Downtown Streetscape Plan

for

Harrisonburg, VA

Adopted

July 8, 2014



ACKNOWLEDGMENTS

The Downtown Streetscape Plan was prepared by City staff with the support of the Downtown Streetscape Plan Advisory Committee, the Harrisonburg Downtown Renaissance (HDR) Landscape Committee, McCormick Taylor, Inc., John Sease of Sease & Associates, P.C., and the citizens of Harrisonburg.

Advisory Committee Members

Brandon Amstutz, Downtown Fine Furniture Ande Banks, City Manager's Office Eddie Bumbaugh, Harrisonburg Downtown Renaissance Thanh Dang, Department of Public Works Adam Fletcher, Department of Planning & Community Development Dave Miller, Dave's Taverna Brad Reed, Department of Public Works Brian Shull, Department of Economic Development Reggie Smith, Department of Public Transportation Gary Stiteler, Glen's Fair Price Stacy Turner, Department of Planning & Community Development Andrew Williams, Department of Public Works

HDR LANDSCAPE COMMITTEE MEMBERS

Becky Bartells – Certified Massage Therapist Jesse Bergey – Fine Earth Randy Buie – Shenandoah Historic Restoration Alliance Eddie Bumbaugh – Harrisonburg Downtown Renaissance Suzi Carter – Northend Greenway Charles Hendricks – The Gaines Group, PLC Architecture + Design Nate Miller – Valley 25X25, Simply Sustainable Landscape Designs Matt Robertson – The Stratford Companies Karl Shank – The Natural Garden Adam Steiniger – Eugene Stoltzfus Architects Dave Wiens – Harrisonburg City Council (former) Mike Zook – Great Outdoors Landscaping

CITY PLANNING COMMISSION

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I. INTRODUCTION

BACKGROUND

This Downtown Streetscape Plan builds upon the work already performed on the Harrisonburg Downtown Streetscape Plan ("Streetscape Plan") developed by Frazier Associates in 2003-2004 and adopted in 2005 by City Council. That Streetscape Plan was developed to provide a coherent vision to help guide city decision making in hardscape material choices, conceptual designs and landscaping materials. The previous downtown streetscape work undertaken in the 1970s was outdated and in need of significant repair by the early 2000s. Since 2005, the City has implemented many features of the Streetscape Plan, including streetscape work on the east side of South Main Street between Bruce Street and Elizabeth Street; sidewalk enhancements on West Bruce Street between South Main Street and South Liberty Street; West Market Street from High Street to Liberty Street; and East Water Street from South Main Street to South Federal Street. The City has also placed utilities underground along the Water Street corridor between Mason and Liberty Streets.

Increasing investment interest in the downtown area is evidenced by a number of major development projects since 2007, including: the renovation of the Wetsel Seed Building on Noll Drive, which was converted into a restaurant and residential housing known as "City Exchange"; new construction known as "Urban Exchange" on East Market Street just east of its intersection with Mason Street; the restoration of a former sewing factory to residential units along West Rock Street known as "Sancar Flats at West Rock"; the renovation of the Wetsel Seed Building on North Liberty Street now housing the "Wetsel Complex" as offices, retail storefronts, and a restaurant; the expansion of Rosetta Stone with the restoration of the Wetsel Seed Warehouse and the Old Creamery Building once occupied by the Harrisonburg Police Department; the construction of a mixed use residential and commercial complex along North Mason Street called the "Colonnades at Rocktown;": and the renovation of the former Cassco Ice industrial facility along South Liberty Street and West Bruce Street now known as the "Ice House," which currently is occupied by employees of James Madison University and remains under construction for a mixture of commercial and residential uses. The City also undertook the implementation of a citywide "wayfinding" sign program to assist visitors as they seek destinations in downtown among other landmark destinations.



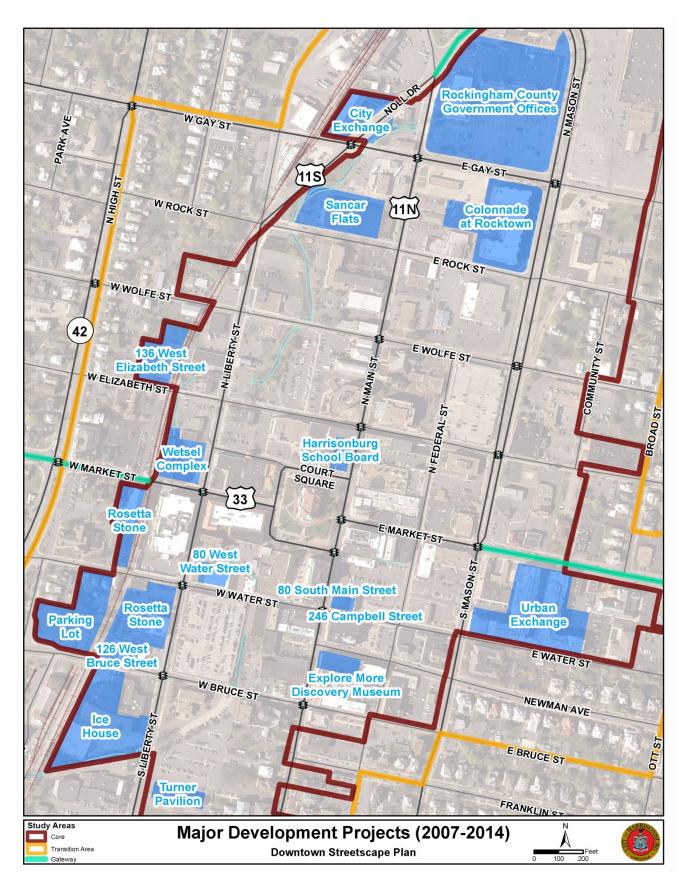
"Wayfinding" sign on Main Street

The noteworthy redevelopment of downtown and the emergence of new plans signify an important reality; a comprehensive plan is needed to communicate the collective vision for the historic and cultural center of the Harrisonburg-Rockingham community. Implementation of the plan requires that scarce public resources be spent wisely. This plan expands the work performed in the 2005 Streetscape Plan and supersedes it. This plan communicates a clear and concise vision for the Central Business District and the immediate surrounding areas, listed here as the "Transition Area". With the expansion of development opportunities in the Central Business District, it is expected that the redevelopment and revitalization of the Transition Area will unfold in a matter of years.

Additionally, several historic structures have been demolished in Harrisonburg's Historic Districts since 2005. Harrisonburg differs from many other Virginia communities that have fostered substantial preservation and revitalization programs, which often focused on retaining historic structures. While the City does have established historic districts, it is one of the few in Virginia that does not have any design standards accompanying the designation. In that respect, revitalization has taken a different approach for this community. This plan does not attempt to establish physical design standards for private structures, though the exploration of this option is a strategy (15.1.2) in the City's 2011 Comprehensive Plan.

Without a comprehensive downtown streetscape plan that coordinates public and private efforts, public interest may be underserved. Without planning and forethought given to future needs, growth will be stymied instead of nurtured. At the same time, it should be recognized that this is a plan, and one which will require revision and realignment from time to time, as economic realities, private investment and public sentiment changes.

One of the unique aspects of Harrisonburg's ongoing downtown development is the decision to preserve the rights of property owners. This plan is consistent with this philosophy, and is not intended to establish an architectural review board or to set forth design standards that property owners are beholden to. This is a plan for an investment in public infrastructure downtown. It sets forth a clear vision so that expenditures can be prioritized in future years and also offers a plan to guide property owner and developer interests in coordinating their developments with the public streetscape.



There are multiple planning documents that serve to govern different aspects of public infrastructure in and surrounding the immediate Central Business District. Some of these plans are conceptual in nature and have not been officially adopted by City Council as "plans" that could govern public infrastructure investment and private development partnership. Some of the requirements and recommendations in these plans refer to the City-at-large and do not address the specific needs and conditions in downtown.

- Harrisonburg Downtown Streetscape Plan, 2005 Created by the Downtown Revitalization and Streetscape Advisory Committee with guidance from Frazier Associates, this document puts forth a phased improvement plan for the downtown area. Improvements to features such as sidewalks, street lighting, and benches are outlined along with strategies for parking, pedestrian safety, and wayfinding. The plan also establishes sub-districts within downtown based on varied defining characteristics. The 2005 plan was adopted by City Council and will be superseded by this new plan.
- <u>Comprehensive Plan</u> This document presents the vision of the kind of community the City would like to be and goals to achieve the vision. The downtown area is referred to throughout the Comprehensive Plan (Chapter 8, Historic Resources; Chapter 11, Transportation; Chapter 13, Economic Development & Tourism; and Chapter 14, Revitalization). The Master Transportation Plan is a component of the Comprehensive Plan and establishes the city's long-range transportation policies and street improvement projects. The Master Transportation Plan includes the Street Improvement Plan, the Bicycle & Pedestrian Plan, and the Transit Development Plan. This plan has been adopted by City Council and is reviewed every 5 years.
- <u>Bicycle & Pedestrian Plan</u> This document details existing policies and facilities for bicycle and pedestrian traffic in Harrisonburg and puts forth priority infrastructure improvement projects and the means by which they are to be achieved. This plan has been adopted by City Council and is updated every 5 years.
- Transit Development Plan A short-range plan that outlines the services that the Harrisonburg Department of Public Transportation intends to implement. The plan estimates what resources will be needed and what funding opportunities are likely to be available to achieve these goals. This plan has been adopted by City Council and is updated every 6 years.
- <u>Capital Improvement Plan</u> A product of planning work completed by city departments, this document lays out public improvement projects for which departments wish to have funds allocated during the next 5 years. This plan is reviewed and adopted by City Council each year.
- <u>A Parking Plan for Downtown Harrisonburg</u> Completed in 2009 as the successor of many downtown parking plans, this document identifies downtown parking needs, opportunities for new parking infrastructure, and financing opportunities for them. This plan has not been adopted by City Council.
- Parking Study by JMU Master of Public Administration Team This study was presented to City Council in October 2013 and provides downtown parking recommendations based upon detailed user survey data. This study has not been adopted by City Council.

Urban Values & Vision for Downtown Harrisonburg by Eugene Stoltzfus Architects – Architect Eugene Stoltzfus' presentation and supplemental book portray a vision for the downtown area by suggesting ways to make downtown a more attractive and pedestrian friendly location. This document was commissioned by the Economic Development Committee of Harrisonburg Downtown Renaissance and has not been adopted by City Council.

There are three regulatory documents that govern development and infrastructure in the City-atlarge and are relative to efforts set forth in this plan:

- Design & Construction Standards Manual (DCSM) This manual defines guidelines and standards for public facilities and private site features constructed in the city and has been adopted by City Council.
- Zoning Code The City's zoning code defines the B-1 Central Business District, which is generally identified as the downtown area. This code has been adopted by City Council.
- Subdivision Ordinance The City's subdivision ordinance enforces provisions for the development of streets within and contiguous to any subdivision to ensure the goals of the Comprehensive Plan and other applicable city plans are met. This ordinance has been adopted by City Council.

There are several issues regarding the downtown that are not addressed by existing plans, creating difficulties for city government. Such issues include:

- how to integrate regular and routine maintenance projects to accommodate a collective vision compatible with the many viewpoints in the downtown area;
- implementation of the hardscape components of the city's Streetscape Plan and that components of it are being accomplished in a piecemeal fashion and may be moving ahead without full consideration of other utilities and infrastructure needs;
- the lack of streetscape standards and plans to communicate to prospective developers desiring to locate within the B-1 zoning classification;
- how to provide additional parking when it is determined by City Council to be needed and where to strategically place it in an easily accessible location adjacent to transportation facilities that can accommodate future traffic volumes while coordinating it with desired streetscape improvements;
- how to manage solid waste issues for downtown businesses that require refuse collection outside of the city's current business model.

This plan aims to address these issues by synthesizing and expanding upon existing documents to develop a long-term, achievable plan for enhancing the downtown streetscape. This includes providing a practical guide for public improvements on each downtown street and communicating these plans to the development community to share project costs amongst stakeholder groups.

This plan's overall goal is: **To present an easily communicable, comprehensive vision for the public streetscape in Downtown Harrisonburg that can be utilized by public and private agencies to further develop and sustain a vibrant downtown.**

OBJECTIVES

- 1. Develop a comprehensive vision for the public right-of-way within the study area that defines public and private expectations for project elements during development and redevelopment of properties.
- 2. Provide a plan for safe and efficient pedestrian and bicycle accommodations that enhance the public streetscape and related public spaces.
- 3. Expand parking opportunities in coordination with streetscape enhancements to support future downtown business, residential housing, and visitor needs.
- 4. Enhance public transportation facilities to accommodate citizens and visitors in coordination with streetscape improvements.
- 5. Develop a plan for public services in the downtown area that addresses the changing needs of businesses.
- 6. Plan for necessary improvements to public and private utility infrastructure so that it does not impede or encumber streetscape improvements.
- 7. Partner with property owners and community stakeholders to provide opportunities for development or redevelopment of public and private downtown properties that could enhance the public streetscape.
- 8. Consider expansion of recreational and green space opportunities downtown that coordinate with public streetscape improvements.
- 9. Enhance the visual character of the downtown streetscape.

CHALLENGES

There are significant planning challenges that make Harrisonburg's downtown unique:

- 1. Downtown is bisected east to west by U.S. Route 33 (Market Street) and north to south by U.S. Route 11 (Main Street/Liberty Street/Noll Drive). As U.S. Route 11 serves as a secondary route to Interstate 81, frequent interstate traffic diversions push heavy traffic volumes through downtown.
- 2. Court Square acts as a quasi-traffic circle where tractor trailers and larger delivery vehicles have difficulty negotiating turns. Many other intersections create similar challenges for large vehicles due to their geometry.
- 3. Blacks Run traverses through downtown and, in many cases, has been "tunneled" underneath buildings, parking lots, and streets.
- 4. The Norfolk Southern Railway runs along the west side of downtown where most streets cross at-grade with the railroad tracks. The only grade separated crossing is a wooden bridge on West Water Street owned by Norfolk Southern, which has a weight restriction.

5. Harrisonburg's downtown was developed with narrow streets and, consequently, narrow sidewalks. While there are sidewalks throughout downtown that provide connectivity, in many cases sidewalks are narrow and encumbered with light poles, traffic signal poles, street furniture, and private advertising.



Narrow sidewalks on West Elizabeth Street

- 6. Downtown is served by some of the oldest public utility infrastructure in the City. Providing adequate water and sewer capacity is essential for continued economic growth and to maintain Needed Fire Flow (NFF) requirements for existing and new structures.
- 7. Public trash collection is provided between Monday and Friday by the City of Harrisonburg. Many restaurant establishments require additional trash collection resources that the City currently does not provide. There are currently few refuse storage areas in downtown and trash often clutters sidewalks.
- 8. Concepts for shared use paths (a.k.a. greenways and biking & walking trails) exist both north and south of downtown. Bringing a dedicated shared use path through downtown to connect these projects poses a challenge due to urban density, narrow streets, and the need to acquire additional property and/or convert on-street parking.
- 9. There is a desire for outdoor seating within the public sidewalk area at some restaurants downtown, which can be difficult to accommodate in many areas due to limited sidewalk space.

PLANNING PROCESS

This plan is overseen by the City of Harrisonburg Department of Public Works, Department of Planning & Community Development, Department of Economic Development, and the City Manager's Office. To establish a baseline format for a Downtown Streetscape Plan and understand challenges that may be involved in such an undertaking, Public Works staff researched the work completed in comparable localities. Through this process, it became apparent that localities with master plans for their downtown viewed the resulting document as an invaluable planning tool for achieving coordinated streetscape improvements, especially when care is taken to define a unified vision that is supported by the community-at-large.

Taking heed of these findings, the Downtown Streetscape Plan Advisory Committee was formed to represent the myriad stakeholders involved in this effort so that ideas can be vetted in a small group atmosphere during the various stages of the planning process.

This Committee had its first meeting in July 2010, wherein city staff gave an introduction to the Downtown Streetscape Plan concept, discussed the concept of a downtown merchant survey, and gathered input on how to redesign the West Bruce Street corridor between South Liberty Street and South Main Street when it was repayed in 2010.



West Bruce Street after 2010 improvements

To gather preliminary input from a broader stakeholder group, a survey of downtown businesses was conducted in September 2010 to gather suggestions and concerns related to public infrastructure. The results of the survey were used to formulate the scope of work for the plan. In January 2011, the Downtown Streetscape Plan Advisory Committee met again to discuss the survey results, share the scope of work, and to collaboratively perform a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for each of the subsections of the plan's study area. Building upon this assessment by the Committee, staff prepared its own analysis for each of the

sections of the plan. Public Works then hosted a series of meetings in February 2011 to discuss the needs of individual city departments.

Using the information gathered from these meetings, city staff developed the draft Downtown Streetscape Plan. This draft was shared with the Advisory Committee and the HDR Landscape Committee for input, updated, and then brought before the community in a public input meeting, titled "Sharing the Vision for Downtown". Comments collected from this meeting were reviewed and integrated into the final draft of the plan where appropriate.

In January 2014, Planning Commission held a public hearing on a final draft of the plan. Several comments were offered by the public and the Commission offered guidance on specifics of the plan. Staff re-evaluated the plan based upon this input and asked for another round of review from the Advisory Committee and the HDR Landscape Committee. Revisions were then made to address the comments received and to refocus the content by more clearly specifying the plan's vision and purpose.

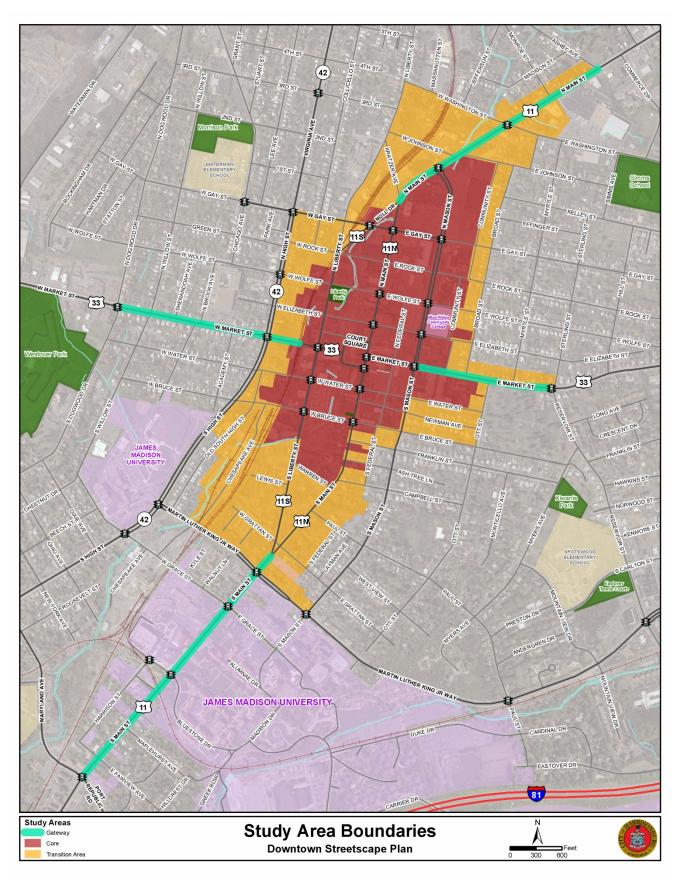
Planning Commission held another public hearing in June 11, 2014 and recommended to approve the plan. Subsequently, City Council held a public hearing on July 8, 2014 and officially approved and adopted the plan.

Similar to the Comprehensive Plan, it is intended that the Downtown Streetscape Plan be a guide rather than a regulatory document, though it should be referenced in the City Design & Construction Standards Manual (DCSM) for use in defining public infrastructure improvements to be completed along the frontage of developing properties in the study area. The City should consider having the Comprehensive Plan reference the Downtown Streetscape Plan to identify it as the City's official vision and guide for public streetscape downtown.

Study Area

The plan addresses three differentiated, but connected study areas:

- <u>Downtown Core</u> Commonly referred to as the Central Business District, this area comprises all parcels with B-1 zoning, a mixed use zoning classification. The boundaries of this area will change over time as parcels within the Downtown Transition Area are rezoned to B-1.
- Downtown Transition Area –The area adjacent to the Downtown Core for which public infrastructure improvements are recommended. This area is generally defined by the future mixed use development parcels identified in the 2011 Comprehensive Plan's Land Use section, but also includes other areas adjacent to the Downtown Core where improvements are recommended by this plan.
- Downtown Gateways This area includes the portions of major street corridors (U.S. Route 11 and U.S. Route 33) that provide access to the Downtown Core and are recommended for streetscape improvements.



II. TRANSPORTATION

STREET NETWORK

The transportation network for the downtown and its immediate vicinity provides multi-modal and multi-purpose service for several divergent user groups, with typical users including area residents, downtown employees, college students, tourists, and commercial businesses. The widening breadth of dining, retail, and service establishments over the last decade has contributed to increasing occupancy levels and more complex travel patterns on downtown streets and sidewalks. Downtown streets need to have the capability of handling this expansion, while also fostering a pedestrian-scale atmosphere.

To meet the growing demand on downtown streets, creative planning and engineering must be used to maintain, if not improve, the level of service and safety of the public right-of-way. Due to space limitations and development density within the study area, this could involve the modification of prevailing travel patterns or the influencing of user perception to improve conditions. Multi-modal transportation improvements, including vehicle, pedestrian, bicycle, and public transportation enhancements may be needed to mitigate these challenges and create a welcoming environment for all travelers in the downtown area. This vision would align with the principles of the "complete streets" planning ideal to design streets to be operated by and enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

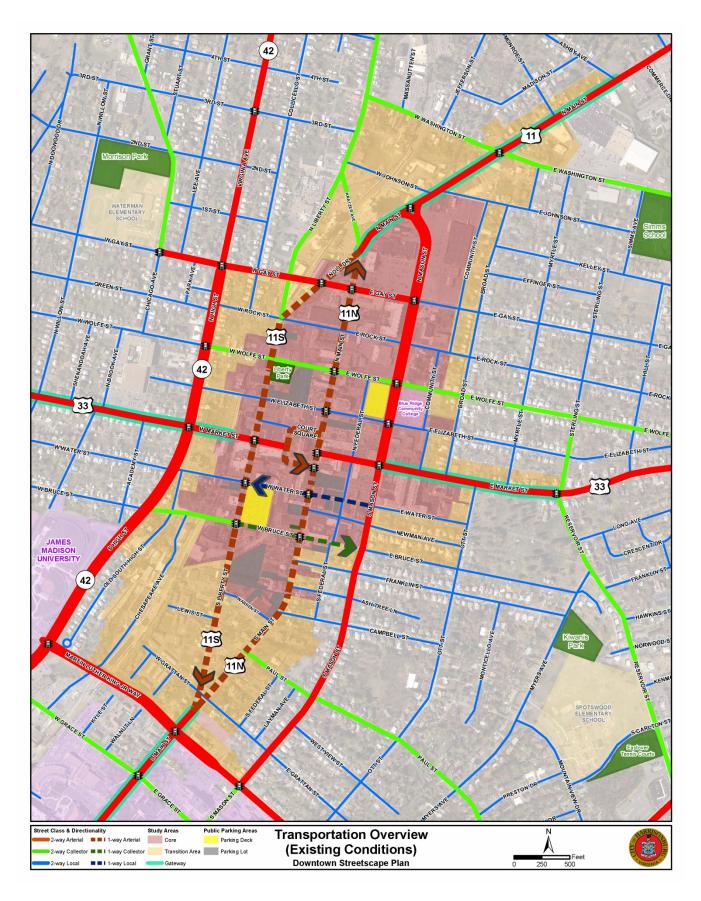
Most streets within the downtown area have sidewalks on both sides, but are limited in width. As pedestrian traffic increases, wider sidewalks are needed. The City's Bicycle & Pedestrian Plan recommends 10-15 feet wide sidewalks on routes with heavy pedestrian traffic. With streetscape improvement projects, there are opportunities on some streets to reduce vehicular lanes and widen sidewalks. This becomes especially important in areas where the effective width of the sidewalk is reduced by utility poles and street furniture. Many existing sidewalks are five feet wide, but fail to meet the four-foot minimum effective width called for by the Americans with Disabilities Act (ADA) guidelines due to utility poles in the middle of them.

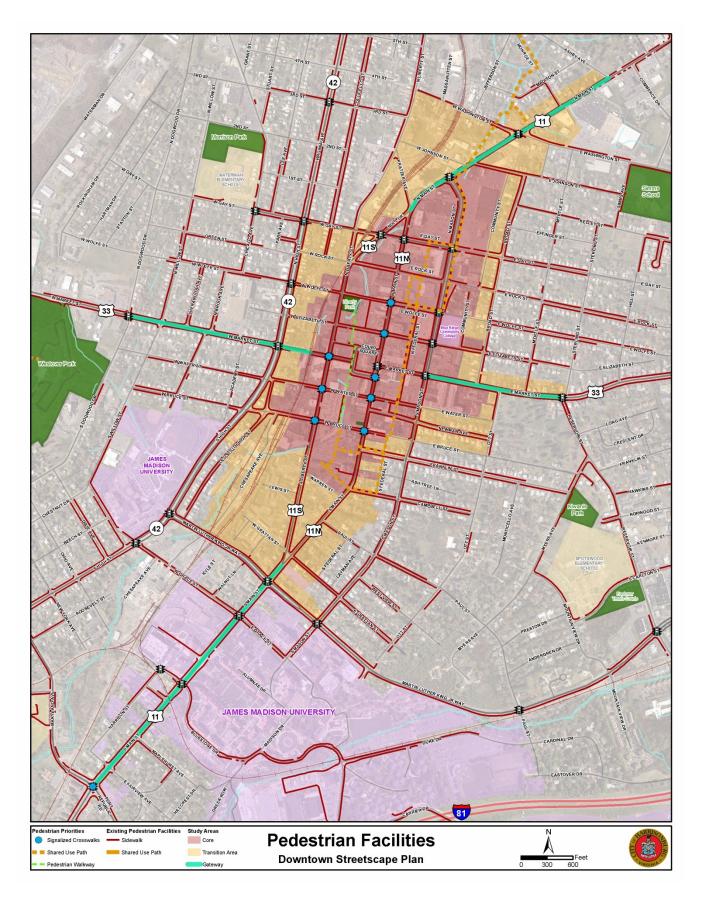
Another key component in providing safe pedestrian travel is the provision of clear guidance for crossing signalized intersections. The Main Street & Court Square/Market Street intersection is the only location in the Downtown Core with pedestrian signals. Other intersections have marked crosswalks and it is the pedestrian's responsibility to cross with traffic, which becomes difficult on corners where visibility of the signal indication is obscured or signal heads are facing the opposite direction on one-way street sidewalks.

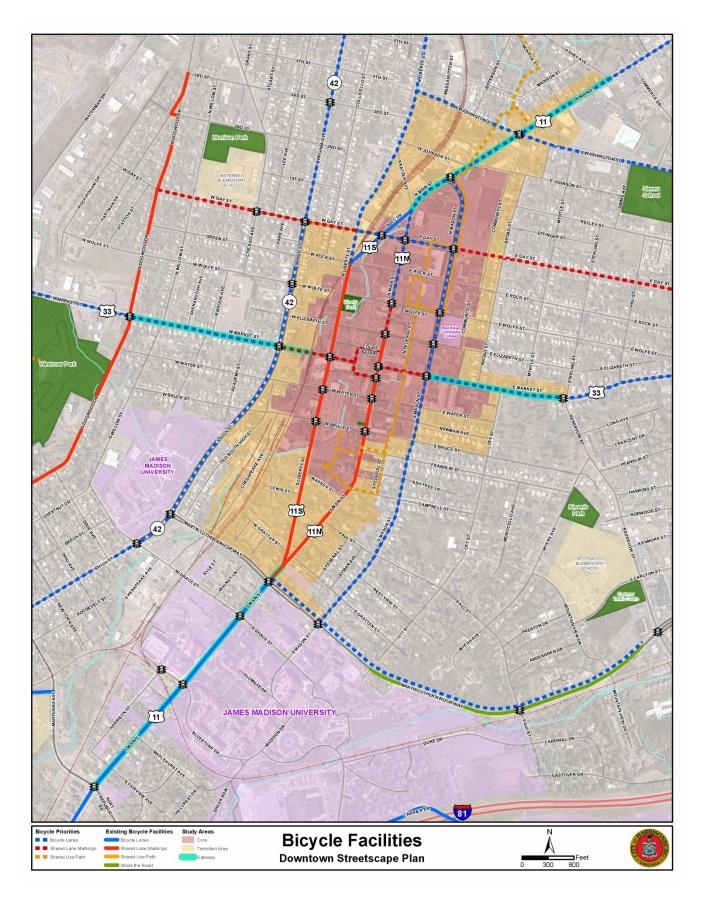
Recommendations related to the installation of new sidewalks, shared use paths, and signalized crosswalks are derived from the City's Comprehensive Plan and Bicycle & Pedestrian Plan. Priority locations recommended by this plan for sidewalk improvements, other pedestrian-related enhancements, and bicycle facilities can be found in the Pedestrian Facilities and Bicycle Facilities maps. Ideally sidewalks would be constructed on both sides of every street, but it is recognized that there are limitations in downtown Harrisonburg that will preclude this.

The number of bicyclists traveling on City streets has been steadily increasing in Harrisonburg. This has been most notable since 2005 when new bicycle facilities were constructed in the City, with growing interest in more active and healthy lifestyles, and interest in reducing environmental impacts by reduced dependence on cars. The inclusion of expanded bicycling facilities, both for travel and parking, is a key component of the Bicycle & Pedestrian Plan. The recommendations will

help guide bicycling-related recommendations downtown and are shown in the Bicycle Facilities Map.







PARKING

Continued successful downtown revitalization efforts may lead to a need for expanded parking facilities. Since Harrisonburg is not an exceptionally urbanized community, residents and guests have an expectation that parking should be available within a very short distance of their destination. Since the majority of downtown businesses are currently concentrated between Bruce Street and Court Square, this high parking demand also overlaps with the area that is most heavily developed. Details as to the parking demand downtown can be found in the Parking Plan for Downtown Harrisonburg completed in December 2009 and in the parking study authored by a Master of Public Administration student team from JMU. When creating or modifying parking facilities, designated bicycle rack areas also need to be provided.

As parking demand increases, it is recommended that:

- on-street parking be expanded where space exists or can be created through street redesign while enhancing the streetscape;
- City staff work with the development community to identify parking resources to accommodate both new development and redevelopment efforts;
- City staff explore and promote public-private partnership options (this could lessen the demand for on-street parking on particular streets allowing more flexibility for streetscape improvements);
- the Elizabeth Street parking deck be evaluated to determine if improvements to appearance and lighting, including the beautification of the walking route between East Elizabeth Street and Court Square, would increase usage during evenings and weekends;
- public surface lots include streetscape design features when improved or programmed for maintenance, and should include lighting, internal sidewalk/pedestrian access design, signage, and landscaping in accord with the Zoning Ordinance;;
- > existing parking lots be reconfigured where it allows for additional spaces; and that
- the City publicize and encourage greater utilization of parking lots on the fringe of the Downtown Core, including the Municipal Parking Lot. This can be accomplished, in part, with walkway and wayfinding improvements. While the Municipal Parking Lot is located close to the center of downtown, there is a perception that it is a farther walk due to the nature of the existing surroundings.

The City should consider the integration of residential and retail uses within future parking facilities. To lessen the demand for vehicle parking, it is recommended that public and private property managers be encouraged to integrate transportation demand management principles into their facilities, including provisions for the use of public transit and for short and long term bicycle parking with amenities such as showers, lockers, and bicycle repair stations into their facilities.

TRUCK ROUTING

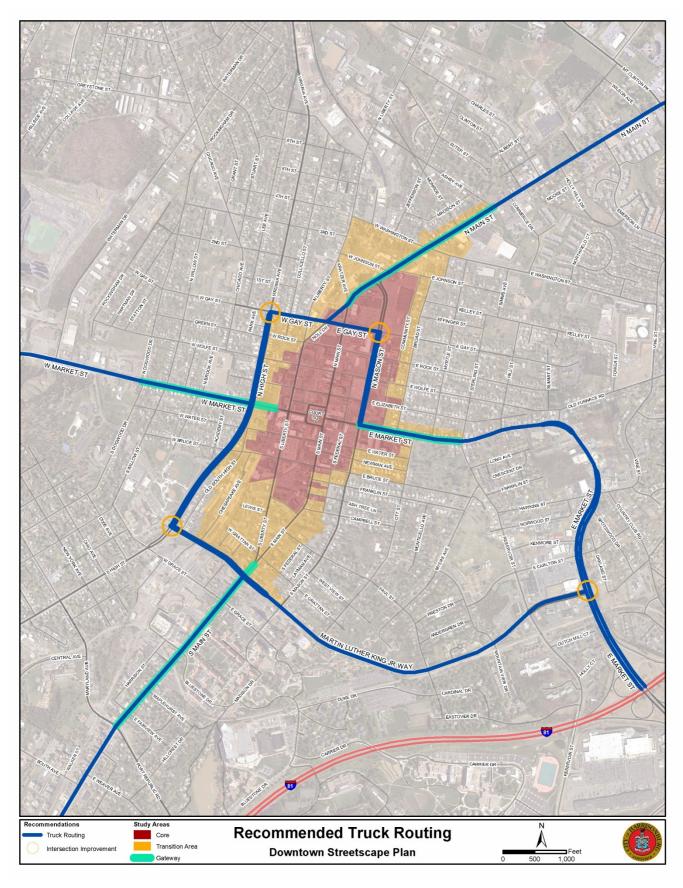
With downtown being situated at the junction of two of the City's major arterial routes, U.S. Route 11 and U.S. Route 33, there is an inherent clash between the desire for access by large vehicles and the ability of the narrow downtown streets to accommodate them. Besides U.S. Route 42, U.S. Route 11 is the only other major north to south route that serves the City and is the primary detour route for Interstate 81. Also a primary Interstate 81 detour route, Route 33 is the only east to west route that stretches entirely through the City. Incidents routinely redirect interstate traffic through the City on these routes, causing heavy congestion and pushing a high volume of trucks into the narrow, pedestrian-heavy streets of downtown.

Of particular concern is the east to west routing of trucks during such incidents, as well as during routine deliveries and through trips across the City. For semi-trailers and other large trucks, traveling U.S. Route 33 around Court Square is a geometrically challenging path with tight turning radii and traffic signs often struck in the past by trucks.

To avoid repair costs for damaged street infrastructure, to improve traffic flow, and to foster a pedestrian-scale atmosphere in the downtown streetscape, it is recommended that trucks be encouraged to use routes that bypass downtown. A review by city staff has identified a favorable route that would relegate trucks to those streets with the best geometric accommodations and least impact on traffic patterns and residences. This route is depicted in the Recommended Truck Routing map.

Though this truck routing may be considered more favorable than other alternatives, it is not without its limitations that must be overcome. It is thereby recommended that the following four intersection improvements be considered to support safe truck turning movements and curtail damage to street infrastructure:

- Martin Luther King, Jr. Way and South High Street enhance the westbound right turn radius on Martin Luther King, Jr. Way to northbound South High Street
- North High Street and West Gay Street enhance the northbound right turn radius on North High Street to eastbound West Gay Street
- East Market Street and Martin Luther King, Jr. Way enhance the northbound right turn radius on Martin Luther King, Jr. Way to eastbound East Market Street
- North Mason Street and East Gay Street enhance the eastbound right turn on East Gay Street to southbound North Mason Street



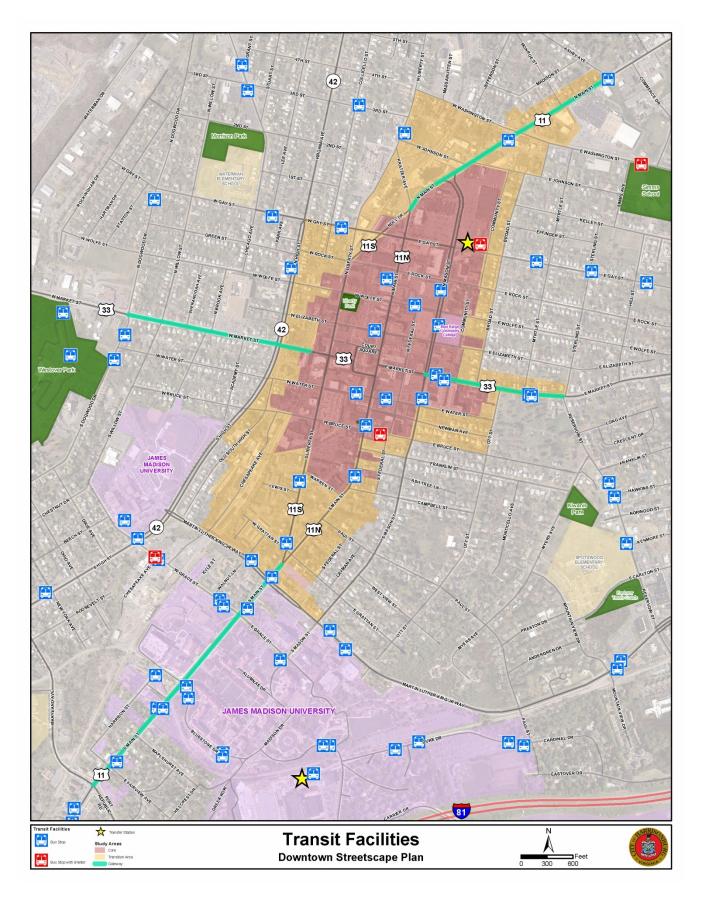
PUBLIC TRANSPORTATION

A reliable public transportation system is an important tool in the effort to reduce dependence upon personal vehicles. The Harrisonburg Department of Public Transportation offers bus services throughout the City, with the majority of its routes and ridership being focused in and around JMU. Four local transit routes service the downtown area, with on-demand paratransit also available. Historically, bus ridership downtown has been largely comprised of citizens living northeast of the Downtown Core in what is considered the Northeast Neighborhood. This area includes those living in the City's public housing managed by the Harrisonburg Redevelopment and Housing Authority (HRHA), many of whom rely upon buses as their primary means of transportation. The recent move of the downtown bus transfer station from East Bruce Street at the rear of the Hardesty-Higgins House into a large shopping center parking lot near the intersection of North Mason Street and East Gay Street has assisted in serving these users.

While it is beyond the scope of this plan to make judgments regarding the routing and ridership of the public transportation system, considerations as to how new downtown bus facilities can be made safer and be appropriately accommodated within the public right-of-way are highly relevant plan elements. The 2011 Transit Development Plan (TDP) is a six-year plan for transit services, resources, and funding opportunities that covers in depth the topics of bus ridership and routing.

It is necessary that public transportation accommodations be incorporated as a component of public and private development projects and that heavily used existing facilities be upgraded to ensure facilities properly serve the community and visitors alike all while coordinating efforts to improve the aesthetics of these public spaces and the adjacent streetscape. Bus stops that have been identified by the Department of Public Transportation as needing shelters installed in the near term include:

- > Lineweaver Apartments on North Main Street near West Rock Street and
- Harrisonburg-Rockingham County Department of Social Services on North Mason Street near East Wolfe Street.



CROSS SECTIONS

Maintaining, operating and planning to reconfigure streets in any downtown area presents many challenges. The core of Harrisonburg dates back to the late 1700's and is comprised of narrow streets and alleys, many of which were converted to accommodate one-way traffic in the last half of the 20th century. Providing a dependable, sustainable transportation network that is safe and accessible for all users is key to the economic vitality of downtown. Where possible, the City has worked to convert excessive pavement widths to accommodate new or wider sidewalks, but this effort often receives negative feedback from motorists and delivery drivers, and narrowing pavement is sometimes impossible on the narrowest of streets.

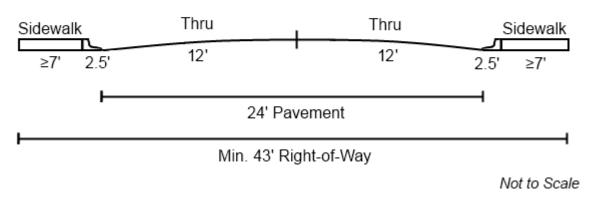
City staff has developed ideal cross-sections for various street types in the Downtown Core and Transition Area. While these are not achievable in all cases, they should be aspirational and serve as a guide when considering routine maintenance or new construction projects where lane configurations may be altered, such as street repaying.

While these cross-sections take into consideration multi-modal transportation needs, they do not show the sidewalk width needed to accommodate streetscape elements such as benches, trash cans, bike racks, street lighting, tree plantings, sandwich boards, etc. The more streetscape elements needed and desired, the wider the sidewalks will need to be to provide safe and comfortable passage for pedestrians.

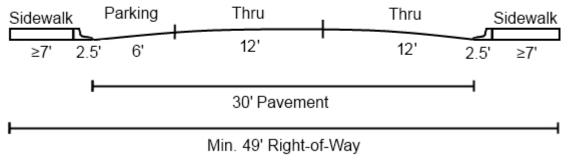
These ideal street cross-sections are to be applied based upon the existing street classification (arterial, collector, or local) and the street's directionality. These classifications are depicted in the Transportation Overview map.

Typical cross sections for arterial streets in the downtown core:

Typical Section: Arterial Street - 1-Way, 2-Lane

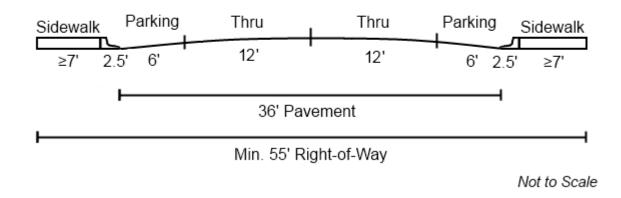


Typical Section: Arterial Street - 1-Way, 2-Lane with Parking

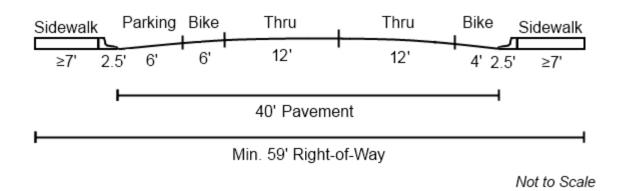


Not to Scale

Typical Section: Arterial Street - 1-Way, 2-Lane with Parking (Both Sides)

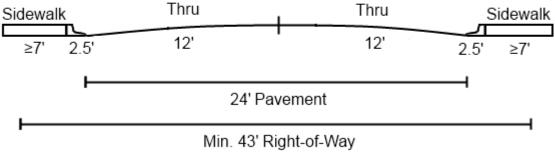


Typical Section: Arterial Street - 1-Way, 2-Lane, Parking, and Bike Lanes



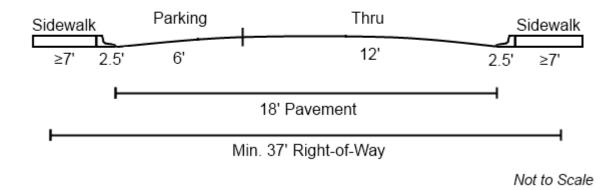
Typical cross sections for sub-arterial (local and collector) streets in the downtown core:

Typical Section: Local Street - 2-Way, 2-Lane

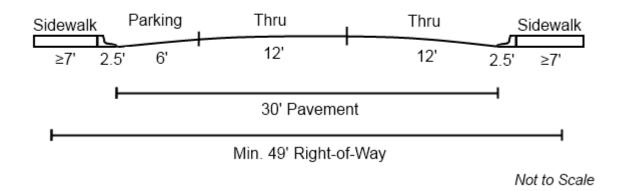


Not to Scale

Typical Section: Local Street - 1-Way, 1-Lane with Parking



Typical Section: Local Street - 2-Way, 2-Lane with Parking



DOWNTOWN GATEWAYS

The four corridors identified by this plan as gateways to the downtown area include North and South Main Street and East and West Market Street. These corridors provide direct routing into the Downtown Core and serve as the first impression of downtown. Vehicle capacity on these streets is generally sufficient under present conditions, but there are targeted improvements that could improve safety and efficiency, assist in supporting future traffic demand, and meet multi-modal user needs. It is recommended that attractive landscaping and public art projects be considered at each gateway to complement the World War I memorial on South Main Street.

NORTH MAIN STREET (U.S. ROUTE 11)

The North Main Street gateway is a 2-lane, 25 mph facility with sidewalks on both sides that runs from Ashby Avenue to Kratzer Avenue, where North Main Street splits into two one-way streets. This corridor carries the least amount of traffic when compared to the other downtown gateways, about 9,000 vehicles per day, and is primarily characterized by industrial complexes and other businesses, which contribute to high volumes of heavy vehicles. With only a single through lane in each direction, this section of Main Street acts as a bottleneck to traffic flow when vehicles are detoured from Interstate 81.

To improve traffic flow and enhance multi-modal capabilities, the City's Comprehensive Plan calls for the expansion of this street to a 3-lane facility and bike lanes. Since there are no major active or planned developments on this corridor, it is difficult to judge future transportation needs.

SOUTH MAIN STREET (U.S. ROUTE 11)

The South Main Street gateway is a 5-lane, 25 mph street with sidewalks and bike lanes on both sides that runs from Port Republic Road to just north of Martin Luther King, Jr. Way where it splits into two one-way streets. This corridor carries the most traffic to and from downtown relative to the other three gateways, as it is the primary north-south route in Harrisonburg and bisects the JMU campus. South Main Street is characterized by daily traffic of over 21,000 vehicles with high volumes of pedestrians and bicyclists, much of which is driven by JMU. Safe and efficient travel on the corridor is limited by a few factors, including the growing deficiencies in capacity on side streets such as Martin Luther King, Jr. Way and Grace Street, the high occurrence of mid-block pedestrian and bicycle crossings, and the oversaturation of traffic when class changes occur.

Side street capacity at the South Main Street & Grace Street and South Main Street & Martin Luther King, Jr. Way signalized intersections has become increasingly strained as JMU expands use of Memorial Hall, the former Harrisonburg High School on South High Street, and its recently acquired buildings and parking decks on the former Rockingham Memorial Hospital grounds off of Martin Luther King, Jr. Way and South Mason Street. JMU's Master Plan identifies East Grace Street as being a boulevard style street conducive to bicycling and walking, with the section east of South Main Street being open only to select motor vehicle traffic, such as the way Bluestone Drive currently operates. Such a change has the potential to divert and consolidate vehicles to other routes, such as South Mason Street and Martin Luther King, Jr. Way, furthering delays.

To mitigate these deficiencies, the City's Comprehensive Plan calls for the addition of a travel lane and raised, landscaped median on Martin Luther King, Jr. Way from South Main Street to approximately 300 feet east of Ott Street with bike lanes. This improvement would also include widening South Main Street at Martin Luther King, Jr. Way to add a northbound right turn lane. Also recommended in the City's Comprehensive Plan is the construction of a landscaped median on South Main Street from Bluestone Drive to Port Republic Road, which could also involve replacement or relocation of water infrastructure where necessary, the installation of enhanced crosswalks, the upgrade of the aging traffic signals to new equipment with decorative styling, and the replacement of street lighting to the decorative style. In response to increasing safety concerns with mid-block pedestrian crossings, a median was installed in 2013 between Bluestone Drive/Warsaw Avenue and Grace Street. Extending this median to Port Republic Road would further improve transportation safety and greatly enhance the visual character of the gateway.

WEST MARKET STREET (U.S. ROUTE 33)

The West Market Street gateway is a 4-lane, 35 mph street with sidewalks on both sides that runs from Dogwood Drive to the railroad tracks just west of the intersection of Liberty Street & West Market Street. This corridor services about 11,000 vehicles per day and is characterized by fronting residential homes and neighborhood streets to the west of Route 42. To the east of Route 42, West Market Street narrows to two 25 mph lanes as it enters downtown. No improvements are identified for this corridor on the City's Comprehensive Plan and this plan has no recommendations for the gateway beyond the implementation of streetscape elements.

EAST MARKET STREET (U.S. ROUTE 33)

The East Market Street gateway is a 4-lane, 35 mph street with sidewalks on both sides of the street that runs from its intersection with Reservoir Street and Sterling Street to its intersection with Mason Street. This corridor services a daily traffic volume of around 14,000 vehicles. This corridor is characterized by its long frontage of Woodbine Cemetery, the large Urban Exchange mixed use development, small businesses, and residential streets. When approaching downtown from the east, the intersection of Reservoir Street and East Market Street offers a sweeping view of the Central Business District. With its many street and business entrances and lack of dedicated turning lanes, frequent left turns interrupt traffic flow and evoke hasty lane changes to bypass turning vehicles. As a result of these left turn movements and conflicts with thru vehicles, the effective capacity of this four-lane street may, at busier times of day, be reduced to that of a two-lane street. Safety is also a concern for bicyclists on this street since speeds are high and lanes are a narrower 11-ft width, as compared to the standard 12-ft width.

To improve motorist and bicyclist safety, calm traffic, and create an improved aesthetic, the City should consider reducing this corridor to a 2-lane street with a raised, landscaped median, left turn lanes at public streets, and bike lanes. This configuration would help smooth vehicle flow by providing dedicated lanes to control and isolate left turn movements. By removing the existing conflicts between thru and left turning vehicles, the overall efficiency of the street can be improved.

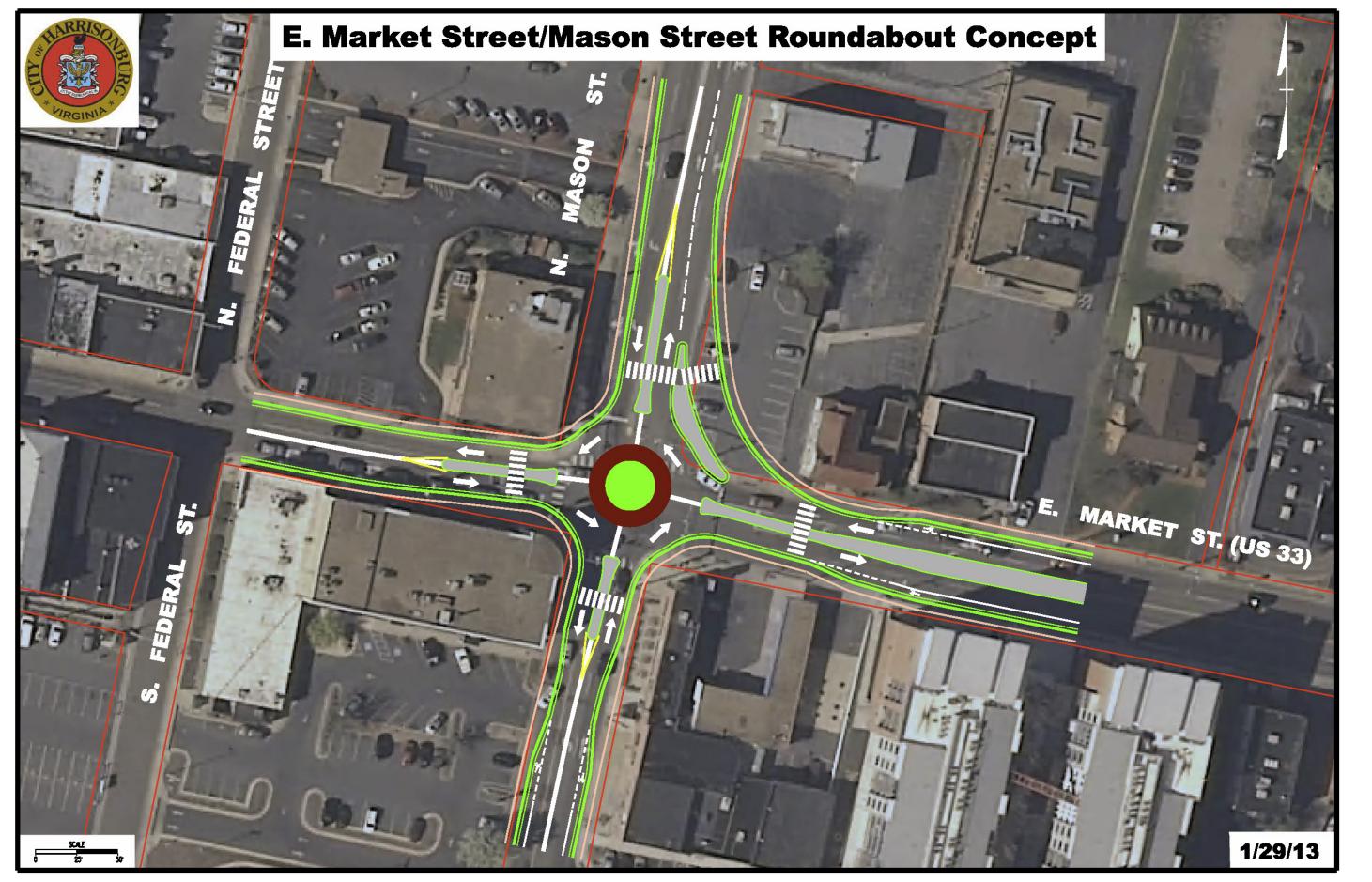
The City should also consider converting the signalized intersection of East Market Street & Mason Street to a roundabout to provide improved safety and the ability to make U-turns to access business entrances to which left turns are restricted by the median. By converting from a signalized intersection to a roundabout, a location can experience a 78 percent reduction in severe crashes and a 48 percent reduction in overall crashes according to the Federal Highway Administration. Preliminary engineering review for the roundabout and the lane reconfiguration of East Market Street between Reservoir Street and Mason Street concluded that a single lane facility could accommodate traffic volumes, providing an equivalent or better service level than exists today.



Conceptual drawing of East Market Street improvements between Mason Street (on left) and Reservoir Street/Sterling Street (on right)







STREETSCAPE ELEMENTS

The use of streetscape design principles for public spaces is a means for providing visitors and residents with an attractive, cohesive environment that is conducive to the encouragement of nonmotorized travel and helps define an identity for downtown. These principles, which treat streets as places not exclusively meant for mobility, but also for social gatherings and various activities, have a significant impact on how users perceive a space. The use of 'streetscaping' can help attract people to downtown, creating a sense of community and stimulating economic activity. Such improvements can be seen today in Harrisonburg's downtown on the east side of South Main Street between Bruce Street and Elizabeth Street, where Phase I of the Streetscape Project has already been completed.

To clearly communicate a vision for the downtown streetscape, design elements have been identified for each street in the study area for inclusion in both public and private projects, including maintenance efforts. It is recommended that the City consider the development of a landscaping plan for downtown.

The following Streetscape elements are defined in the Appendix for each section of the study area:

Paving and Curbs

- Sidewalks
- Crosswalks
- Bicycle facilities
- Street paving
- > Curbs

Street Furnishings

- ➢ Lighting
- > Traffic signals
- Bus shelters/stops
- Bicycle racks
- > Signage
- Landscaping
- > Trash & recycling receptacles
- > Benches

III. SERVICES & UTILITIES

Utilities and public services play a vital role in sustaining residences and businesses. By fostering customer focused services and reliable utilities, businesses are encouraged to locate and remain within the City. While the City offers a wide array of services to its citizens, solid waste management is the only service within the scope of this plan due to its uniquely challenging operations in the downtown area. Both public and private utilities are addressed to coordinate upgrades and expansions with street projects and to identify opportunities for infrastructure changes that would improve the character of the downtown environment.

To further public facility maintenance and enhancement efforts, the City may need to consider the use of alternative financing, such as a downtown service tax district as a way to fund existing and planned services and public facilities that are provided specifically for the downtown area, such as more frequent refuse collection, maintenance of landscaping, and maintenance of public parking facilities. These funds could also be used to upgrade or expand the aging water and sewer infrastructure downtown, an undertaking that poses major budgetary and logistical challenges. An example of a similar tax district can be found in Roanoke, VA, where the "Downtown Service Tax District" provides the following services:

- Economic and business development
- > Promotional activities intended to foster business retention
- > Business recruitment and developer recruitment
- Planning for the development or revitalization of downtown
- > Transportation and public facility and public space needs

Solid Waste Management

The space limitations and lack of indoor or outdoor refuse storage areas has created issues for city services and businesses downtown. Though refuse is collected daily between Monday and Friday by the City, many restaurant establishments require additional trash collection on the weekends due to the high volume of customers served during that time. Since no ordinances are in place to require customers to account for refuse space inside their premises, trash is often left cluttered on sidewalks while it awaits Monday pickup, creating safety, health, and curb appeal issues. Customers within the Central Business District currently receive daily collection at the same rate structure as all other customers in the City who are provided once per week collection.

To address this growing problem, the City met with local downtown business leaders in 2012 to discuss multiple options including a weekend collection program. After months of discussing options, it was deemed that a weekend collection program was not a financially viable option for the City due to the limited number of downtown businesses interested in paying additional fees for the extra collection. The City will, however, monitor the downtown area on weekends to ensure violators are cited and fined according to City ordinances.

In addition to the weekend monitoring program, it is recommended that alternative collection programs be considered along with an ordinance change to require all downtown developments and redevelopments to include space to accommodate refuse for up to 3 days, thus providing room for waste buildup during the weekend and holidays until pickup can occur.

The following projects are under consideration to enhance solid waste services downtown and to promote the four R's of the waste hierarchy (Reduce, Reuse, Recycle, and Recover):

- Pay-As-You-Throw (PAYT) Program Utilize City provided carts and cart dumpers on refuse trucks equipped with weighing software, which would streamline the waste receptacles downtown and rid the area of loose trash bags.
- Promote the use of curbside recycling for businesses that are currently choosing not to recycle.

UTILITIES

There are a number of public and private entities possessing existing utility infrastructure or having an interest in future installations in the downtown area. These stakeholders include:

- Harrisonburg Electric Commission (electricity)
- City Department of Public Utilities (water, sewer)
- City Department of Public Works (stormwater, traffic)
- Columbia Gas of Virginia (natural gas)
- Comcast (cable line services)
- Verizon (phone line and cellular services)
- Lumos Networks (previously nTelos phone line and cellular services)
- Shentel (phone line services)

Private utility companies were contacted to request information about existing and planned infrastructure, but they were unable to provide any information due to security and competition concerns. For this reason, it is imperative that plans for streetscape improvements continue to be shared at the quarterly utility coordination meetings between City staff and private company representatives. Utility retrofits should be sensitive to both existing and planned streetscape improvements. It is recommended that a special review process for downtown be created through the City's Public Access Permit process for use when utility companies prepare for upgrades or replacements. This will help ensure the appropriate City departments are notified of the upcoming work.

Upgrades to public utilities, including electricity (semi-private), water, sewer, stormwater, and traffic should also be coordinated with streetscape improvements. In keeping with past efforts to help improve the visual character of downtown, placing utilities underground where feasible and appropriate is encouraged. To help facilitate this effort, consideration should be given to including conduit installation as a component of public street and sidewalk projects, which could then be leased to utility companies.

GREEN INFRASTRUCTURE OPPORTUNITIES

Blacks Run flows through the heart of downtown Harrisonburg. It is a stream that originates in the northern parts of the City and flows south where it enters downtown at West Washington Street and exits downtown where Chesapeake Avenue crosses under Martin Luther King, Jr. Way. Eventually, Blacks Run flows into Cooks Creek, North River, Shenandoah River, Potomac River, and finally the Chesapeake Bay. During heavy rainfall, large amounts of water flows across impervious surfaces in downtown and into storm sewer systems, and then into Blacks Run, which causes localized flooding in some areas and erosion of stream banks that contributes to heavy sedimentation of local waterways.

Green infrastructure uses vegetation and soil to manage rainwater where it falls and can contribute to healthier waters. Green infrastructure encompasses a variety of techniques that replicate and restore the natural hydrologic cycle and reduces the volume of stormwater entering the storm sewer system and into Blacks Run. Green infrastructure generally includes stormwater management methods that:

• Infiltrate (porous pavements, sidewalks, and gutters; linear infiltration systems)

- Evaporate, transpire and reduce energy consumption (vegetated roofs, trees, planter boxes)
- Infiltrate and transpire (rain gardens and bioretention)
- Capture and reuse rainfall (rain barrels, cisterns, irrigation supply systems, and gray water systems)

In contrast to traditional gray infrastructure, which refers to traditional practices for stormwater management and wastewater treatment such as pipes and sewers, a green infrastructure approach preserves and restores natural landscape features when possible, and uses technologies that infiltrate, evapotranspire, capture, and reuses stormwater. Green infrastructure approaches often have higher returns of investment and offer multiple benefits, including:

- *Environmental* recharges ground water, provides natural storm water management, reduced energy usage through mitigation of the heat island effect, and improved water quality.
- *Social* beautifies and increases recreational opportunities, improves health through clean air and water, and improves psychological well-being.
- *Economic* reduces future costs of stormwater management, reduces potential for localized flooding events and damage to property and public infrastructure, reduces cost of treating water for drinking downstream, and increases property values.

Opportunities to install green infrastructure with redevelopment and improvement projects in downtown might include:



Planter boxes: Urban rain gardens with vertical walls and open or closed bottoms that collect and absorb runoff from sidewalks, parking lots, and streets.

Bioswales: Vegetated, mulched, or xeriscaped channels that provide treatment and retention as they move stormwater from one place to another. As linear features, vegetated swales are particularly suitable along streets and parking lots.



Permeable pavements: Paved surfaces that infiltrate, treat, and/or store rainwater where it falls. Permeable pavements may be constructed from pervious concrete, porous asphalt, permeable interlocking pavers, and several other materials.



Green streets and alleys: Include integrating green infrastructure elements into the street and/or alley design to store, infiltrate, and evapotranspire stormwater.



Green parking: Includes integrating green infrastructure elements into parking lot designs. Permeable pavements can be installed in sections of a lot and rain gardens and bioswales included in medians and along parking lot perimeters.



Urban trees: Reduce and slow stormwater by intercepting precipitation in their leaves and branches. Other benefits include urban heat island mitigation and a more walkable built environment.

Source: <u>http://water.epa.gov/infrastructure/greeninfrastructure/gi_what.cfm</u>

IV. LAND USE & COMMUNITY DEVELOPMENT

Well defined policies for land use and desired quality of development consistent with the vision for the surrounding environment are an essential part of sustaining a vibrant downtown community. City officials work to achieve this through the use of the Comprehensive Plan's Land Use Guide, the Subdivision Ordinance, the Zoning Ordinance, and the Design & Construction Standards Manual. The City's vision for land use is defined in the Comprehensive Plan. Both the existing and future uses of land in downtown and the immediately surrounding area play a role in street and streetscape design. The Comprehensive Plan recommends the majority of properties in the study area for mixed use development, which correlates with the B-1 Central Business District and MX-U Mixed Use Planned Community District classifications in the Zoning Ordinance. We have already begun to experience this with rezoning requests of traditionally industrial properties along the Chesapeake & Western Railway to B-1 – aligning with traditional development standards associated with downtown.

The City has assumed a strong economic development perspective with regard to downtown revitalization, which includes the creation of several incentive programs. More details for these incentives can be found in the Harrisonburg City Code. The currently available incentives are:

- Harrisonburg Downtown Technology Zone created to encourage technology companies to locate in a limited area of downtown. Incentives include water and sewer connection fee exemptions for three years along with Business Professional & Occupation License fee relief.
- Economic Revitalization Zone includes all parcels located within the B-1 zoning classification and Virginia's Main Street District. Tax incentives include partial exemption for 5-10 years from real estate taxation for new commercial and residential mixed-use construction exceeding \$1 million and containing a minimum of 40 percent retail on the ground floor.
- Central Business District Tax Incentive offers partial exemption from real estate taxation for up to 5 years for qualifying buildings at least 25 years old that receive substantial rehabilitation.
- Arts and Cultural District first district in Virginia to be created in order to promote a vibrant downtown arts related atmosphere. Tax incentives include exemption from admissions taxes and Business Professional & Occupation License fee for qualified businesses and organizations.
- Downtown Historic District provides state and federal tax credits for approved renovation and restoration of qualifying historic buildings at least 50 years old.

There are many opportunities to nurture revitalization and development within the Downtown Core and Transition Area. One such opportunity is to maintain a relationship between the City and the community by continuing to work with downtown alliances and organizations, such as Harrisonburg Downtown Renaissance, the Downtown Dining Alliance, and neighborhood groups. This will help further common goals that protect property values, further economic development interests, and minimize impacts to public resources.

With key downtown properties available for mixed-use development in the downtown core, it is also important that the City partner with private property owners and community stakeholders to provide opportunities for development or redevelopment. It is important to note that, while it is not the goal of this plan to define standards for historic preservation, development, or redevelopment, the business community is an integral component to achieving this plan's goals.

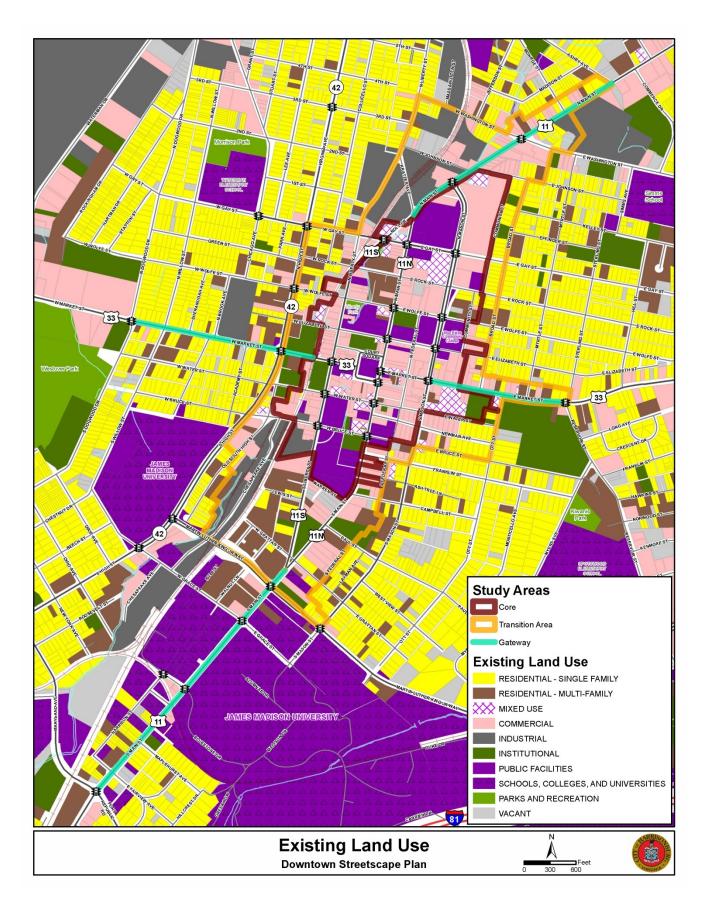
One revitalization opportunity may be found with the Chesapeake Avenue corridor. As JMU expands into the Grace Street corridor as indicated on their Master Plan, Chesapeake Avenue could be redeveloped as a connection between JMU's main campus and downtown.

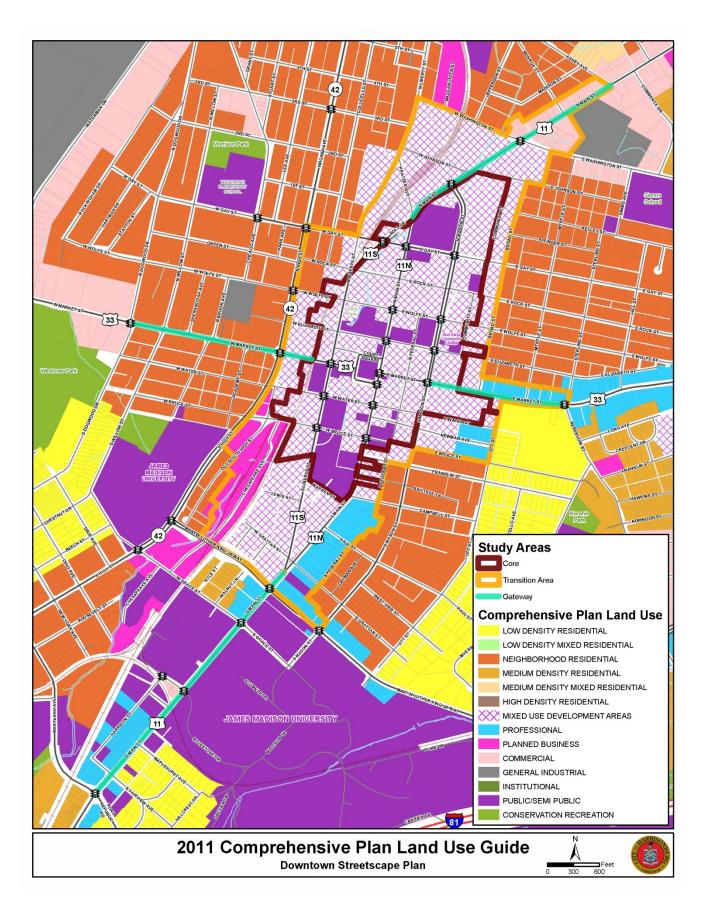
To further support goals for expanding public recreation and nurturing a mixed-use lifestyle downtown, the City should consider converting Federal Street to a one-way street with a wide shared use path that includes attractive landscaping and public art. Due to its low traffic volumes and narrow pavement, Federal Street lends itself well to providing a safe, family friendly, recreational corridor that runs much of the length of the downtown core. By connecting the Federal Street path to existing north and south greenway trail concepts, a pedestrian and bicycle corridor could link many residential areas in Harrisonburg to the downtown core. This concept was discussed as a transportation component, but it is important that the possible economic and community benefits of such a facility be taken into consideration.

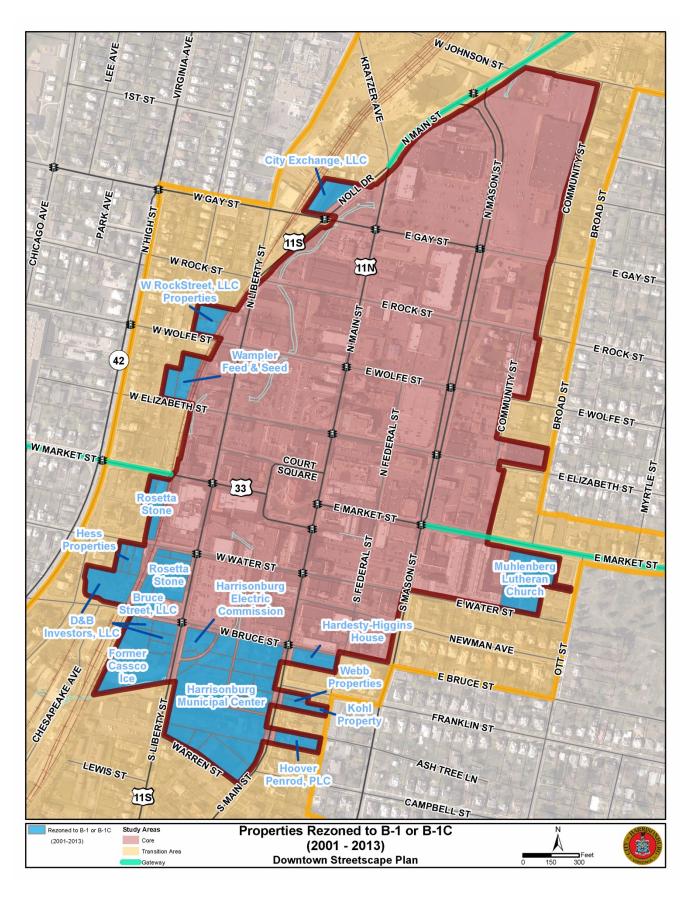
Although it is small, and despite the fact that it has been "tunneled" under many streets, buildings, and parking lots, Blacks Run has the opportunity to provide scenic beauty in a variety of contexts.

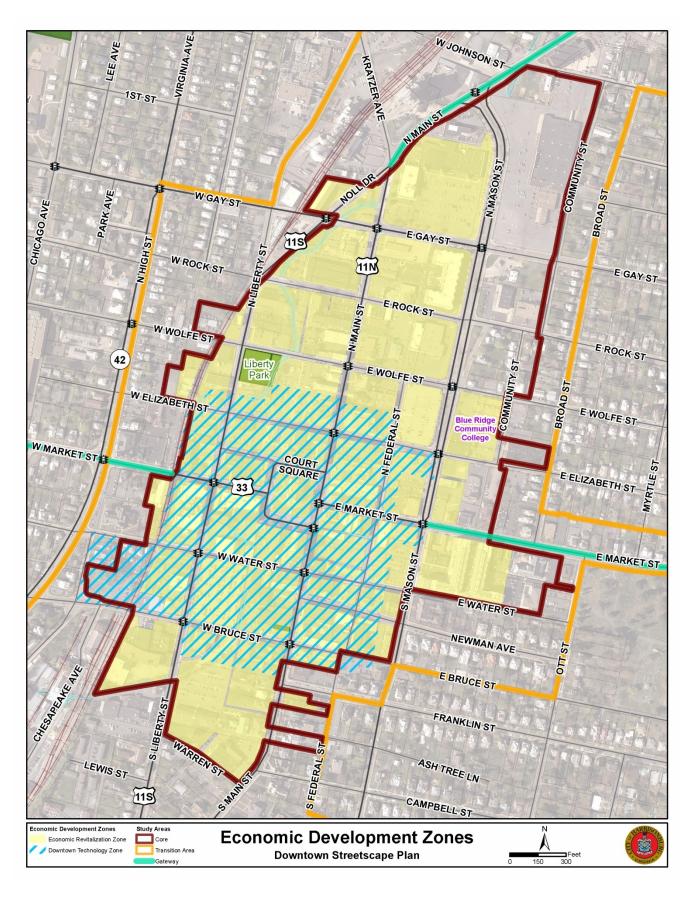
- Between Gay and Rock Streets, Blacks Run winds through a narrow, mainly privately owned, green area below grade level – an area that could be enhanced through landscaping.
- At Liberty Park, a stream restoration project was completed in 2006 and Blacks Run provides a beautiful vegetated and shaded area for park visitors to relax in and enjoy a connection to nature along the stream. The park and surrounding area are publicly owned.
- Between Court Square and West Water Street, there exists a pedestrian walkway in a public easement that overlooks Blacks Run and adjacent restaurant owners have taken advantage of outside dining opportunities and have vegetated the opposite stream bank with a mixture of native plants.
- Behind Shenandoah Bicycle Company there is a small privately owned pocket park that provides an intimately scaled green space with trees, ornamental plantings, a path, and picnic table. This area could be enhanced by cleanup and removal of overgrown invasive plant species.

Other opportunities may be available for nurturing the economic benefits that Blacks Run can bring to a downtown area. Projects such as Liberty Park and the pocket park behind Shenandoah Bicycle Company resulted from public-private partnerships between the City, community groups, and private property owners who own the banks and areas adjacent to Blacks Run.









V. IMPLEMENTATION STRATEGIES

Objective 1: Develop a comprehensive vision for the public right-of-way within the study area that defines public and private expectation for project elements during development and redevelopment of properties.

- a. Use cross sections for streets to provide specific recommendations for improvements.
- b. When properties are redeveloped or rezoned, consider sidewalk replacement and other utility replacement to be compatible with downtown design elements.

Objective 2: Provide a plan for safe and efficient pedestrian and bicycle accommodations that enhance the public streetscape and related public spaces.

- a. Use cross sections for specific improvement recommendations on each street.
- b. Design downtown streets using "complete streets" principles where possible.
- c. Encourage routing and complete necessary intersection improvements to relegate trucks to more appropriate streets outside the downtown core.

Objective 3: Expand parking opportunities in coordination with streetscape enhancements to support future downtown business, residential housing, and visitor needs.

- a. Expand on-street parking where space exists or can be created through street redesign.
- b. Encourage greater utilization of parking lots on the fringe of the downtown core, such as the Municipal Parking Lot, with walkway and wayfinding improvements.
- c. Expand bicycle parking facilities to encourage and accommodate bicycling downtown.
- d. Evaluate existing parking facilities to ensure they are easily accessible and attractive to downtown visitors to encourage their full usage.

Objective 4: Enhance public transportation facilities to accommodate citizens and visitors in coordination with streetscape improvements.

- a. Integrate public transit accommodations and facilities to serve residents of downtown, as well as providing transit accommodations that make downtown a destination for visitors and community residents.
- b. Install bus shelters at high volume stops.
- c. Encourage public transportation accommodations as a component of public and private development projects.

Objective 5: Develop a plan for public services in the downtown area that addresses the changing needs of businesses.

- a. Continue work to develop a solution for providing trash pickup on weekends.
- b. Evaluate the use of larger trash receptacles to prevent the storage of trash on sidewalks while awaiting pick-up.
- c. Promote the use of public recycling service for businesses that are currently choosing not to recycle.
- d. Evaluate the concept of requiring downtown development and redevelopment projects to accommodate trash storage for up to three days.
- e. Consider the use of a downtown service tax district to help fund additional services provided for the downtown area, such as more frequent refuse collection, maintenance of public parking facilities, and maintenance of landscaping.

Objective 6: Plan for necessary improvements to public and private utility infrastructure so that does it not impede or encumber streetscape improvements.

- a. Complement known and needed upgrades with utility upgrades and new service expansion. Retrofits should be sensitive to any existing or planned streetscape improvements.
- b. Create a special review process through the Public Access Permit process to be used when utility companies prepare for upgrades or replacements.
- c. Consider the elimination of overhead utility lines where feasible.
- d. Considering utilizing green infrastructure practices whenever feasible.

Objective 7: Partner with property owners and community stakeholders to provide opportunities for development or redevelopment of public and private downtown properties that could enhance the public streetscape.

- a. Work with James Madison University (JMU) to better connect the main campus with downtown. As JMU redevelops the Grace Street corridor, the Chesapeake Avenue corridor should be considered for redevelopment in partnership with private property owners as a connection between JMU and downtown.
- b. Partner with JMU to extend the South Main Street median, which would contribute to developing an attractive gateway linking the university campus to downtown.
- c. Partner with technology developers, an attractive industry sector desired to populate downtown as evidence by the City's Downtown Technology Zone and applicable incentives, to maintain their presence in the downtown area, and provide a "campus-like" atmosphere that integrates ideals and principles of the company.
- d. Continue partnerships with developers to revitalize vacant properties.
- e. Work with downtown organizations to further common goals that protect property values, further economic development interests and minimize impacts to public resources.

Objective 8: Consider expansion of recreational and open space opportunities downtown that coordinate with public streetscape improvements.

- a. Consider developing a plan for a recreational, shared use path using the Federal Street corridor to tie into greenway concepts to the north and south of downtown.
- b. Consider developing a plan for a recreational, shared use path between the Harrisonburg Municipal Center and West Bruce Street, and a pedestrian path between West Bruce Street and Liberty Park.

Objective 9: Enhance the visual character of the downtown streetscape.

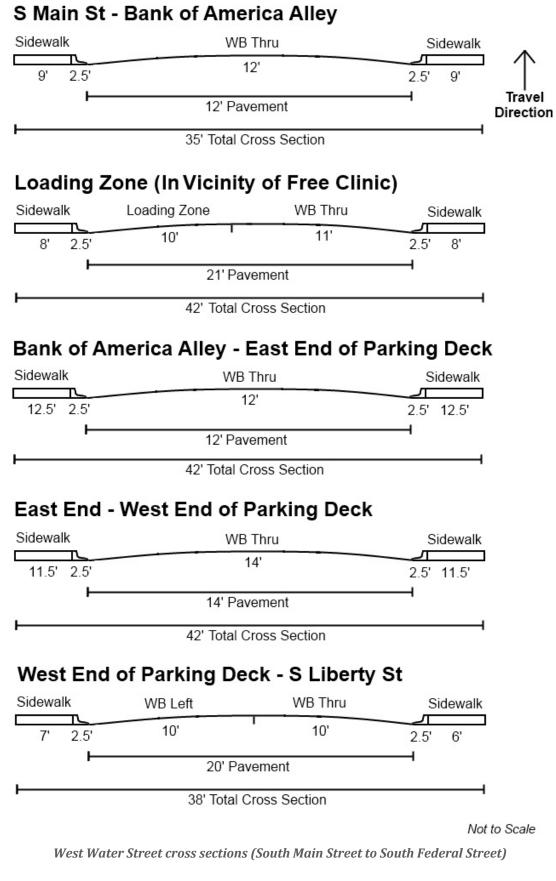
- a. Integrate design elements of downtown features into maintenance projects as per streetscape standards.
- b. Consider the development of a public landscaping plan for downtown.

VI. APPENDICES

APPENDIX A: STREET SPECIFIC RECOMMENDATIONS

More detailed cross-sections have been created for streets with specific redesign goals addressed in this plan. For streets without specific recommendations, the typical cross sections should be consulted. Corridor specific recommendations are as follows:

Water Street – A popular commercial corridor, Water Street serves as a link between the most heavily utilized public parking resource and the majority of attractions found in the downtown core. Being a one-way street with few driveways, vehicle capacity is well accommodated by a single lane. Opportunities for the widening of sidewalks to enhance pedestrian travel and the accommodation of delivery vehicles should be sought as priorities for this corridor.







Bruce Street – Serving primarily as an access street to the Water Street parking deck and the Municipal Parking Lot and a connection to South Mason Street from the west with few destinations, the Bruce Street corridor's role leans heavily towards vehicular access. While pedestrian accommodations should be enhanced in areas, the greatest opportunity for redesign would be the addition of on-street parking west of South Main Street.

Bruce Street Cross Sections (S Liberty St - S Mason St)

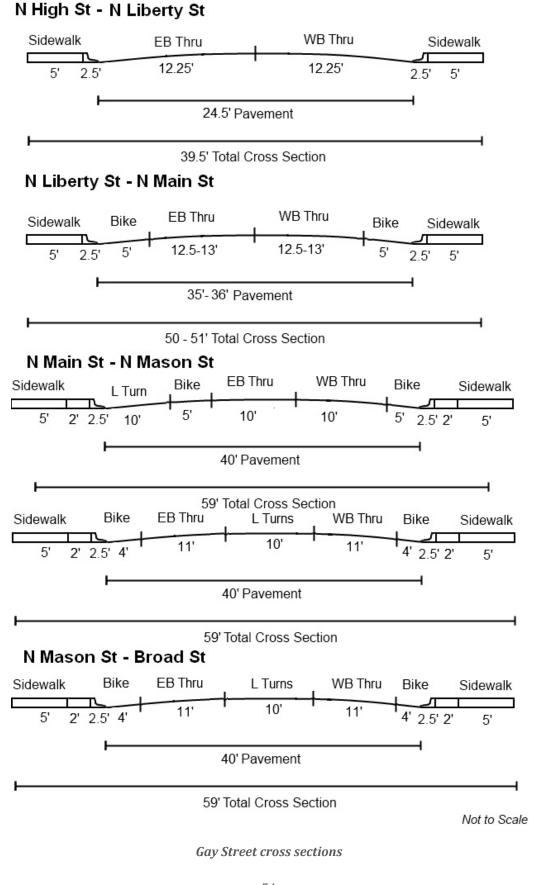
EB Thru Sidewalk Sidewalk 18' 6.5' 2.5 2 5' 5 18' Pavement Direction 34.5' Total Cross Section West side of Blacks Run bridge - S Main St EB Thru Parking Sidewalk Sidewalk 10' 6' 6' 2.5 2.5 6 16' Pavement 33' Total Cross Section S Main St - East end of Hardesty-Higgins lot Sidewalk Bus Pulloff EB Thru Sidewalk 10' 10' 5' 2.5' 2.5' 5' 20' Pavement 35' Total Cross Section East end of Hardesty-Higgins lot - S Mason St EB Thru Parking Sidewalk Sidewalk 12' 6' 5 2.5' 2.5 5' 18' Pavement 33' Total Cross Section Not to Scale East Bruce Street cross sections

S Liberty St - West side of Blacks Run bridge

<u>Gay Street</u> – A two-way east-west arterial, Gay Street provides a high capacity connection between South High Street (U.S. Route 42) and North Mason Street and is a primary connection to downtown by those living in the Northeast Neighborhood (framed by North Mason Street, North Main Street, East Washington Street, and East Market Street).

While more than a single queuing lane is needed at major intersections, the wide, 4-lane midblock sections of Gay Street are overbuilt for the volume of traffic they carry and offer an opportunity for adding bike lanes and shared lane markings ("sharrows"). This plan differs from the plan shown in the City's 2010 Bicycle & Pedestrian Plan (amended 2011). The Bicycle & Pedestrian Plan shows Wolfe Street as the east to west connector and proposed installing sharrows. This plan suggests the use of bike lanes and sharrows on Gay Street instead of Wolfe Street as the east-west connector. Gay Street will provide bicyclists with a route on slightly wider streets, which will help bicyclists avoid the "door zone" of cars parked on-street; and will provide bicyclists with a route with significantly fewer stop signs so they may conserve energy that would have been used to stop at every intersection on Gay Street. The Bicycle & Pedestrian Plan will be revised to reflect this change during its 2015 update.

The opportunity for constructing a westbound right turn lane at North Main Street should be explored to avoid the need for a sharp lane transition.







Conceptual drawing of Gay Street improvements between North Liberty Street (on left) and Broad Street (on right)

South Main Street – South Main Street is the primary entrance to the downtown and provides two travel lanes, on-street parking in sections, and shared lane markings for bicyclists. South of Campbell Street, the street widens and provides unmarked, two-sided on-street parking. Due to this expanded width, this section experiences higher than desired travel speeds and longer pedestrian crossing distances. To meet the goal of fostering a pedestrian-scale atmosphere on this street, it is recommended that curb extensions be installed at the intersections of Grattan Street, Paul Street, Campbell Street, and Franklin Street.

Curb extensions have the following features:

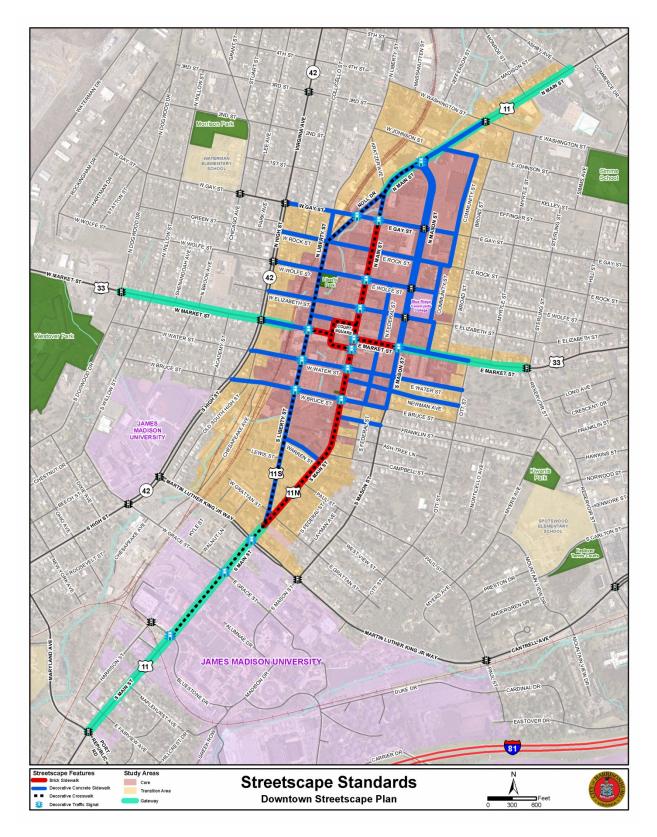
- They narrow the street, contributing to the calming of vehicular traffic.
- They shorten the distance that a pedestrian must travel to cross a street. Pedestrians will feel safer.
- They increase the sight distance between the motorist and pedestrians crossing the street.
- They improve sight lines for vehicles on side streets.
- They create additional pedestrian space that can be used for streetscape elements.

Appropriate accommodations must be made for drainage facilities when installing these features. Planters may be an attractive addition within the extended sidewalk area provided they do not block sight lines for vehicles on the side streets. To assist with visually narrowing the street, on-street parking spaces should be marked on South Main Street between East Grattan Street and the existing parking stall markings to the north.



APPENDIX B: STREETSCAPE STANDARDS

The following map shows general guidelines for designs at locations downtown.



DESIGN STANDARDS & DESCRIPTIONS

Below are standards and details for the downtown streetscape. Additional details may also be available from previously completed downtown streetscape engineering plans. Previous engineering plans should be reviewed to ensure consistency between existing and planned facilities. Locations for certain features are defined in the Streetscape Standards map.

Additionally, given that this Plan is conceptual, further coordination with adjacent property owners and emergency responders will be done during further planning and design engineering.

Sidewalks

Brick Sidewalk

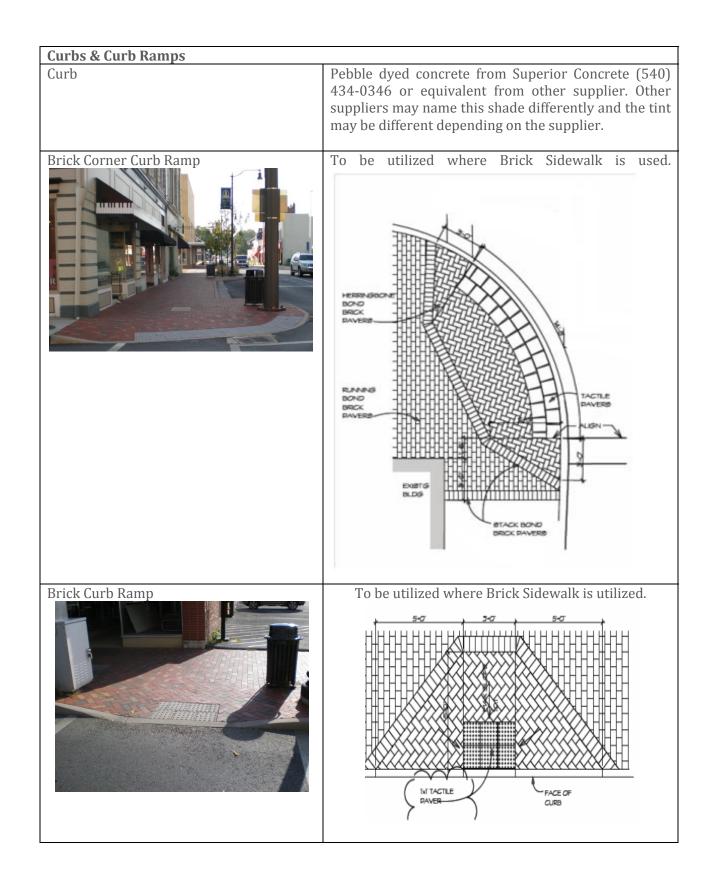


Sidewalk Brick Pavers will use the Pine Hall Standard 2 ¼" X 4" X 8" square edge paving brick. Mix Pine Hall Pathway Full Range Bricks with Pine Hall Rosewood Full Range Bricks in a ratio of 3 pathway to 1 rosewood. Avoid setting more than 2 rosewood style bricks together.

Decorative Concrete Sidewalk Standard A-3 or A-4 with "Old Virginia Shale" color tint from Superior Concrete (540) 434-0346 or equivalent from other supplier. Other suppliers may name this shade differently and the tint may be different depending on the supplier. Contractor to coordinate border width for rectangular print with Public Works prior to beginning work. *Note: To accommodate Fire Department ladder trucks, where pavement widths are less than 20-feet, then adjacent sidewalks must be a minimum of 7inches thick, and total street and sidewalk width must be 20-feet wide and unobstructed. Standard Concrete Sidewalk Design as per the City's Design & Construction

Design as per the City's Design & Construction Standards Manual.

*Note: To accommodate Fire Department ladder trucks, where pavement widths are less than 20-feet, then adjacent sidewalks must be a minimum of 7-inches thick, and total street and sidewalk width must be 20-feet wide and unobstructed.



Brick Tactile Pavers	To be utilized where Brick Sidewalk is utilized. Hanover Detectable Warning Paver 11 ³ ⁄ ₄ " X 11 ³ ⁄ ₄ ",
	Red 15.
Decorative Corner Curb Ramp	Design as per the City's Design & Construction
	Standards Manual and VDOT Road & Bridge Standards with decorative concrete mix. As of 2009 edition, DCSM required CG-12A, B, or C as appropriate.
Decorative Typical Curb Ramp	Design as per the City's Design & Construction Standards Manual and VDOT Road & Bridge Standards with decorative concrete mix. As of 2009 edition, DCSM required CG-12A, B, or C as appropriate.
Decorative Tactile Pavers	ADA Solutions (800) 372-0519 model 24 RAD REP (radial) or ID PAV 2 (24 X 48 insert) or equivalent.
Standard Corner Curb Ramp	Design as per the City's Design & Construction Standards Manual and VDOT Road & Bridge Standards with standard concrete mix. As of 2009 edition, DCSM required CG-12A, B, or C as appropriate.
Standard Typical Curb Ramp	Design as per the City's Design & Construction Standards Manual and VDOT Road & Bridge Standards with standard concrete mix. As of 2009 edition, DCSM required CG-12A, B, or C as appropriate.
Standard Tactile Pavers	ADA Solutions (800) 372-0519 model 24 RAD REP (radial) or ID PAV 2 (24 X 48 insert) or equivalent.

Crosswalks	
Decorative Crosswalk	TrafficPatternsXD (stamped asphalt, previously called StreetPrintXD) or equivalent from other supplier. – Pattern: diagonal herringbone. Color: Colonial Brick. Border: 12-inch wide white thermoplastic.
Standard Crosswalk	To be utilized where Decorative Crosswalk is not used and shall be a "Continental-Style" thermoplastic crosswalk.

Federal Street Path	Surface shall be red-dyed concrete. Utilize the Manual on Uniform Traffic Control Devices
	(MUTCD) and Virginia Supplement to the MUTCD.*Note: Where adjacent to roadway and to
	accommodate Fire Department ladder trucks, where pavement widths are less than 20-feet, then adjacent
	sidewalks must be a minimum of 7-inches thick, and total street and sidewalk width must be 20-feet wide
	and unobstructed.
Bicycle Facilities	Utilize the Manual on Uniform Traffic Control Devices (MUTCD) and Virginia Supplement to the MUTCD.

Street Paving	Standard asphalt to be used on all streets.

Street Lighting

To be installed within the Downtown Core, Transition Area, and along Gateways.

Holophane Memphis Style Luminare, Boston Harbour, Columbia 20, with banner bracket where appropriate. Color: Bronze. Include weatherproof receptacle at midpoint between banner brackets and photo eye on each pole.

Traffic Signals	
Decorative Traffic Signal	See Streetscape Standards map for locations. Design is dependent upon location. Generally, bronze
	powder coated poles, arms, and signal heads (without back plates).
	See City's "Specifications & Guidelines for Traffic Signal Projects" for more details.
Standard Traffic Signal	To be installed at signalized locations where the Decorative Traffic Signal is not used.
	Galvanized steel mast arms and poles. See City's "Specifications & Guidelines for Traffic Signal Projects" for more details.

Bus Shelters/ Stops	Locations and design to be coordinated with Harrisonburg Department of Public Transportation.
	Generally requires a minimum shelter pad of 9' X 15' with additional bus stop pad 8' deep for loading and unloading area.

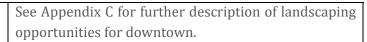


Inverted U steel tubing bike rack. May be connected in series or mounted as a single bike rack. Black powdercoat. May be in ground or surface mounted. Installation shall follow the "Bicycle Parking Guidelines: A set of recommendations from the Association of Pedestrian and Bicycle Professionals"

Signage	
Blue Downtown Badge Street Name Sign	To be installed within Downtown Core and Transition
	Area, provided that all four sides of the intersection
	are fully within these areas.
Court Square	At signalized intersections, this design shall be used in an LED street name sign with bronze housing. For additional LED street sign specifications, see City's "Specifications & Guidelines for Traffic Signal Projects".
LED Green Street Name Sign	To be installed at traffic signals along Gateways.
E. Market St	See City's "Specifications & Guidelines for Traffic Signal Projects".
Standard Green Street Name Sign	To be installed along non-signalized intersections
	along Gateways and fringes of the Transition Area.

Decorative Regulatory Street Sign Post	Generally, black powder-coated 2 in. x 2 in. square channel steel post without holes. Post topped with silver pyramidal cap (2x2 cast aluminum rain cap. Korman Item # HCC22 or equivalent).
Standard Regulatory Street Sign Post	Generally, galvanized square channel steel post with holes.
Wayfinding Sign Program	Design dependent upon location. Generally, NW Sign Industries, Trailblazer "B" style sign. Contact City of Harrisonburg Public Works Department, (540) 434- 5928, for specifications.





Use of in ground planters and free standing planter will be determined on a site by site basis.

At the time of this writing, free standing planters purchased for use on Main Street and around Court Square have been the Cast Stone Galveston Planter made by Dura Art Stone. Various shapes and sizes have been utilized.



Trash and recycling receptacles to be utilized in Downtown Core and Transition Area.

Scarborough Litter Receptacle. Style: side opening, 30 gallon capacity. Side panel: vertical strap. Color: Stormcloud Powdercoat. Liner: Default color, 30 gallon polyethylene liner. Standard features: free standing/ surface mountable.

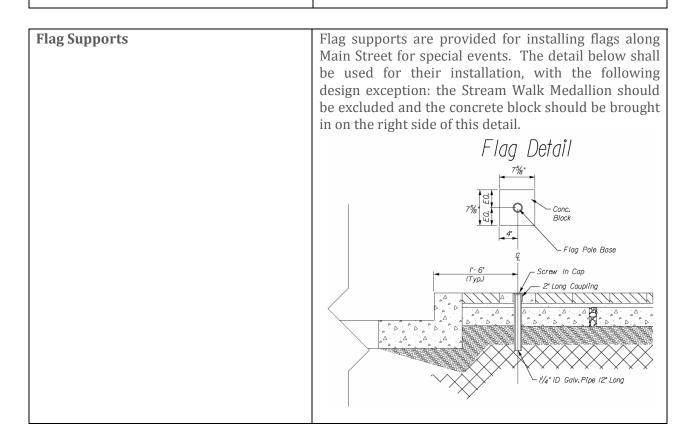
Note: Image shown of sample recycling receptacle in silver color. Color will be: Stormcloud Powdercoat.





To be utilized in Downtown Core and Transition Area.

Landscape Forms Scarborough, backed, 72" length, horizontal strap seat with center arm (not pictured), Stormcloud Powdercoat Finish. (Other lengths available)





Banners are to be installed on all light poles on Main Street, Market Street, and Court Square within the Downtown Core and Transition Area. Banner design should match the specifications on the following page. Consult with the Public Works Department prior to installation for details on banner selection and location. If desired by the City and/or Harrisonburg Downtown Renaissance, new banner designs may be taken into consideration by those parties.







APPENDIX C: LANDSCAPING

Trees and landscaping are highly visible elements within the streetscape. They provide spring bloom, summer shade, fall foliage color, and winter branching. Landscaping softens the otherwise hard urban environment, provides a defense against the "urban heat island effect" and can help with stormwater management.

At the time of this writing, maintenance of trees and in ground planters within the downtown streetscape is being performed by the City Department of Parks & Recreation. However, maintenance is minimal and opportunities to add more plantings are not available due to limitations on budgets and available space. Maintenance of free standing planter boxes and containers along the streetscape has been organized by Harrisonburg Downtown Renaissance and is being provided, in part, by businesses downtown that have volunteered to hand water and maintain the planters.

Maintenance must be considered in the choice of plant materials, and maintenance concerns must be addressed early in the streetscape and landscaping design process, along with property access and access for emergency responders. Although no landscaping will be successful without some degree of maintenance, some plants require less attention than others. Landscaping, both in ground planters and free standing planters, will be determined on a site by site basis. Some considerations may include width of sidewalk, whether there is on street parking adjacent to the area, availability of light onto the site, etc.

Lack of proper growing space is one of the primary causes of premature death of urban trees. Where sidewalks are less than 9' wide, street trees are not recommended. In these situations, plantings may be added to the streetscape by alternative means such as:

- Hanging baskets on light poles (this feature may require additional engineering review to determine the suitability of installation on the standard light pole called for in the Design Standards & Descriptions section).
- Private planter boxes along buildings or hanging from adjacent buildings.



Example of privately maintained planter boxes at Hawthorne Hotel in Salem, MA

- Side street curb extensions at intersections with large planters.
- Free standing planter boxes outside of the pedestrian pathway.

Where more sidewalk space is available, but space is still limited (sidewalks 9'-12' wide), trees in tree grates, 4'x6' or 5'x5' in size, or the use of silva cells may be considered.

It is recommended that different variety of trees should be used throughout downtown. However, each street or section of street should have a consistent look with the same variety of trees spaced along the street.

APPENDIX D: SHARED USE PATHS AND PEDESTRIAN PATHS

This Plan seeks to formalize the alignments for two shared use paths and walkway facilities in the downtown area. These facilities will connect with the larger development of the Northend Greenway, the Bluestone Trail, and trail facilities outside of the downtown area that are included in the City's 2010 Bicycle & Pedestrian Plan (amended 2011).

It should be noted that the following concepts for the Federal Street shared use path and Pedestrian Path (Municipal Lot to Liberty Park) were not considered during the development of the 2010 Bicycle & Pedestrian Plan. Should City Council approve these concepts, it is intended that the Bicycle & Pedestrian Plan will be updated to reflect these additions.

FEDERAL STREET SHARED USE PATH

Federal Street is a quiet street in the heart of the downtown core. This low volume street is a narrow alleyway south of East Water Street and a two-lane street north of East Water Street. It is primarily used for deliveries, making short trips between businesses and parking lots and serving as the ingress/egress point for the top of the Elizabeth Street parking deck. Its low traffic and potential for conversion to one-way motor vehicle traffic (flowing northbound north of East Market Street and southbound south of East Market Street), makes this street an excellent location for creating a recreational path in parallel with the street, including attractive landscaping and public art.

The following renderings show a shared use path corridor, generally 10-feet wide for bicyclists and pedestrians, stretching between the Turner Pavilion to the southern terminus of the Northend Greenway. The heart of the corridor will be Federal Street between East Wolfe Street to Franklin Street.

Due to unknown development specifics and challenges with existing conditions, three alignment options are provided north of East Wolfe Street:

- Option A is the preferred alignment as it is a straight continuation of Federal Street, but Option A has challenges such as going through an area behind the Friendly City Food Co-op, Family Dollar, and the U.S. Post Office that is heavily utilized for deliveries and refuse service, and in close proximity to parking spaces adjacent to Kline's Dairy Bar. Between East Elizabeth Street and East Gay Street, the Colonnade at Rocktown had dedicated half the width needed for a pedestrian easement to the City of Harrisonburg, but additional easements from adjacent property owners are still needed.
- Options B and C are alternative alignments that may be considered depending upon how the area redevelops and the willingness of private property owners to dedicate land for this path.

From where Federal Street meets Franklin Street, two options are shown for connecting to the Turner Pavilion:

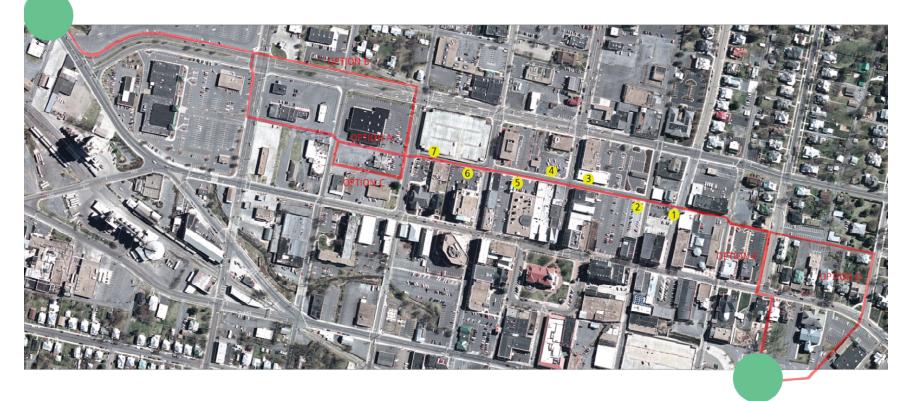
Option D would utilize Federal Street between Franklin Street and Campbell Street, which is a narrow 19-foot wide alley that serves adjacent parking lots. Like the block between Bruce Street to Franklin Street, bicyclists, pedestrians, and motorists would have to share this space, as there is not enough room to provide separation between bicyclists and pedestrians from motor vehicles. Option D also requires the relocation or burying of utility lines on the north side of Campbell Street in order to accommodate a 10-feet wide shared use path and buffer area. This would require that Campbell Street serve only one lane of one-way traffic. Crossing South Main Street would become easier as the proposed bump outs at this intersection will reduce the crossing distance.

- Option E would have a shared use path constructed on the north side of Franklin Street, and the path would cross South Main Street. Along South Main Street, the sidewalk in front of the Virginia Quilt Museum would be widened, and the path is proposed to turn into the drive way between the Quilt Museum and the Smith House, and connect with the shared use path/pedestrian walkway that will lead to the Turner Pavilion.
- Interconnections between the shared use path and adjacent points of interest could be considered where public property is available and where private property owners request to provide direct customer access to businesses from the path. For example, it would be beneficial to create a convenient connection between Federal Street and Court Square.



DOWNTOWN FEDERAL STREET CORRIDOR

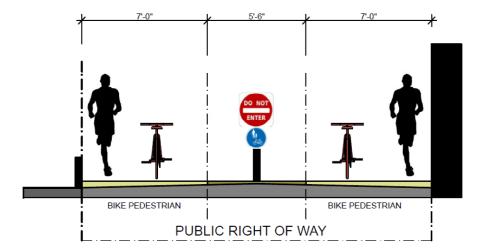
NORTHEND GREENWAY



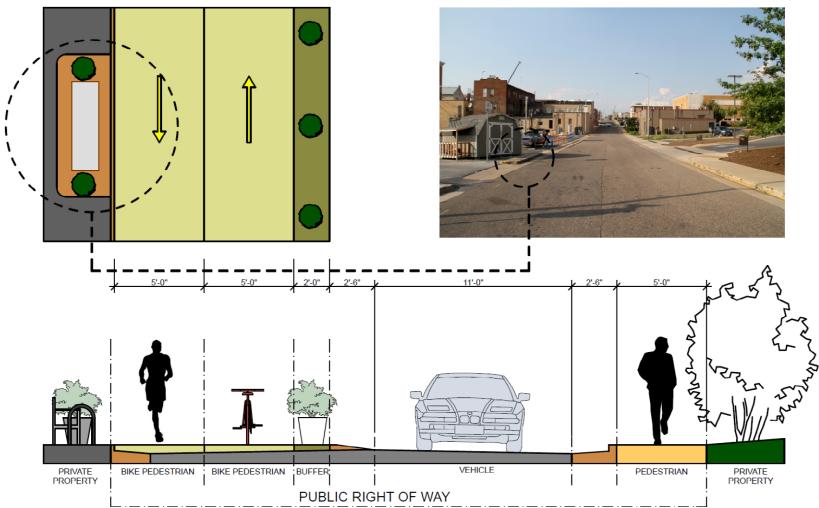
FARMERS MARKET

1. Newman Avenue to East Water Street

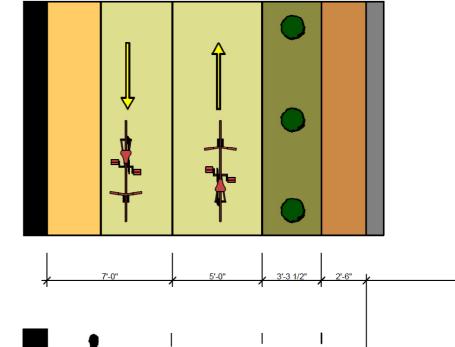




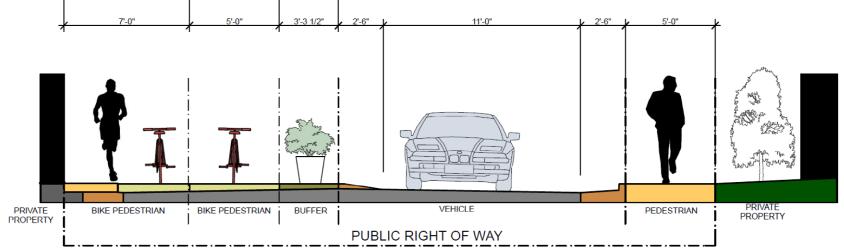
2. East Water Street to East Market Street (Southern Segment)



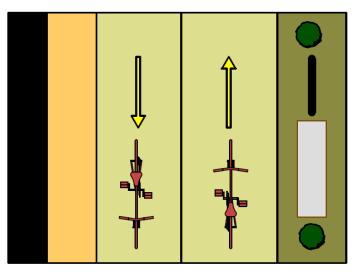
3. East Water Street to East Market Street (Northern Segment)



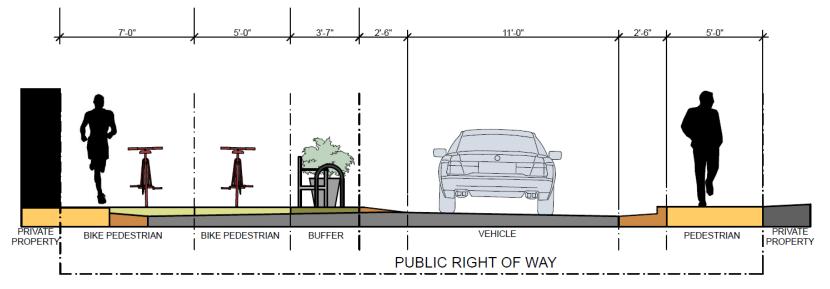




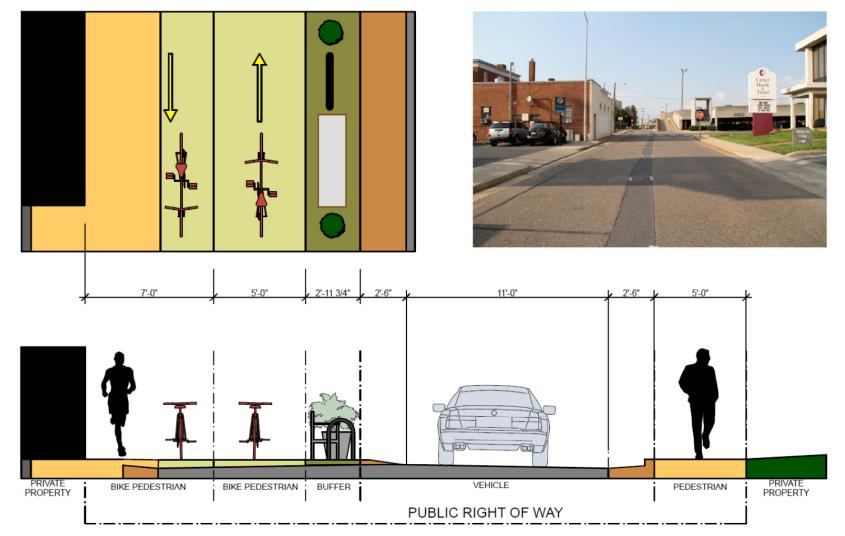
4. East Market Street to East Elizabeth Street (Southern Segment)



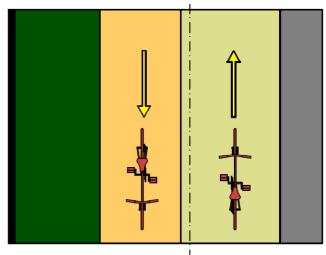




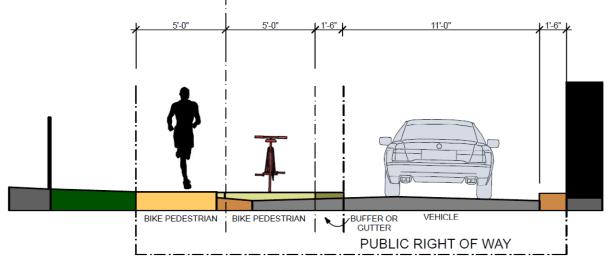
5. East Market Street to East Elizabeth Street (Northern Segment)



6. East Elizabeth Street to Blessed Sacrament Catholic Church

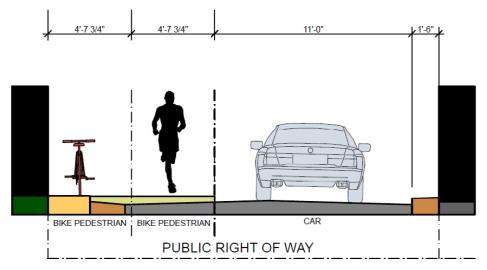






7. Blessed Sacrament Catholic Church to East Wolfe Street





PEDESTRIAN PATH (MUNICIPAL LOT TO LIBERTY PARK)

It is recommended that the City consider enhancing the pedestrian path between the municipal parking lot to Court Square to Liberty Park with benches, trees and green space.

Between the Municipal Parking Lot and Court Square, this path would be a 10- to 20- foot wide corridor. This concept would redevelop an existing corridor from a vague pathway that is generally obscure to Harrisonburg's visitors and plain to its residents into a pedestrian pathway of greater vitality, connecting what are becoming the two cores of downtown social and economic development, Turner Pavilion and Court Square. Central to the theme of this proposal is the historic nature of the City. The proposed path travels through the heart of the original boundaries of Harrisonburg and passes adjacent to the stone house of the founder of the City, Thomas Harrison, whose original land grant of the early 18th century incorporates the lands contained within the course of the walkway.

Two of the more technically challenging aspects of this pathway's design is its integration with the Municipal Parking Lot and the existing bridge over Blacks Run on West Bruce Street, which obscures vehicle sight lines. To help mitigate these issues, it is recommended that the concept of closing the West Bruce Street exit from the municipal lot be explored as a means of limiting pedestrian conflicts with motor vehicles.

This route would also provide an improved pedestrian route for those using the Water Street parking deck. From Court Square, the path would travel north towards Liberty Park along the alignment shown in the Pedestrian Path map.





Pedestrian Path (concept for connection from Municipal Parking Lot to Water Street Parking Deck)

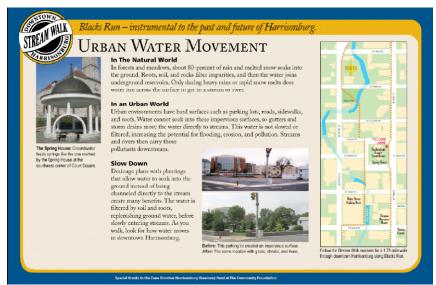


Pedestrian Path (concept for connection from Municipal Parking Lot to Water Street Parking Deck)

DOWNTOWN STREAM WALK

In 2008, the Friends of Blacks Run Greenway, with financial support from The Community Foundation, received approval from City Council to delineate a 1.75 mile Downtown Stream Walk that followed Main Street and Liberty Street between the World War II Memorial to the south and the intersection of North Main Street and Noll Drive to the north. The walk's objective was to create a pedestrian path for exercise, encouraging healthy enjoyment of businesses, restaurants, pocket parks, and green spaces in downtown.

The project included the installation of four educational, interpretive signs that highlighted Blacks Run and its history and role in the past and future of Harrisonburg. The signs are titled and reflect the topics of: "Growing on Blacks Run", "Blacks Run Wildlife", "Landscaping for Stream Health", and "Urban Water Movement". The walking route was delineated with 93, 3-inch diameter bronze medallions embedded into existing sidewalks along the walking route. However, over the years, the medallions have badly tarnished, making them difficult to see in the sidewalks, and some have also become loose from the sidewalk and have gone missing.



One of four signs installed for the Downtown Stream Walk

Although there is desire to support the concept and vision of the Downtown Stream Walk, at the time of this writing, city staff has decided not to reinstall the Downtown Stream Walk medallions until a new medallion design is developed (that are more visible and better affixed into the sidewalk), and until pathways are delineated as part of this plan. It would be a positive opportunity to combine the objectives of the Downtown Stream Walk with the Pedestrian Path between the Municipal Lot and Liberty Street, and the Federal Street Shared Use Path.