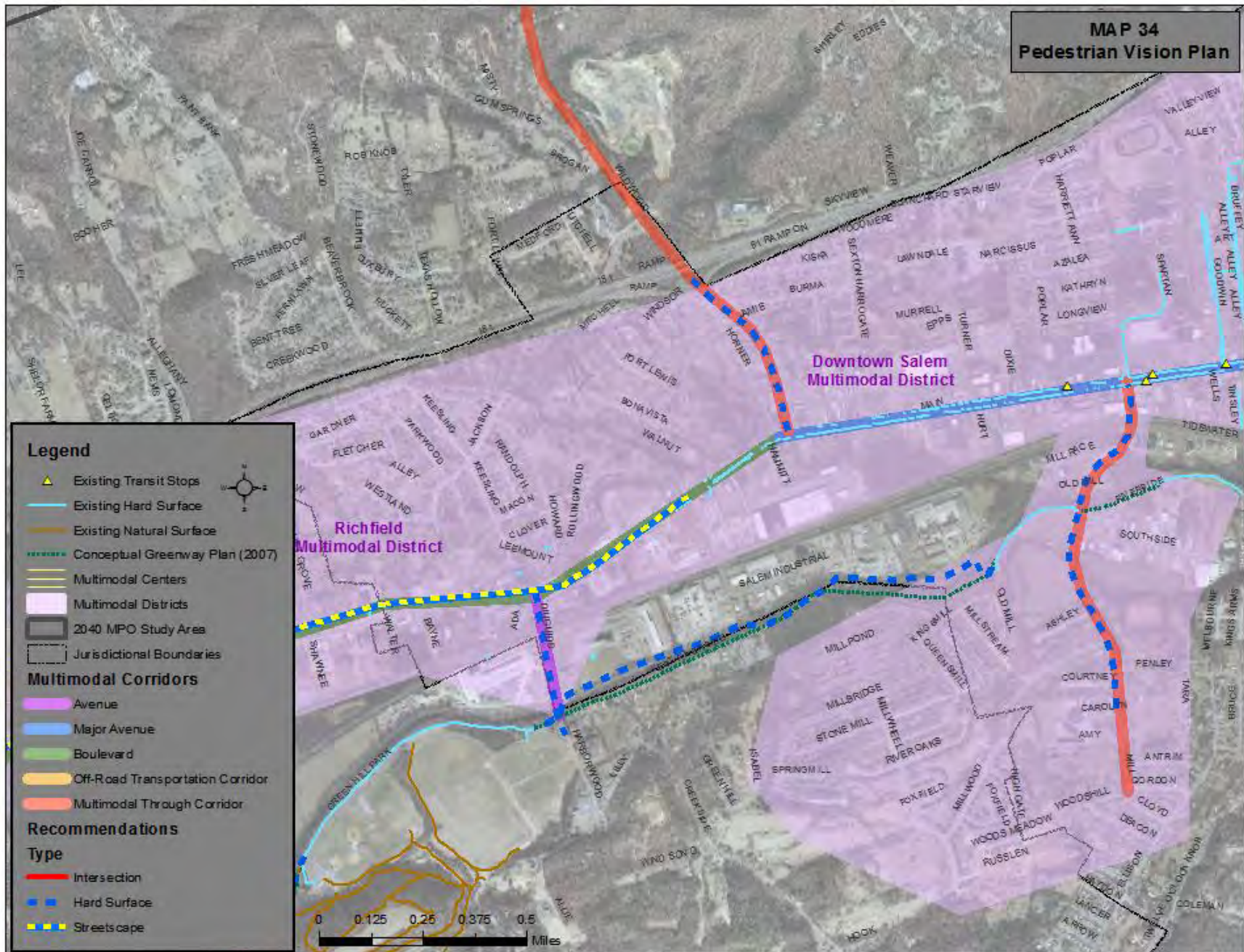


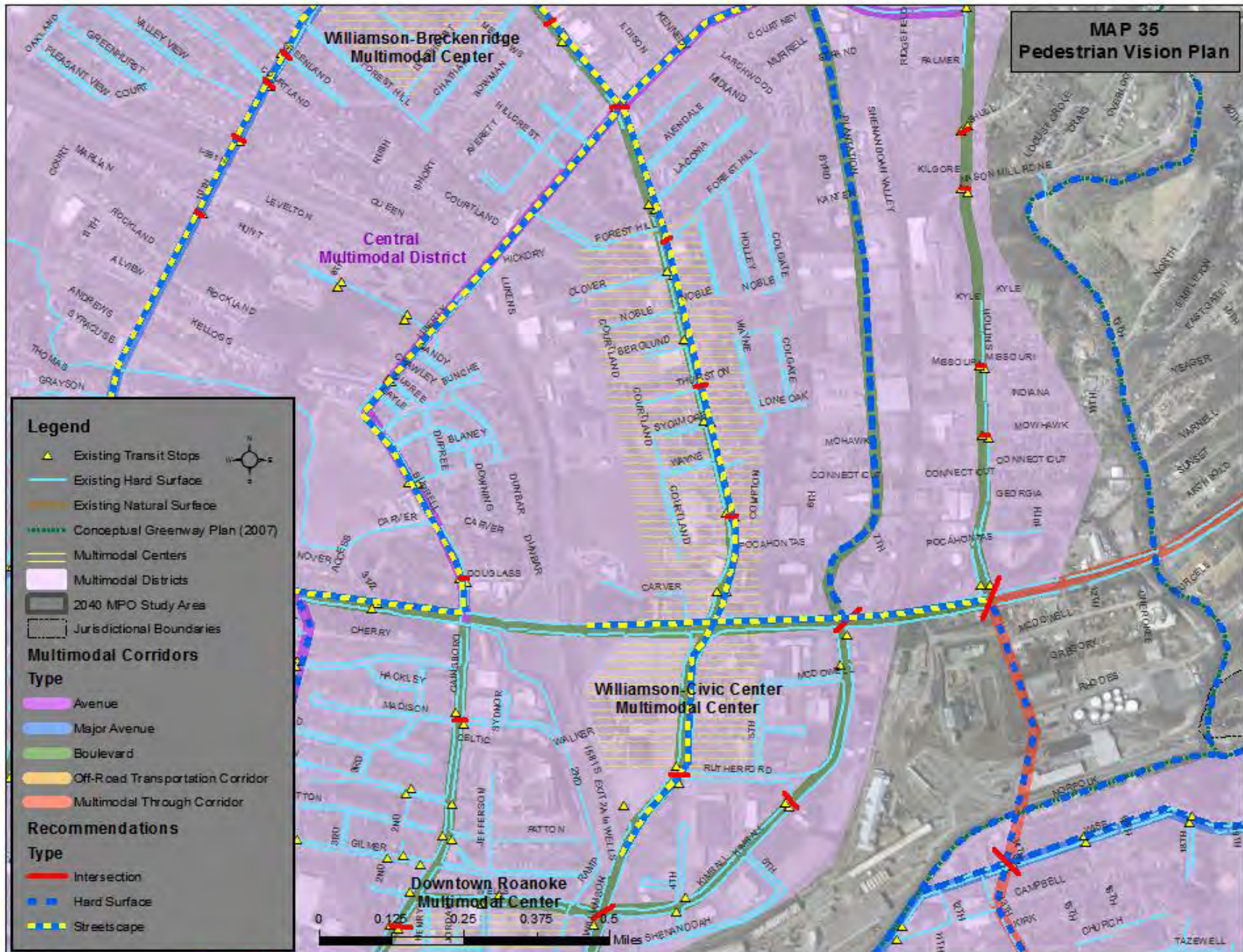












8.0 BEST PRACTICES: CREATIVE PEDESTRIAN ACCOMMODATIONS

The following pictures provide examples of how pedestrians are creatively being accommodated in the Roanoke Valley and in places around the world. Opportunities to improve the walking, waiting, and crossing spaces for pedestrians are present in all upcoming infrastructure projects planned along roads, off-road, or on private properties in the Roanoke region. Working with designers for both public and private improvements to incorporate pedestrian accommodations into every design will go a long way to making safer places for people to walk.



Figure 19: Towers Shopping Center's redesigned parking lot accommodates pedestrians from a new bus stop on Colonial Avenue, City of Roanoke



Figure 20: A little more green and less concrete makes 6th Street an attractive urban street for walking, City of Roanoke



Figure 21: A walking path is separated from the busy 4-lane roadway by a grass buffer with trees, Town of Blacksburg



Figure 22: Adding no new impervious surfaces, Westside Boulevard was redesigned to accommodate pedestrians/bikes within the existing street pavement along a path separated from traffic by a concrete median, City of Roanoke



Figure 23: Adding no new impervious surfaces, Williamson Road was redesigned to accommodate pedestrians/bikes within the existing street pavement along a path, the “Mill Mountain Greenway”, separated from traffic by a landscaped median, City of Roanoke



Figure 24: A sign along a multi-use wide sidewalk indicates bicyclists yield to pedestrians, Washington State



Figure 25: Open drainage channels minimize expenses while still providing space for pedestrians along a 4-lane road, Sanford, FL



Figure 26: Clear designation for cars, bicyclists (black lane), pedestrians (red lane), and bus riders (bench) with an accessible concrete bus stop landing pad, Reddington Beach, FL



Figures 28-29: A pedestrian path connects to a crosswalk, a pair of bus stops, and on-road bike lanes, Montgomery County, MD



Figure 27: A busy four-lane road features a median crosswalk diversion with two sets of pedestrian signals, one for each leg of traffic, Buenos Aires



Figure 30: Accessible pedestrian waiting area at a bus stop, Montgomery County, MD

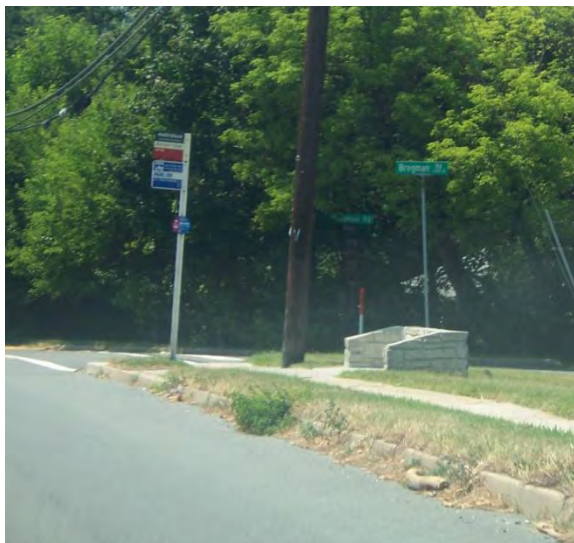


Figure 31: Simple pedestrian amenities at a bus stop, Montgomery County, MD



Figure 32: A car-free curb-free street is inherently ADA accessible; pavement textures and colors demarcate different areas for uses, Buenos Aires



Figure 33: At-grade railroad crossing with continuous pedestrian accommodations, Manassas, VA

9.0 FUNDING

Possibly the greatest challenge to any transportation project is securing the funding for design, right-of-way acquisition, and construction. In Virginia, projects are identified in the Commonwealth Transportation Board's Six-Year Improvement Program (SYIP) which allocates the funding for any surface transportation project. In developing the SYIP, each year, local governments work with citizens, transportation agencies, and other stakeholders to identify the projects that will help the locality, the region, and the Commonwealth achieve its goals. All projects receiving state or federal funding are listed in the SYIP.

Another document, the Transportation Improvement Program (TIP) is a 4-year financial program that lists the transportation projects within the RVTPO region that will utilize federal funds. The TIP reflects the projects and priorities identified in the RVTPO CLRMTP. The TIP is approved by the RVTPO Policy Board every three years but amendments and adjustments occur continuously as new projects are added or existing projects are modified.

Within the government, the following programs exist to fund pedestrian infrastructure.

- ▲ LOCAL GOVERNMENT CAPITAL IMPROVEMENT PROGRAMS
- ▲ REVENUE SHARING PROGRAM
- ▲ PRIMARY AND SECONDARY ROAD PROGRAMS
- ▲ REGIONAL SURFACE TRANSPORTATION PROGRAM
- ▲ TRANSPORTATION ALTERNATIVES PROGRAM
- ▲ HIGHWAY SAFETY IMPROVEMENT PROGRAM
- ▲ RECREATIONAL ACCESS PROGRAM
- ▲ LITTER FUNDS

▲ SHARE THE ROAD SIGN PROGRAM

One of the simplest ways to accomplish pedestrian accommodations is for local governments to require developers to build the necessary infrastructure at the time of construction. This is especially important in areas where pedestrian traffic is likely to occur based on the surrounding current or future land uses. The multimodal centers and districts already identified by the region are a good starting point for identifying places where pedestrian accommodations should naturally occur with new development.

10.0 IMPLEMENTATION STRATEGIES

A number of strategies have been identified that will guide the region as it works towards accomplishing each goal and ultimately its vision for a more pedestrian-friendly Roanoke Valley. The following tables correspond to each goal. They list the related strategies, the responsible parties for implementing the strategy, the expected output of the strategies, and the ultimate outcomes.

Measuring the success of investments and actions has become a state and national priority as they relate to meeting goals and desired outcomes. The Roanoke Valley TPO, as part of its typical Work Program, tracks several performance measures, many of which relate to the vision and goals of the Pedestrian Plan. Those measures are listed according to their tracking number in parentheses. In addition, new measures are recommended in addition to existing measures, which will aid in the measurement of progress. The Regional Commission, as staff to the RVTPO, will be responsible for coordinating data tracking among regional and local staff.

GOAL #1: IMPROVE SAFETY FOR PEDESTRIANS. MORE PEOPLE ARE SEEN WALKING IN THE ROANOKE VALLEY BECAUSE THEY FEEL SAFE DUE TO NEW INFRASTRUCTURE WHICH MAKES WALKING SAFER FOR PEOPLE.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
1	Construct hard surface walking facilities where many people need/want to walk.	-Developers of new developments -Local Government (Planning and Engineering staff) - Virginia Department of Transportation (Planning and Engineering staff)	More linear feet of hard surface walking facilities.	More people walk.	(3.2) Number of Pedestrians by Location (3.3) Number of Greenway Users by Location (8.1) # and % of residents who walk to work (New) Linear feet of public walkways in Multimodal Centers (New) Linear feet of public walkways in Multimodal Districts (New) Linear feet of public walkways in the TPO study area.
2	Maintain pedestrian infrastructure including walking facilities, pedestrian signals, crosswalks, etc.	-Local Governments (Traffic Engineering staff) - Virginia Department of Transportation	Existing pedestrian infrastructure in good working order and upgraded to accommodate the mobility needs of people with disabilities.	People are able to use existing infrastructure without difficulty.	(2.10) Annual pedestrian fatalities (2.11) Annual pedestrian injuries (New) Total Number of Curb Ramps
3	Install crosswalks, pedestrian signals, and pedestrian safety signage at identified locations, particularly within multimodal districts and centers.	- Local Governments (Planning and Traffic Engineering staff) - Virginia Department of Transportation	Marked pedestrian crossings with clear indications on when and where pedestrians are expected to cross the street.	People feel comfortable crossing the street.	(New) Total Number of Crosswalks (New) Total Number of Pedestrian Signals

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
4	Install lighting along sidewalks, at crosswalks, and public transit stops.	-Developers of new developments -Local Governments(Traffic Engineering staff) - Virginia Department of Transportation -Valley Metro	Greater visibility in the dark where pedestrians walk and wait.	-More people feel comfortable walking in the dark. -No crimes due to lack of visibility.	(New) Number of public transit stops with nearby lighting.
5	Provide ADA landing pads at public transit stops.	-Developers of new developments -Valley Metro -Local Governments (Traffic Engineering staff) - Virginia Department of Transportation	Number of public transit stops that have an ADA accessible place to wait.	All public transit stops are ADA accessible; people with disabilities have a safe place to wait at public transit stops.	(New) Number of ADA accessible public transit stops.
6	Provide ADA accessible routes from nearby local streets to public transit stops.	-Developers of new developments -Local Governments (Traffic Engineering staff) - Virginia Department of Transportation	Number of public transit stops that have a safe walking connection to nearby streets.	All public transit stops have a connection to a nearby street; people with disabilities have a safe place to travel from a stop to a nearby local street.	(New) Number of public transit stops connected to a public walkway.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
7	Educate pedestrians and drivers about laws, use of the road, etc.	-RideSolutions - Virginia Department of Transportation -Local Law Enforcement -Parents	Campaigns and material distributed to educate pedestrians and drivers.	Pedestrians cross the road at marked locations; drivers yield to pedestrians in crosswalks.	(2.10) Annual pedestrian fatalities (2.11) Annual pedestrian injuries
8	Work with schools and parents to enable students to walk to school.		-Safe Routes to School Plans written. -Safe Routes to School events held at schools.	More students walk to school.	
9	Provide Crossing Patrols at schools where needed.	-Schools	All schools that need crossing patrols have them.	Students feel comfortable crossing the street near schools.	
10	Implement adopted local and state pedestrian accommodation policies and street design guidelines, which provide information on buffer distances between pedestrian facilities and vehicle travel lanes, sidewalk width, etc.).	-Local Governments (Engineering and Traffic Engineering staff) -Virginia Department of Transportation	Pedestrian facilities designed to reflect the suggested width, separation from vehicle traffic, etc.	More people walking because the design of the pedestrian facility creates a comfortable place to walk.	

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
11	Identify high crime areas and address public concerns about the safety of walking.	-Local Governments (Planning staff) -Local Law Enforcement	Meetings with neighborhood groups regarding safety of walking.	Citizens in high crime areas feel safe walking in their neighborhood.	

GOAL #2: ENABLE INDEPENDENT MOBILITY, PARTICULARLY WITHIN MULTIMODAL CENTERS AND DISTRICTS, WHERE PEOPLE DO NOT HAVE TO RELY ON PERSONAL VEHICLES TO GET FROM ONE PLACE TO ANOTHER. WALKING IS AN EASY DECISION BECAUSE IT IS A PLEASANT EXPERIENCE.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
1	Provide pedestrian connections between primary destinations (residential, employment, services, and retail), particularly within Multimodal Centers and Districts.	-Developers of new developments -Local Government (Planning and Engineering staff) -Virginia Department of Transportation (Planning and Engineering staff)	More places within Multimodal Centers and Districts are connected by walking facilities.	More people walk for trips within Multimodal Centers and Districts	(New) Linear feet of public walkways in Multimodal Centers (New) Linear feet of public walkways in Multimodal Districts (3.2) Number of Pedestrians by Location
2	For federally-funded pedestrian projects, incorporate into project selection procedures greater prioritization based on the number of potential users as indicated by a project's location within Multimodal Centers and Districts.	-Transportation Technical Committee -RVTPD Policy Board	Federally-funded pedestrian projects are selected in part based on their location with respect to higher density areas defined by the region's multimodal centers and districts.	Pedestrian improvements are made where many people are likely to take advantage of them because of their proximity to work or home.	Revised project selection procedures.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
3	Incorporate into project selection procedures greater prioritization for funding maintenance of pedestrian facilities based on density of users as indicated by a project's location within or connecting Multimodal Centers and Districts.	-Local Governments (Traffic Engineering) -Virginia Department of Transportation (Roadway Maintenance)	Maintenance projects are selected in part based on their location with respect to higher density areas defined by the region's multimodal centers and districts.	Pedestrian infrastructure in high activity areas are in a good state of repair.	Revised project selection procedures.
4	Implement the Regional Pedestrian Vision Plan's network of pedestrian accommodations.	-Developers of new developments -Local Governments (Planning and Engineering staff) -Virginia Department of Transportation	The proposed pedestrian network is constructed as envisioned.	More people in the region are able and comfortable walking for transportation.	
5	Coordinate the Regional Pedestrian Vision Plan with plans for other modes – bikes, transit, and automobiles.	-Roanoke Valley-Alleghany Regional Commission	-Develop Bike, Hike and Bus Maps (existing multimodal system maps) -Develop future multimodal system vision map as part of the Long-Range Transportation Plan. -Multimodal Interactive Online Maps	People are able to seamlessly use multiple modes for traveling in the Roanoke Valley.	Roanoke Valley Transportation Planning Organization Policy Board adopts the LRTP Multimodal System Plan.

GOAL #3: CREATE A REGION WHERE ACTIVE LIFESTYLES ARE THE NORM BECAUSE OUR LAND USE DECISIONS AND INVESTMENT IN TRANSPORTATION INFRASTRUCTURE COMPLEMENT EACH OTHER AND ENABLE A NATURAL TENDENCY FOR PEOPLE TO WALK EVERY DAY. AS A RESULT, PEOPLE FEEL HEALTHIER, MORE SOCIALLY-CONNECTED AND HAPPY LIVING AND WORKING IN THE ROANOKE VALLEY.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
1	Revise subdivision/ zoning ordinances to encourage or require pedestrian facilities be constructed along with new development as recommended in this Pedestrian Vision Plan.	-Local Governments (Zoning and Development Review staff) - Virginia Department of Transportation	New developments in and near to Multimodal Centers and Districts are built with pedestrian infrastructure along roads and connected to buildings.	People are able to walk to new developments within and near current or future Multimodal Districts.	(New) Inventory of language in local ordinances that include requirements for building pedestrian facilities in places where it has been identified that people will need or want to walk along public roadways or to provide a connection with adjacent land parcels.
2	Include pedestrian improvements in project budgets for roadway projects that include federal funding (should be a part of the normal budget and not considered as an extra or special project).	-Local Governments - Virginia Department of Transportation	Pedestrian accommodations are always considered and commonly included in roadway projects in the TPO Area, per the recommendations of this Plan.	People in the Roanoke Valley are more able to walk to places because the region's roadway projects have included accommodations for pedestrians.	(New) # and % of construction projects in the Transportation Improvement Program that include pedestrian accommodations

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
3	Develop incentives for existing businesses within Multimodal Districts to build pedestrian facilities.	-Local Governments (Planning, Stormwater, and Economic Development staff)	-Incentives for building pedestrian facilities. -Missing pedestrian facilities are constructed on existing developments.	More people in Multimodal Districts are able to walk to nearby places.	(3.2) Number of Pedestrians by Location
4	Create bike and car sharing programs.	-RideSolutions	Bikes and cars are available for a reasonable hourly fee at convenient locations for short trips within the region.	In many places, people don't need to own a bike or car and as a result are walking more because when needed they have the option to use a bike or a car.	Existence of bike and car share programs.

GOAL #4: INCREASE BUSINESS IN MULTIMODAL CENTERS AND DISTRICTS; THEY ARE ENJOYABLE PLACES TO WORK AND PATRONIZE IN PART BECAUSE THEY ARE IN ATTRACTIVE WELL-CONNECTED WALKABLE ENVIRONMENTS.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
1	Promote pedestrian friendly building/site design (focus on the front door not the parking lot) for new developments within and near Multimodal Districts.	-Local Governments (Planning and Development Review staff)	The front door of buildings is located near the street and is connected to a pedestrian facility along the street.	People commonly walk to and between buildings, particularly within Multimodal Districts.	(New) Inventory of language in local ordinances that include requirements for building pedestrian facilities in places where it has been identified that people will need or want to walk along public roadways or to provide a connection with adjacent land parcels.
2	Promote complementary land uses to allow trip chaining without having to use an automobile to travel between destinations.	-Local Governments (Zoning and Economic Development staff)	A mix of residential and different types of business in close proximity so people do not have to drive to get from one place to another.	People can meet their daily needs easily because goods and services are accessible without a car near to where they live or work.	(New) Change in Activity Density
3	Encourage provision of pedestrian amenities (benches, wayfinding, sidewalks) in Multimodal Districts.	-Local Governments (Zoning and Development Review staff) -Valley Metro for existing bus stops	More pedestrian amenities in Multimodal Districts.	More people walking for trips within Multimodal Districts.	(3.2) Number of Pedestrians by Location (New) Linear feet of public walkways in Multimodal Centers (New) Linear feet of public walkways in Multimodal Districts

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
4	Promote pedestrian-oriented places, particularly within Multimodal Centers, where available public spaces, including parking spaces and streets, are re-purposed for pedestrian uses such as dining, shopping, walking, and socializing.	-Local Governments (Planning staff)	-Pedestrian plazas and wider sidewalks that allow for pedestrian-oriented uses. -ADA accessible bus stops with curb-side bus pickup, benches, and/or bus shelters.	Multimodal Centers are vibrant walkable places where people congregate and businesses thrive.	(3.2) Number of Pedestrians by Location (New) Number of public transit stops connected to a public walkway (New) Number of businesses in Multimodal Centers and Districts (New) Number of employees in Multimodal Centers and Districts (New) Number of residents in Multimodal Centers and Districts

GOAL #5: CLEAN THE ENVIRONMENT BY WALKING FOR MORE TRIPS AND DRIVING LESS. THE ROANOKE VALLEY IS AN ATTAINMENT AREA FOR AIR QUALITY, AND WE WANT IT TO REMAIN AS SUCH EVEN AS WE CONTINUE TO GROW IN POPULATION. AS MORE CITIZENS WALK TO ACCOMPLISH EVERYDAY TASKS, THEY ARE ABLE TO ENJOY THE VALLEY'S BEAUTIFUL ENVIRONMENT.

	<u>STRATEGIES</u>	<u>RESPONSIBLE PARTIES</u>	<u>OUTPUTS</u>	<u>OUTCOMES</u>	<u>PERFORMANCE MEASURES</u>
1	Continue participation in the Ozone Early Action Plan.	-Roanoke Valley-Alleghany Regional Commission -RideSolutions	Reduced emissions per strategies listed in the OEA Plan.	Roanoke Valley remains in attainment of air quality standards.	(9.1) Annual # of Days when Ozone Levels were Above 8-hour Standard
2	Encourage the use of alternative forms of transportation.	-Roanoke Valley-Alleghany Regional Commission -RideSolutions -Valley Metro	-Meetings with employers. -Advertising and marketing of transit services.	More people use alternative forms of transportation.	(4.1) Annual Unlinked Passenger Transit Trips (4.2) Annual Unlinked Passenger Transit Trips Per Capita (4.7) Annual Smart Way Connector Bus Ridership (5.2) # of members in Ride Solutions program (8.1) # and % of Residents who Walk to Work
3	Develop and implement outreach/education campaign to employers to encourage walking.	-RideSolutions	Meetings with employers.	More people walk to work.	(8.1) # and % of Residents who Walk to Work
4	Develop and implement outreach/education campaign to the public to encourage walking.	-RideSolutions	Marketing efforts towards the public.	More people walk.	(3.2) Number of Pedestrians by Location (3.3) Number of Greenway Users by Location

APPENDIX A: Descriptions of Multimodal Corridors

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Multimodal Through Corridors and Placemaking Corridors

Corridors have different functions in a region. Some corridors are used to get smoothly and rapidly through a region or to get quickly to major destinations in the region. For the purpose of these Guidelines, these kinds of corridors are called *Multimodal Through Corridors*. Other corridors are more slow speed and used to access local businesses, residences and activities within a destination. Usually these types of corridors are found in *Multimodal Districts* and *Multimodal Centers*, and they are called *Placemaking Corridors* in these Guidelines.

This fundamental distinction – between *Multimodal Through Corridors* and *Placemaking Corridors* is a key concept in these Guidelines. All *Multimodal Corridors* within a *Multimodal Center*, and often many of the corridors in a *Multimodal District* are considered to be *Placemaking Corridors*; these corridors facilitate movement to destinations within a *Multimodal Center* or *District*. The higher speed *Multimodal Corridors* that travel between and connect *Multimodal Centers* within a *Multimodal District*, or connect between *Districts*, are considered to be *Multimodal Through Corridors*. *Multimodal Through Corridors* and *Placemaking Corridors* work together in a region by getting people quickly from one *Multimodal District* or *Multimodal Center* to another and ultimately to activities within a *Multimodal District* or *Multimodal Center*. *Multimodal Through Corridors* will typically

transition to *Placemaking Corridors* as they enter a *Multimodal Center*. Ideally, though, they are located at the edge of *Multimodal Centers*, remaining as higher-speed facilities to which *Placemaking Corridors* provide access from the core of the *Multimodal Center*.

Placemaking Corridors are usually located within *Multimodal Centers*, but can extend outward beyond the *Multimodal Center* boundaries into a *Multimodal District*. Any street that communities desire to make into a lively, pedestrian-oriented street may be designated as a *Placemaking Corridor*, regardless of location. Because of the concentration and diversity of land uses within *Multimodal Centers*, the streets within *Multimodal Centers* should be designated as *Placemaking Corridors*.

Multimodal Through Corridors are located exclusively outside of *Multimodal Centers*, but may traverse *Multimodal Districts*. If possible, *Multimodal Centers* should be located such that *Multimodal Through Corridors* skirt the edges of a *Multimodal Center*. Alternatively, *Multimodal Through Corridors* should transition to *Placemaking Corridors* if they go through a *Multimodal Center*. Once they have passed through the *Multimodal Center*, they may transition back to *Multimodal Through Corridors*.

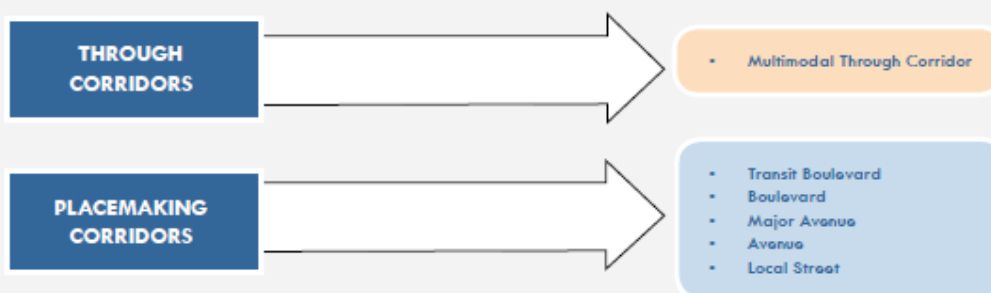


Figure 43 - List of Multimodal Corridor Types.

The basic relationship between Multimodal Through and Placemaking Corridors is described in Figure 44.

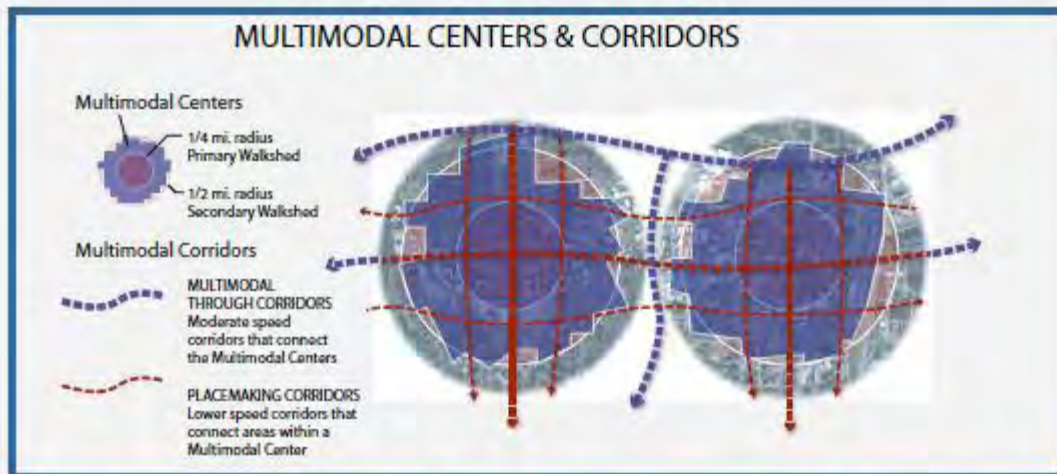


Figure 44 - Multimodal Through and Placemaking Corridors. The diagram distinguishes Placemaking Corridors from Multimodal Through Corridors – the two general categories of Multimodal Corridors that together comprise a true multimodal transportation system in a region.

Through Corridors

Multimodal Through Corridor

The Multimodal Through Corridor is a higher speed corridor that connects multiple activity centers. It is intended for longer distance, higher speed automobile, bus, or rail travel and ideally has limited at-grade intersections with other roadway types. Multimodal Through Corridors are good candidates for high speed commuter transit having few impediments to traffic flow. High speeds limit pedestrian and bicycle modes and hence the corridor design should provide separated facilities for these modes if they are needed. The design of the adjacent buildings should be oriented away from Multimodal Through Corridors and towards Placemaking Corridors on the other side of the buildings, providing more desirable pedestrian facilities and pedestrian-oriented land uses on the Placemaking Corridors, while still accommodating pedestrian travel along the Multimodal Through



Figure 45 - Fairfax County Parkway. An example of a Multimodal Through Corridor.

Corridors. Design speeds for Multimodal Through Corridors range from 35 to 55 mph.

70Placemaking Corridors

Within Multimodal Centers, the street network consists of different types of corridors with different functions relative to access, mobility, and multimodal features. Placemaking corridors are thus further divided into five types, each of which has a unique function and interface with the surrounding land uses. The following five Placemaking Corridor types were derived from the basic typology of Boulevard, Avenue and Street used in the ITE/CNU Guidebook, but with two additional Multimodal Corridor types added (Transit Boulevards and Major Avenues) for additional flexibility in designing Multimodal Corridors and Multimodal Centers. Thus the five Placemaking Corridor types used in these Guidelines are described in the following sections:

Transit Boulevard

The Transit Boulevard is the highest capacity and most transit supportive Multimodal Corridor in the typology. It would typically only be found in dense urban centers that have sufficient density and market for premium transit. A Transit Boulevard is a multi-lane and multimodal boulevard with a dedicated lane or right-of-way for transit. Transit technologies could be bus service with a bus only lane (BRT or express bus), light rail, or other transit technologies with a separate right-of-way. Other transit types that share lanes with general traffic, such as streetcar or local bus service, could be accommodated on a Boulevard, Major Avenue, or Avenue, but the dedicated transit-only right-of-way defines the Transit Boulevard corridor type. Design speeds for Transit Boulevards range from 30 to 35 mph.



Figure 46 – Plume Street in Norfolk, An example of a Transit Boulevard.

Boulevard

A Boulevard is the corridor type of highest multimodal capacity that accommodates multiple motorized and non-motorized modes. Boulevards allow for higher traffic volumes and greater efficiency of vehicular movements than Major Avenues, Avenues, and Local Streets, and typically have four to six lanes of traffic but may grow to eight in particularly dense centers such as Tysons Corner. Boulevards provide safe and convenient pedestrian and bicycle access to adjacent land uses. Boulevards feature a median, landscaped amenity elements, street trees, and wider sidewalks. Design speeds for Boulevards range from 30 to 35 mph.



Figure 47 - Glebe Road in Arlington County. An example of a Boulevard.

Major Avenue

Major Avenues contain the highest density of destinations, intensity of activity, and mix of modes. Because of the close proximity of destinations, pedestrians and street activity are common on Major Avenues. Major Avenues have wide sidewalks to accommodate high numbers of pedestrians and a variety of outdoor activities, including sidewalk cafes, kiosks, vendors, and other street activities. Major Avenues can be areas of high transit ridership for local bus routes. Traffic is low speed and localized. Due to the intensity of destinations, longer regional



Figure 48 - Crawford Street in Portsmouth. An example of a Major Avenue.

trips do not use Major Avenues; rather they would typically be on Boulevards or Multimodal Through Corridors. Autos and buses on Major Avenues travel at slow speeds because pedestrian crossings and on-road bicyclists are frequent. Major Avenues typically have four or fewer lanes for motor vehicle travel while providing adequate facilities for bicycling and typically providing roadway space dedicated to on-street parking. Design speeds for Major Avenues range from 30 to 35 mph.

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Avenue

Avenues provide a balance between access to the businesses and residences that front upon them and the collection of vehicular and pedestrian traffic. While having fewer destinations than Major Avenues, pedestrian and bicycle activity is very common, as Avenues serve as critical links in the non-motorized network. Avenues are low speed roadways that facilitate shorter trips, but still contain a fair amount of destinations. Avenues typically have three travel lanes or fewer, and do not exceed four lanes. Avenues may have roadway space dedicated for on-street parking and provide adequate bicycle facilities. Avenues have a 25-30 mph design speed.



Figure 49 - Henley Avenue in Winchester. An example of an Avenue.

Local Street

Local Streets see the lowest amount of activity and have the slowest speeds and the highest access. Bicyclists typically can share the road with autos, because speeds are slow and auto traffic is sparse, although they have separate sidewalks and trails for pedestrian accommodation. Local Streets are primarily in more residential areas and are intended to serve only trips that originate or end along them. They connect to Avenues, Boulevards or Major Avenues, funneling longer trips to these higher capacity corridor types. Local Streets are characterized by slow design speeds, wider setbacks; they may not have lane striping, and they emphasize on-street parking. Local Streets have a 25 mph design speed.



Figure 50 - Page Street in Charlottesville. An example of a Local Street.

Transitions Between Through Corridors and Placemaking Corridors

When Multimodal Through Corridors enter a Multimodal Center, the surrounding context signals a change in corridor character and function, and they transition to Placemaking Corridors. This transition is marked by slower traffic speeds, more frequent pedestrian crossings, and pedestrian-oriented buildings. Multimodal Through Corridors that transition to Placemaking Corridors can maintain vehicular throughput by access management (consolidating driveways and unsignalized intersections to minimize the number of entrances onto a road) and traffic signal coordination and optimization. These techniques are particularly relevant for Corridors of Statewide Significance, National Highway System (NHS) Routes, and emergency evacuation routes.

Relationship to Functional Class

The Multimodal Corridor typology within these Guidelines is related, but not identical, to the functional classification of roads. Functional classification is a concept within roadway design and engineering circles that recognizes that roads have different functions for motorized vehicles. Streets that provide direct access to destinations for cars via driveways, curb cuts, and frequent intersections often cannot retain high speeds and serve high volumes of traffic. Conversely, high capacity roads with heavy volumes and higher speeds have less frequent access points to keep traffic moving.

Roads are designated into functional classes mainly for federal and state funding purposes. The Federal Highway Administration (FHWA) provides guidelines on how to classify roads, and these are based on having a certain percentage of total road

miles for each classification. For example, urban principal arterials should only account for 5 to 10 percent of an area's total road centerline miles, but should carry 40 to 65 percent of the area's total vehicle-miles traveled (VMT).

Functional classification is also a relevant concept for Multimodal Corridor design, but must be broadened to include other travel modes. The five types of Placemaking Corridors are different in nomenclature from the functional classification systems used by VDOT and the FHWA. However, the concept of functional classification is similar. The Corridor Matrix Annotation Document in Appendix B has a more detailed discussion on VDOT functional classification. Table 9 shows the general translation of Multimodal Corridor types to the functional classes of roadways:

		VDOT Functional Classification (Design Speed)				
		Interstate, Freeway, or Expressway (30 – 70 mph)	Urban Other Principal Arterial (30 – 60 mph)	Urban Minor Arterial (30 – 60 mph)	Urban Collector (30 – 50 mph)	Local Street (20 – 30 mph)
Multimodal Corridor Types (Design Speed)	Multimodal Through Corridor (35-55 mph)					
			Transit Boulevard (30-35 mph)			
			Boulevard (30-35 mph)			
				Major Avenue (30-35 mph)		
					Avenue (25-30 mph)	
						Local Street (25-30 mph)

Table 9 – Comparison of VDOT Functional Classes to Multimodal Corridor Types.

APPENDIX B: Public Survey Outreach and Results

The public survey conducted was a joint effort to receive input for two regional plans: Pedestrian Vision Plan and Transit Vision Plan. The following organizations were communicated with electronically, and each communicated with their constituents about the survey opportunity.

- ▲ BLUE RIDGE BICYCLE CLUB
- ▲ BLUE RIDGE INDEPENDENT LIVING CENTER (NEWSLETTER, FACEBOOK, DISABILITY ADVOCATES EMAIL DISTRIBUTION LIST)
- ▲ BLUE RIDGE INTER-AGENCY COUNCIL ON HOMELESSNESS
- ▲ ROANOKE REGIONAL CHAMBER OF COMMERCE TRANSPORTATION COMMITTEE
- ▲ CITY OF ROANOKE (MYROANOKE EMAIL LIST, ECONOMIC DEVELOPMENT BIZNEWS, DOWNTOWN PLAN FACEBOOK PAGE, PLANNING DEPARTMENT WEBPAGE)
- ▲ CITYWORKS(X)PO FACEBOOK, TWITTER
- ▲ COUNCIL OF COMMUNITY SERVICES NON-PROFIT E-NEWSLETTER
- ▲ ROANOKE VALLEY GREENWAY COMMISSION
- ▲ KIWANIS CLUB
- ▲ LOUDON-MELROSE/SHENANDOAH WEST TRANSFORMATION PLAN CONSULTANT
- ▲ REGIONAL BICYCLE ADVISORY COMMITTEE
- ▲ ROANOKE CHAPTER OF INTERNATIONAL MOUNTAIN BIKING ASSOCIATION
- ▲ ROANOKE REGIONAL HOUSING NETWORK

- ▲ ROANOKE VALLEY-ALLEGHANY REGIONAL COMMISSION (WEBSITE, FACEBOOK)
- ▲ RIDESOLUTIONS (MEMBER LIST, WEBSITE, FACEBOOK)
- ▲ ROANOKE COUNTY (COMMUNITY DEVELOPMENT E-NEWSLETTER, PLANNING SERVICES FACEBOOK)
- ▲ SENIOR NETWORKING GROUP EMAIL LIST

Paper surveys provided to the following libraries:

1. South County Library
2. Glenvar Library
3. Hollins Library
4. Vinton Library
5. Salem Library
6. Gainsboro Library
7. Jackson Park Library
8. Melrose Library
9. Raleigh Court Library
10. Williamson Road Library

Business cards with the web address of the survey were delivered to the following senior living and rehabilitation centers:

Pheasant Ridge Nursing Rehab

4435 Pheasant Ridge Rd., Roanoke, VA 24014

Brandon Oaks Retirement Village

3804 Brandon Ave., SW, Roanoke, VA 24018

Friendship Health and Rehab Center and Friendship Retirement Community

327 Hershberger Rd, #1, Roanoke, VA 24012

Salem Health and Rehab Center

1945 Roanoke Blvd., Salem, VA 24153

Our Lady of the Valley

Jefferson Street across from St. Andrew's Catholic Church

Emeritus Senior Living

1127 Persinger Rd., SW, Roanoke, VA 24015

Emeritus at Cave Spring

3585 Brambleton Ave., Roanoke, VA 24018

Summerville at Ridgewood Gardens

2001 Ridgewood Dr., Salem, VA 24153

Hermitage in Roanoke (formerly Roanoke United Methodist Home)

1009 Old Country Club Rd., Roanoke, VA 24017

Edinburgh Square Retirement Community

129 Hershberger Rd., NW, Roanoke, VA 24012

Magnolia Ridge Residential Care & Assisted Living

1007 Amherst St., SW, Roanoke, VA 24015

Elm Park Estates

4230 Elm View Road, Roanoke, VA 24018

Hamilton Haven of Roanoke

2720 Cove Rd., NW, Roanoke, VA 24017

Candis Home For Adults

1619 Hanover Ave., NW, Roanoke, VA 24017

Local Office on Aging

706 Campbell Ave., SW, Roanoke, VA 24016

Kirk Family YMCA

520 Church Avenue, SW, Roanoke, VA 24016

Melrose Towers

3038 Melrose Ave., NW, Roanoke, VA 24017

Jamestown Place

1533 Pike Lane, SE, Roanoke, VA 24014

Morningside Manor

1020 13th St., SE, Roanoke, VA 24013

Regional Pedestrian and Transit Vision Plans Survey

If you need additional accommodations in order to complete this survey, please contact Cristina Finch at 540-343-4417 or cfinch@rvarc.org. You may also take the survey online at: <http://www.surveymonkey.com/s/HQK8LS8>.



1. In what locality do you reside?
- Bedford County Botetourt County
 Montgomery County Roanoke County
 City of Roanoke City of Salem
 Town of Vinton
 Other (please specify)

2. What is your residence zip code?
-

3. In what locality do you work?
- Not applicable, I don't work Bedford County
 Botetourt County
 Montgomery County Roanoke County
 City of Roanoke City of Salem
 Town of Vinton
 Other (please specify)

4. What is your work zip code?
-

5. What is your age?
- Under 18 18-25 26-35 36-45
 46-55 56-65 Over 65

6. Do you own a car?
- Yes No

7. Do you have a mobility disability and/or use a wheelchair, scooter, or other mobility device?
- Yes No

8. Do you think local governments should allocate more money to construct/improve pedestrian facilities?
- Yes No

9. Please share why you think walkability is or is not important to the Roanoke Valley.

10. How would you classify your walking (or rolling if you use a wheelchair or mobility scooter) ability in terms of the following?
- I have no difficulty walking a quarter-mile or more.
 I can walk a couple blocks but more is difficult for me.
 I can walk a block but more is difficult for me.
 I am unable to walk a block.

11. On average, how many DAYS per week do you walk (roll) for the following reasons?

	Days					
	0	1	2	3-4	5	6-7
To get to work/school						
To get something to eat						
To get to stores/do errands						
To get to medical appointments						
To exercise						
To visit friends or go out for fun						

12. Please list the top three locations where "regionally significant" pedestrian accommodations are most needed (not local neighborhood streets). Include specific street segments and/or intersections for reference.

1

2

3

13. Do you think local governments should allocate more money to improve public transit services?
- Yes No

14. Please share why you think public transit is or is not important in the Roanoke Valley.

15. In the past year, have you used public transit (such as Valley Metro, Smart Way, RADAR)?

- Yes No

16. What public transit service did you use?

- Valley Metro local fixed routes
 Starline Trolley
 Smart Way Commuter Bus
 Smart Way Commuter Bus to Amtrak
 RADAR – STAR service (City of Roanoke, Salem, and Vinton residents).
 RADAR – County of Roanoke (CORTAN) service
 Other (please specify)

17. In the past year, how often did you use public transit?

- Less than once a month
 1-3 times per month
 Once or twice a week
 About every day

18. On average, how many DAYS per week do you use public transit for the following reasons?

	Days					
	0	1	2	3-4	5	6-7
To get to work/school						
To get something to eat						
To get to stores/do errands						
To get to medical appointments						
To exercise						
To visit friends or go out for fun						

19. If you use public transit to get to work, please indicate the main reason by checking the appropriate box below.

- Not applicable; I don't use public transit to get to work.
 It is my only way to get to work.
 The cost of parking my car is too much.
 It is environmentally-friendly.
 Other (please specify)

20. What factor(s) discourage you from using public transit? Select all that apply.

- Not Applicable: I frequently use public transit.
 The bus doesn't come near my home.
 The bus doesn't go where I need to go.
 The bus doesn't come often enough for me to use it.
 The bus ride to where I need to go is too long.
 I don't understand how the bus system works.
 I worry about my personal safety.
 Other (please specify)

21. If it were convenient and affordable, would you consider using public transit?

- Not Applicable: I currently use public transit.
 Yes No

22. List the top three activity centers or destinations you feel should be better connected via the public transit network. Include specific street segments and/or intersections for reference.

1

2

3

23. What one public transit or pedestrian accommodation, service or idea is so important that you would be disappointed if it were not included in the final plan?

24. What is the most important message you would like to share with decision-makers about walking?

25. What is the most important message you would like to share with decision-makers about public transit?

26. Please list any other comments or suggestions about walking or public transit.

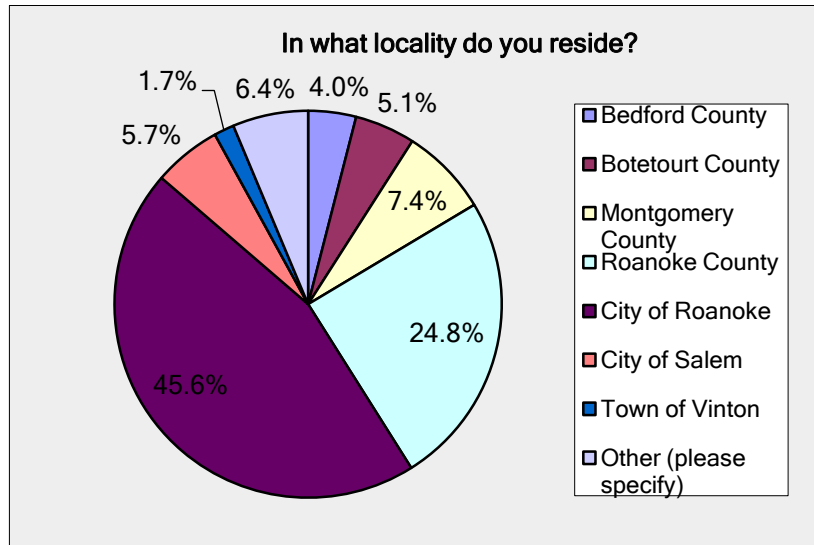
Thank you for completing this survey! Please send to:

Fax: 540-343-4416
 E-mail: cfinch@rvarc.org
 Mail: P.O. Box 2569, Roanoke, VA 24010

Summary of Public Survey Responses

1. Survey Responder - Place of Residence

LOCALITY	% of Current MPO Population	Response Percent	Response Count
Bedford County	0.2%	4.0%	19
Botetourt County	5.7%	5.1%	24
Montgomery County	0.3%	7.4%	35
Roanoke County	32.0%	24.8%	117
City of Roanoke	46.2%	45.6%	215
City of Salem	11.8%	5.7%	27
Town of Vinton	3.9%	1.7%	8
Other (please specify)		6.4%	30
<i>Alleghany County</i>		0.2%	1
<i>Blacksburg</i>		0.4%	2
<i>Christiansburg</i>		0.8%	4
<i>Craig County</i>		0.4%	2
<i>Ferrum</i>		0.2%	1
<i>Franklin County</i>		1.7%	8
<i>Giles County</i>		0.2%	1
<i>Lynchburg</i>		0.2%	1
<i>Overseas</i>		0.2%	1
<i>Pulaski</i>		0.4%	2
<i>Radford</i>		0.4%	2
<i>West Virginia</i>		0.2%	1
answered question			470
skipped question			1

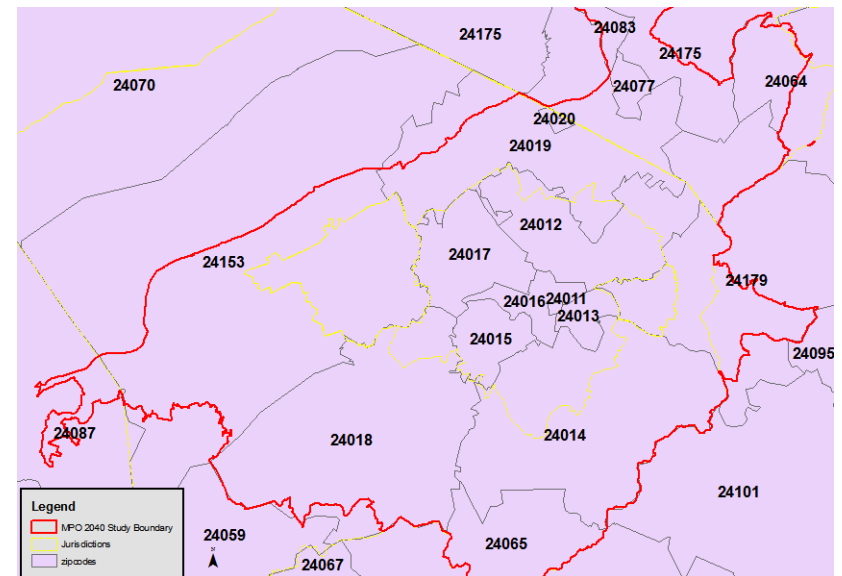


2. Survey Responder - Residence by Zip Code

Responses	Zip Code
82	24018
72	24015
47	24014
37	24153
28	24019
24	24016
22	24012
19	24060
17	24073
16	24179
13	24013
13	24017
11	24020
9	24175

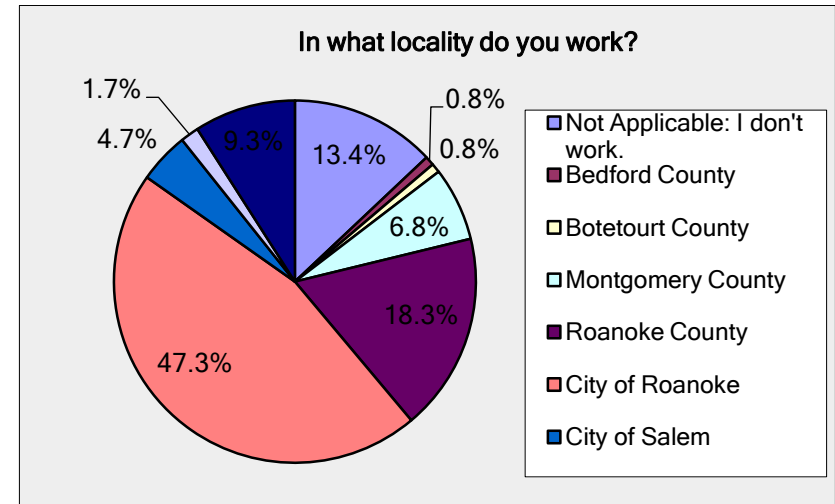
Zip Codes with 5 or fewer responses:

24064	20189	24162
24011	24059	24426
24121	24065	24503
24151	24066	24551
24523	24070	24740
24083	24088	27204
24101	24092	
24077	24122	
24087	24127	
24095	24128	
24149	24134	
24174	24141	
24301	24143	



3. Survey Responder – Place of Work

Job Location	Response Percent	Response Count
Not Applicable: I don't work.	13.4%	63
Bedford County	0.8%	4
Botetourt County	0.8%	4
Montgomery County	6.8%	32
Roanoke County	18.3%	86
City of Roanoke	47.3%	223
City of Salem	4.7%	22
Town of Vinton	1.7%	8
Other (please specify)	9.3%	44
<i>At Home</i>	0.8%	4
<i>All</i>	0.6%	3
<i>Various states</i>	0.2%	1
<i>Overseas</i>	0.2%	1
<i>Alleghany County</i>	0.2%	1
<i>Town of Blacksburg</i>	0.8%	4
<i>City of Radford</i>	0.8%	4
<i>Craig County</i>	0.2%	1
<i>Town of Dublin</i>	0.2%	1
<i>Franklin County</i>	0.2%	1
<i>Town of Hillsville</i>	0.2%	1
<i>City of Lynchburg</i>	0.6%	3
<i>Floyd County</i>	0.2%	1
<i>New River Valley</i>	0.2%	1
<i>Town of Rocky Mount</i>	0.4%	2
Total Job Location Responses		471



4. Survey Responder –

Place of Work by Zip Code

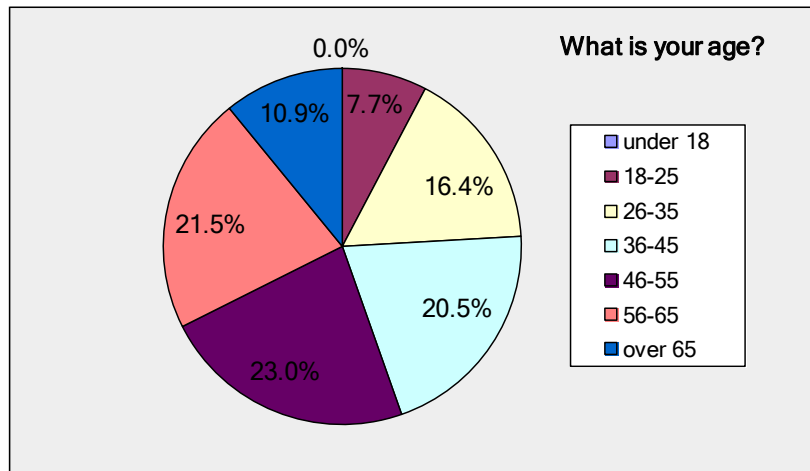
Responses	Zip Code
50	24019
49	24011
45	24018
43	24016
38	24012
26	24153
19	N/A
17	24014
16	24061
14	24020
13	24060
12	24015
11	24179
9	24013
9	24017

Zip codes with 5 or fewer responses

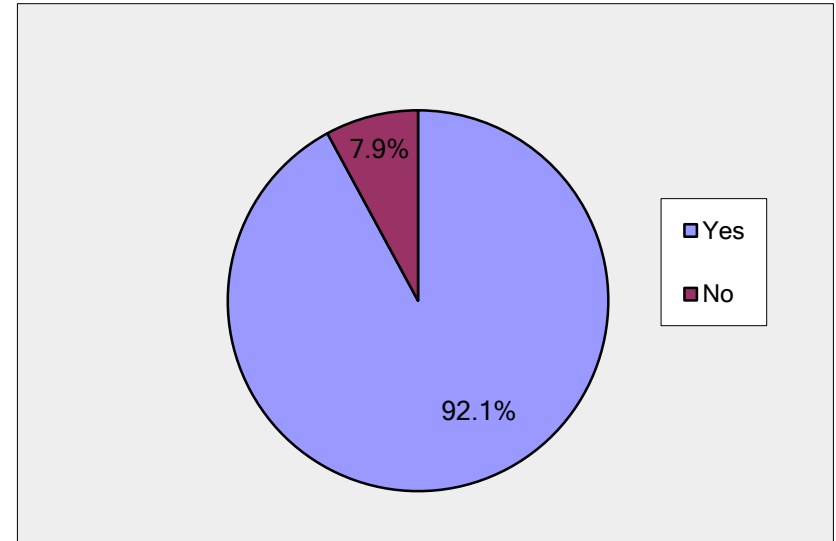
24073	20189
24042	24005
24142	24022
24151	24038
24502	24043
24001	24070
24010	24083
24077	24084
Varies	24106
	24120
	24121
	24127
	24343
	24422
	24523

5. Responses by Age – What is your age?

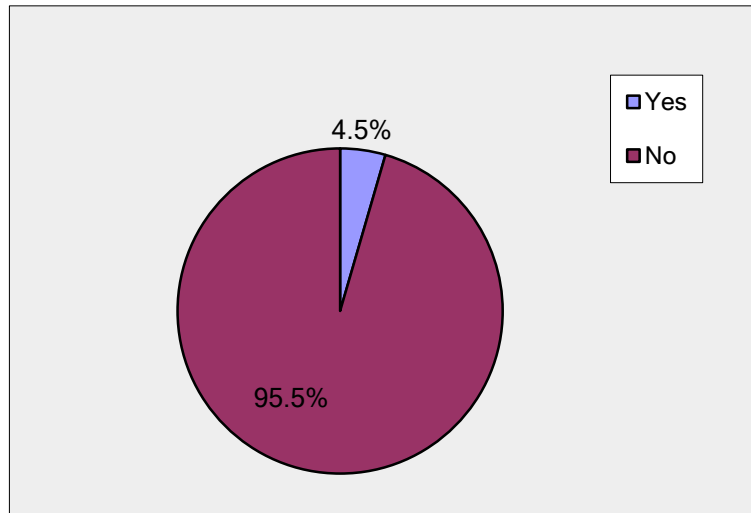
Age Bracket	Response Percent	Response Count
under 18	0.0%	0
18-25	7.7%	36
26-35	16.4%	77
36-45	20.5%	96
46-55	23.0%	108
56-65	21.5%	101
over 65	10.9%	51
<i>answered question</i>		469
<i>skipped question</i>		2



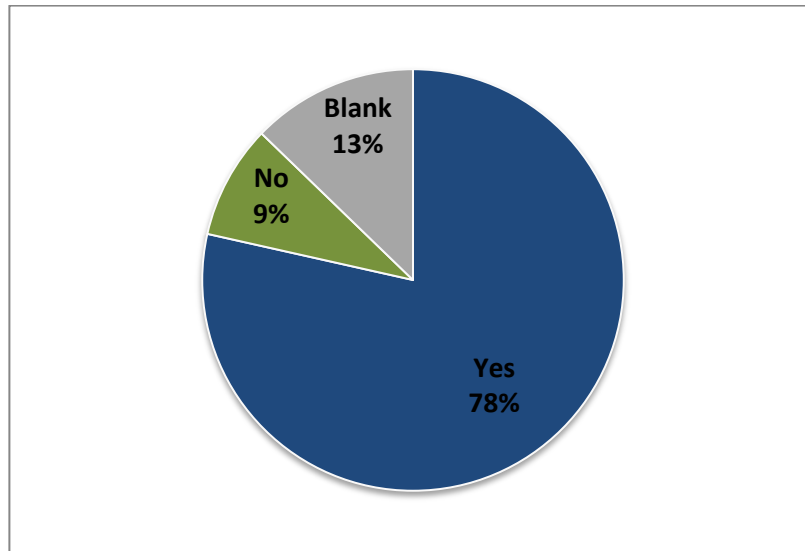
6. Vehicle Ownership – Do you own a car?



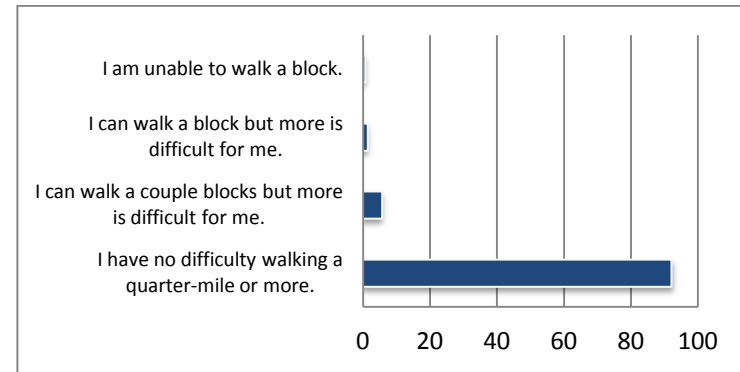
7. Do you have a mobility disability and/or use a wheelchair, scooter, or other mobility device?



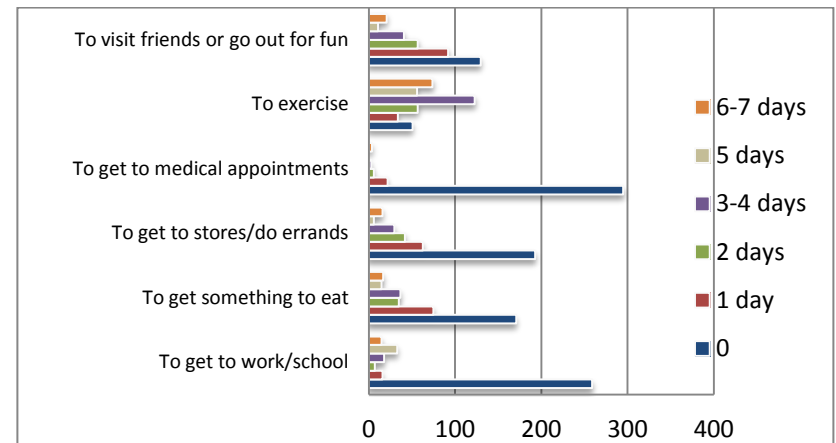
8. Do you think local governments should allocate more money to construct/improve pedestrian facilities?



9. How would you classify your walking (or rolling if you use a wheelchair or mobility scooter) ability in terms of the following?



10. On average, how many DAYS per week do you walk (roll) for the following reasons?



In addition, many pages worth of answers regarding why people think walkability is or is not important to the Roanoke Valley; the top three locations where “regionally significant” pedestrian accommodations are most needed, and the most important message to share with decision-makers about walking are available at the Regional Commission.