

Town of Harpers Ferry

APPROVED

Comprehensive Plan

**Prepared by the
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Town of Harpers Ferry Comprehensive Plan

SECTION I: INTRODUCTION

Purpose of the Plan

The Harpers Ferry Comprehensive Plan is a description of how the town intends to develop. It describes existing environmental constraints, including steep slopes, water quality needs, noise generators, and forest protection needs. The Plan describes the historic character of the town and how it can be protected and improved.

The Comprehensive Plan is used as a point of reference by public officials when making decisions on such things as capital improvements, neighborhood rehabilitation, public acquisition, and approval of new private development. The Plan must be long-range, comprehensive, general and internally consistent. It must be understandable and available to the public because the policies will be carried out only if they have public support.

Planning process

In 2004, the Town Council appointed a task force made up of residents, representatives from the various town commissions, and the National Park Service. The task force met 32 times in preparing this Plan. Residents were asked early on to fill out an opinion survey on what they liked about the town and what they believed needed improvement. Many of the recommendations included in this Plan reflect the results of the survey. A draft version of the plan was made available to residents who were invited to comment both in writing and at the public hearings before the Planning Commission and the Town Council.

As policies and conditions change, the plan should be updated. It is recommended that a review of the plan be undertaken every five years to reflect new constraints and opportunities.

State planning requirements

This plan meets the requirements of Chapter 8A, Article 3 of the West Virginia State Code. A compliance table indicating where each requirement is met is included in the appendix.

Previous planning in Harpers Ferry

This is the first comprehensive plan prepared for the Town of Harpers Ferry. Previous planning efforts included studies conducted before designation of the entire town as a Historic District in 1979, and of the Lower Town as a National Trust, Main Street Focus Area in 2001. In addition, the National Park Service initiated a comprehensive planning effort in 2003, to develop a General Management Plan to guide preservation and management of the Park resources.

SECTION II: BACKGROUND INFORMATION

Location

The Town of Harpers Ferry is located on the easternmost point of Jefferson County, West Virginia. It is approximately 75 miles from the Baltimore and Washington, D. C. Other major cities within a 30 mile radius include Leesburg, Virginia, Hagerstown and Frederick, Maryland, and Charles Town and Martinsburg, West Virginia.

A brief history

Harpers Ferry is a small town known around the world for the part it has played in history. George Washington personally selected Harpers Ferry as the site for a United States Armory in 1795. In 1851, the Town of Harpers Ferry was incorporated and the first officials were elected. Every child in this country learns that in 1859, abolitionist John Brown was hanged after his attempt to start an uprising of slaves in Harpers Ferry, in his quest to end slavery.

The 300 acres that make up the Town reach from the quiet Pine Grove section in the northwest corner to the downtown where the rivers join. Laid out in a grid on a peninsula formed by the Potomac and Shenandoah Rivers and constrained by the natural landforms, the town has retained much of its 19th century village character. Although much of the original grid was in place before incorporation, it was officially platted in 1852. All U. S. Government lots not sold in 1852 were sold in 1869.

Both sides of the Civil War wreaked havoc on the town. Buildings were destroyed by fire, the mountainsides were stripped of their trees to be used in making charcoal, the railroad bridges linking the town to the east were left in ruin many times, and the town residents were pushed out by the dangers of war and the new soldier occupants. Attempts to renew its industrial prosperity after the war were thwarted by repeated river flooding. The town never returned to the industrial prominence it held before the war.

In 1944, the federal government established Harpers Ferry National Monument and in 1960 added Storer College, established in 1865 as a school for newly freed slaves, to what is now Harpers Ferry National Historical Park. These actions have helped preserve many of the original buildings within the Park's generous boundaries, and helped protect the tree covered ridges that surround the town.

Designation of the entire town in 1979 as a Historic District furthered the effort to protect the unique character of Harpers Ferry.

A more complete history of the town can be found in the Appendix.

Town government

The Town of Harpers Ferry elects a mayor, recorder, and five additional council members, all serving 2-year terms. The Mayor is the chief executive officer of the town and is responsible for overseeing the enforcement of Town rules and regulations. The Council is responsible for the review and approval of decisions involving public expenditures and for preparing and adopting local law. The Council appoints an 11-member Planning Commission which serves in an advisory capacity. The Planning Commission's task is to promote the orderly growth of the town. The Council also appoints a 5-member Historic Landmarks Commission, which is charged with protecting the historic resources of the Town. The Council and Commission meetings are open to the public in accordance with state law.

Demographics

In 2000, the official census showed 315 residents in Harpers Ferry, with half over 43 years of age. Young people, 18 and under, number 75 and older people, 60 and over, numbered 66. Females outnumbered males by 174 to 141. There were a total 149 households with an average household size of 2.11, with 104 households in owner-occupied housing and 45 in renter-occupied housing.

Of the 252 persons aged 16 or over, 170 were in the labor force, of which more than half (89) were employed in management, professional or related occupations. The next largest sectors were 34 persons in sales and office occupations and 28 persons in service occupations. Breaking it down by major employment industries, the Census showed 44 people in the education, health and social services and 34 the arts, entertainment, recreation, accommodation and food services. Of those employed, 24 worked at home, 17 walked to work, 17 used public transportation, and 110 drove alone (103) or carpoled (7). The median household income was \$52,344, significantly higher than Jefferson County (\$44,373), West Virginia (\$29,696), or the U. S. as a whole (\$41,994).

The education levels attained by Harpers Ferry workers were 91.1% with a minimum of a high school diploma, 22.9% with some college or an associate's degree, 31.8% have a bachelor's degree and 28.4% have a post graduate or professional degree.

The Town of Harpers Ferry will likely experience limited population growth, with new housing being offset somewhat by continuing reduction in the household size as the existing population ages.

SECTION III: ENVIRONMENTAL RESOURCES AND CONSTRAINTS

The Environmental Resources and Constraints section describes the existing environmental conditions in Harpers Ferry: stream valleys, water quality, wooded areas, ambient noise, air quality, and light pollution. It recommends goals and objectives for ensuring that these resources will be protected for both today's residents and for the generations to come. Features referred to in this section can be found on the Environmental Resources and Constraints map.

The most obvious natural features to both residents and visitors are the major land forms in and around Harpers Ferry. These include the peninsula formed by the meeting of the Potomac and Shenandoah Rivers, and the hills and small valleys within the community. Both residents and visitors appreciate the views of the ridges and rivers, as well as the historic buildings found between them.

In 1856, grading of most of the roads occurred. The topography on the southern side of the Harpers Ferry peninsula (Fillmore Street) was flattened by grading down the high spots and filling the low ones. Similar treatment was not performed on the northern side of the peninsula, leaving Ridge Street split by a stream valley. Public rights-of-way in which roads have not been constructed are called *paper streets*.

Stream valley protection and improving water quality

There are four stream valleys that cut across the peninsula on which Harpers Ferry sits. One of the stream valleys, the smallest of the four, roughly parallels Washington Street and runs towards the point of the peninsula. Much of it has been graded over, with the water carried in underground storm water pipes. A second, larger stream valley starts at the town park at the northeast corner of Washington Street and Union Street and ends at the Potomac River near the base of the end of Putnam Street (paper). This stream valley has a secondary portion that starts from behind the Women's Club on Washington Street. These stream valleys are, for the most part, in private ownership.

The third and fourth stream valleys start in the Town of Bolivar and trend northerly through the Pine Grove neighborhood where they join before ending at the Potomac River. Most of this stream valley is already in public ownership.

Stream valleys, if left in a natural condition, perform many useful roles. They provide space for storm water drainage, and if forested, can help slow runoff into the river and reduce downstream flooding. They provide habitat for flora and fauna. Because of their naturally linear form, stream valleys may allow for trails that augment the paved streets for getting around the community. The steep-sided stream valleys in Harpers Ferry make them particularly vulnerable to soil erosion if the forest cover is disturbed.

The grid system of streets in Harpers Ferry ignored the steep stream valleys. Most of the lots remaining in these stream valleys are vacant and without access to a paved road.

Developing many of these lots will be extremely costly. It is unlikely that the unpaved

rights-of-way to some of these lots will be feasible, in part because of the significant adverse impact on the stream bed and in part because the grade of the street will be too steep to be safe, especially in icy conditions.

Rain falling in Harpers Ferry drains into the Potomac and Shenandoah Rivers and ultimately into the Chesapeake Bay. Many communities downstream use water from the Potomac River for drinking water and are concerned about the quality of the water. The health of the Chesapeake Bay, and the aquatic wildlife within it, is dependent upon the quality of the water flowing into the Bay. Forested stream valleys help protect water quality by reducing erosion, filtering pollutants from street runoff, and shading the stream which maintains a cooler environment in the stream. In 2006, the Shenandoah River was placed on the Endangered Rivers list and is considered to be at risk from an increase in polluted runoff from urban and suburban areas.

The most effective steps for protecting water quality are done at the local level. This includes reducing the speed and amount of storm water runoff by retaining it onsite and by providing buffers from the edge of streams or stream banks. Best management practices typically call for a minimum of 100 feet of buffer from a stream's edge and a minimum of 25 feet from the top of a stream bank. For new development, the most effective provisions include reducing the amount of impervious surface, including building size in relation to the lot size and paved areas like driveways, parking lots, and patios. These measures are far less expensive and more effective for protecting water quality than a public storm drain system that concentrates the storm water runoff. For existing buildings, the most effective measures include capturing the runoff in cisterns and rain barrels (attached to downspouts), redirecting the runoff to green areas that can absorb the water, and planting trees and shrubs.

GOAL: Maintain the stream valleys in Harpers Ferry to protect water quality and provide additional hiking opportunities for residents and tourists.

OBJECTIVES:

1. Develop a specific plan for the [Ridge Street] maintenance of stream valleys to:
 - a. provide for significant stream buffers [of at least 100 feet] from the edge of the stream bed, and 25 feet from the top of the stream bank, or other mitigative measures.
 - b. limit grading and forest disturbance within steep sided stream valleys, e. g., where the slope is 25% or greater.
 - c. provide for a maximum percentage of impervious surface to reduce the amount and velocity of storm water runoff,
 - d. retain existing native vegetation and provide for appropriate re-vegetation with native species or noninvasive hybrids where clearance is allowed during construction,
 - e. provide for a maximum slope for future street extensions and connections to ensure driver and pedestrian safety, especially in wet or icy conditions, and to reduce the impact of storm water runoff on stream water quality,
 - f. protect the existing stream bed from degradation at all crossing points, and
 - g. evaluate methods for protecting stream valleys and allowing public access,

including easements and expansion of the National Park and other publicly owned land.

2. Evaluate the potential for using mini-parks created from paper streets for temporary water infiltration during storms.
 3. Encourage property owners of land within the steep sided stream valleys to donate tax deductible easements to the town, or a nonprofit organization, so as to eliminate future development and allow for pedestrian access.
 4. Develop restrictions on removal of forested areas on stream valley slopes that exceed 25 percent, with provisions for allowing tree removal for safety purposes.
- NOTE: First half of sentence was moved from the *Forests and trees* section.

Forests, including the urban forest and trees

The residents of Harpers Ferry are fortunate that most of the forested areas within and around the town are within the National Historical Park or state-owned conservation land. This designation as federal parkland will ensure forest protection for generations to come.

Most of the forested area within the Town of Harpers Ferry has already been identified since they are within the stream valleys. Significant forested area can also be found along the steep banks paralleling Shenandoah Street to the south and the Potomac River to the north.

The remaining trees [make up what is called the urban forest and] are found on private property and within the public right-of-way.

These trees and forests provide significant year-round energy savings. Winter windbreaks can lower heating costs by 10-20 percent. Summer shade can lower cooling costs by 15-35 percent. In addition to their role in protecting water quality identified above, trees and forests provide habitat and add to the aesthetic quality of the town and to the value of the private property. Street trees provide shade for pedestrians and improve street appearance. Proper selection of street trees is important to reduce damage to sidewalks, interference with utility lines, and long term health of the trees.

The Town should encourage the use of native species in planting on private property, especially properties adjacent to the state and National Park lands, so that invasive non-native species do not take over in natural areas. Native species are often more hardy and do not require watering once established.

Best management practices, as developed by the organization *American Forests* (www.americanforests.org) recommends a canopy of at least 40 percent for urban areas.

GOAL: To have 40 percent of the land area in the town under tree canopy within 20 years, as recommended by *American Forests* (www.americanforests.org).] To preserve, maintain and enhance the tree canopy in Harpers Ferry.

OBJECTIVES:

1. Develop a street tree program that encourages private and public tree planting

- within the public right-of-way from an approved species list.
2. [Develop restrictions on removal of forested areas on stream valley slopes that exceed 25 percent.] NOTE: Moved to the section *Stream valley protection and improving water quality*.
 3. Develop an education program for residents to encourage tree planting and other landscaping to minimize storm water runoff, improve water quality, and conserve energy, and to encourage removal of undesirable invasive species such as ivy that can kill trees.

Noise

Most residents of Harpers Ferry enjoy a relatively quiet environment. One of the main sources of noise is that of the two rivers, which tend to muffle the sound of the traffic on Rt. 340. The loudest intermittent noise is that from the fire station siren and the train horns which are sounded at the grade crossing on Potomac Street. Within town, noise from trucks and motorcycles can be annoying, especially in the areas with steep streets where buildings are set back only a few feet from the roadway. Other, less intrusive noise comes from aircraft using the river for navigation or flying over the town to take in the scenery.

The degree of disturbance from noise depends upon three factors: (1) the amount (amplitude) and nature (frequency) of the intruding noise, (2) the amount of background noise present before the intruding noise, and (3) the nature of the working or living activity of the people occupying the area where the noise is heard.

Over a prolonged period, sleep loss caused by noise, and the resulting fatigue, can have serious consequences on physical and mental health. The decibel scale is relative to the human ear, with 0 decibels being the threshold of hearing. Because the human ear's perception of sound varies with the frequency, a modified decibel scale, called the A scale, has been developed which incorporates the human's greater sensitivity to high frequency sound and lower sensitivity to low frequency sound. Continuous, extremely high, i.e., 90dB(A) or higher, noise levels can cause hearing loss. (The noise level of music listened through ear buds instead of headphones can often reach or exceed this level.)

A smooth, continuous flow of noise is more comfortable or acceptable than impulsive or intermittent noise. The rivers beside Harpers Ferry contribute most to the ambient noise level, day and night, and when the rivers are high, they often reach 50dB(A) when measured several hundred feet away. Noises that are more identifiable tend to be more annoying. Impulsive noise, in general, is more disruptive than continuous sound levels within the community, and high frequency noises are perceived as more annoying than low frequency sounds. Community annoyance response is dependent on the existing ambient, or background, noise levels and the time of day. In other words, a powered lawn mower is more annoying early in the morning.

GOAL: To have a quiet, peaceful community.

OBJECTIVES:

1. Adopt a maximum *ambient* noise level in the Town of 50dB(A).

(See Article 527.02 (b))

2. Update the noise ordinance so that it is more easily enforced.
3. Work with CSXT to establish a Quiet Community designation for Harpers Ferry.
4. Work with the Fire Department on alternatives to the siren.

Air quality

The quality of the air in Harpers Ferry is, for the most part, dependent on pollutants generated elsewhere and cannot be addressed by local policy. Locally produced pollutants include such things as idling vehicles, outdoor burning (illegal in town, but still occurs), gas powered yard equipment, and wood and coal burning stoves.

GOAL: Maximize local efforts that can improve air quality.

OBJECTIVES:

1. Encourage drivers through education and enforcement (unattended vehicle ordinance) to reduce long term idling of vehicles.
2. Encourage the use of manual and electric powered yard equipment.

Light pollution

In most populated areas, being able to enjoy the night sky from one's own home is becoming a rarity. This is still possible in most locations within Harpers Ferry. However, as more residents and business owners install lighting for security or simply for effect, the night sky will become more difficult to see. The organization International Dark Sky Society (www.darksky.org) has developed sample ordinances for communities interested in reducing light pollution so residents can continue to enjoy the night sky.

GOAL: To continue to be able to see the stars and planets.

OBJECTIVES:

1. Adopt a lighting ordinance to minimize light pollution as recommended by the International Dark Sky Society (www.darksky.org).
2. Include in the lighting ordinance a limitation on landscape lighting, including that of and on the illumination of building fronts during the night hours, in the lighting ordinance.
3. Resist conversion of the street lighting system to lamps that distort natural lighting, for example, mercury vapor or sodium vapor lamps, and upgrade the existing incandescent lighting if the proposed lamps provide natural lighting, i.e., have a full spectrum output and a color rendering index greater than 80.

SECTION IV: BUILDING ON OUR HISTORIC CHARACTER

The Building on Our Historic Character section describes the existing manmade features created since the town's inception. It recommends goals and objectives for protecting the historic character, improving the local economy, providing decent and affordable housing for its residents, and increasing the recreational facilities for residents and tourists. Features referred to in this section can be found on the Building on Our Historic Character map.

The zoning ordinance specifies the permitted and conditional uses allowed in the two zoning districts: the Residential District, and the Business and Commercial District. These two land use categories are located as shown on the Existing Zoning Map.

A 19th century village

Many of the buildings in Harpers Ferry were constructed from 1800 through the Civil War period, when the custom was to use materials found locally, including stone, brick and wood. As expected under the constraints of a grid pattern, building lots had a standard width and length, which resulted in housing of fairly consistent size. Building occupants relied more on natural light and air flow, and rooms were more uniform in size. As a result, the exterior wall openings (windows and doors) of all the building walls were more regularly spaced than in is found in the tract type houses of today where the primary focus is on the front wall. Many houses had front porches, making it more pleasant to enjoy sitting outside and visiting with others passing by.

After the Civil War, Harpers Ferry underwent a short-lived industrial and residential building renaissance. Many gracious homes were built by town merchants and other citizens and are fine examples of Queen Anne, Eastlake, Italianate, Victorian and Foursquare architecture, in a period extending into the early 20th century. These homes blend well with the earlier 19th century homes built in the Federal or Greek revival styles.

In Camp Hill and Lower Town houses are evenly and tightly spaced, thus new development potential is primarily in minor expansion of these houses and other remodeling efforts. In the western end of the town, houses have been built further apart, and there is more potential for infill development.

Most leisure time in the 1800s and first half of the 20th century was taken up in church functions so church buildings held prominent positions within the community and their steeples and towers were the tallest structures in the town. Commercial enterprises were often found on the first floors of buildings, with residences above, throughout the town, but especially on the main streets of High/Washington, Potomac, and Shenandoah. The larger industrial uses which relied on water for power were found along the Potomac and Shenandoah Rivers, subjecting them to the floods that eventually caused the demise of those enterprises that had survived the Civil War. Little remains of the businesses of this post Civil war economic surge except the Hilltop House Hotel.

In 1977, the Town adopted a Growth and Preservation Ordinance which included the

zoning designation (residential or commercial/business) of all the lots within the Town, and rules under which development could occur. The Existing Zoning Map shows the groupings of properties in the town that are currently designated to permit commercial uses. The remaining properties in the town are zoned for residential uses. Expansion of the commercial areas, where desirable or appropriate, could be considered through rezoning actions by the Town Council. Such areas would best be confined to locations contiguous to existing commercially zoned areas or in locations or structures historically used for commercial purposes.

In 1979, the entire town of Harpers Ferry was designated as an historic district under the Department of Interior National Register of Historic Places, a program developed to protect our national treasures. The town council adopted guidelines for new construction with the goal of preserving the overall character of the town and individual structures of historic importance. The national designation makes property owners eligible to receive grants, tax benefits, and protection from certain federally funded site activities.

In 1983, a comprehensive survey of buildings in Harpers Ferry was conducted under the direction of the Historic Landmarks Commission. The purpose of the inventory was to aid in future preservation and planning in the community, recognize historic buildings resources, and create historical records. The survey is a written and visual inventory which categorizes all buildings in the district by aspects, such as their style, age and historic significance to the district. It also provides a basis for updating the District's period of significance to include early 20th century resources.

In 2001, the commercial High Street and Potomac Street section of Harpers Ferry received designation as a National Trust, Main Street Focus Area. In 2007, the Main Street designation was dropped and the program was taken over by the Harpers Ferry Historic Town Foundation. This [designation means that the Main Street program] Foundation will work to encourage property owners to renovate historic structures by providing information on financial tools, including donation of façade easements. Another effort of the program is to determine existing infrastructure needs and find funding and partners to make the necessary changes.

An attractive feature of Harpers Ferry is the views of the surrounding terrain and historic resources. Measures to identify, protect and maintain important view sheds would be the first step toward preserving the scenic character of the town.

GOAL: To preserve and protect and preserve the town's historically diverse character and historic integrity for present and future generations.

OBJECTIVES:

1. Provide special treatment at the main entrances to Harpers Ferry so residents and visitors are aware of the Town's designation as a Historic District.
2. Map the historic resources included in the 1983 building inventory by age, style and significance to assist in refining the historic design guidelines.
3. Develop a brochure and other material to educate the public on the historic district guidelines and their value in protecting the character of Harpers Ferry, and the availability of programs that assist property owners in maintaining historic

- structures, including grants and tax deductions.
4. Adopt uniform design guidelines for improvements within the public right-of-way and on town-owned property, including sidewalks, lighting, street trees, and directional signs.
 5. Modify the historic district nominating statement with the Department of Interior to include early 20th century historic resources.
 6. Ensure formal recognition of all contributing structures in the town by registering the building inventory survey with the state.
 7. Revise the development guidelines to remove any requirements that historic design be imitated in construction of new buildings, and instead provide that new construction be compatible in size, scale, material, and character with surrounding historic structures in accordance with the guidelines of the Department of Interior.
 8. Develop guidelines to allow appropriate uses of modern building materials.
 9. Amend the Zoning Ordinance to allow front porches in the front yard setback.
 10. Work closely with the National Historical Park to ensure a smooth transition between Park and town.
 11. Develop a community-wide interpretation program that involves public art, wayside exhibits, and interpretative markers that tell the story of the town and its role in early industry and transportation, the Civil War, and the civil rights movement.]
NOTE: Moved to *Cultural and recreational facilities* section.
 12. Support the Harpers Ferry Historic Town Foundation's efforts to protect the town's historical resources.
 13. Require all solid waste storage containers to be screened from the public right-of-way and, in commercial areas, to be screened from public view.
 14. Develop a sequenced plan for Undergrounding utility lines, or other alternatives, to reduce visual clutter.
 15. Develop a view shed management plan and a plan for tree planting with low growing native trees.

A 21st century market place

According to a market study conducted in 2002, 23 privately owned buildings in the commercial district on High Street, Shenandoah Street, Public Way, and Potomac Street have approximately 38,600 square feet occupied by commercial businesses. Another 8 buildings have only residential uses.

At the time the market study was conducted, lodging in or near the town included nine bed and breakfasts (with 18 rooms), three hotels (212 rooms), and one campground (1,400 guest capacity).

The business environment of Harpers Ferry can be measured by the number of visitors and the sales revenue. Although the number of visitors to the National Historical Park has declined since 1990 (a national trend for historical parks in the U. S.), the average dollar amount spent by visitors has increased.

Using park attendance as a comparison, similar results were found for the Antietam/Sharpsburg area, while the Gettysburg area, which has experienced significantly more

growth in local business, has seen a significant increase in visitors. Visitors to Harpers Ferry appear to be drawn both by easy accessibility to interesting park facilities and by a vibrant commercial area.

Since the land area of Harpers Ferry cannot expand, additional commercial and office development will be limited. One method of increasing the potential development would be to encourage home based employment, also called home occupations. Typically these businesses have limits that keep the use from detracting from the residential nature of the neighborhood. Types of home occupations could include arts and crafts studios with limited onsite sales and other businesses that cater to visitors, as well as services that cater to residents. The review and approval process for home occupations should be tied to the level of intensity of the proposed use. A home occupation with no impact on the neighborhood could be allowed by right, while a home occupation with potential impacts on traffic and parking could require a special permit.

The Harpers Ferry Historic Town Foundation's program includes efforts to rehabilitate existing structures and infrastructure to make the town's commercial area more attractive to both new businesses and to visitors and shoppers. The program aims toward more diverse goods and services to boost the economic well-being of the town. These changes will have a positive impact on revenue generation.

GOAL: To expand the town's commercial development (and tax base) in a manner that complements the historic character of Harpers Ferry.

OBJECTIVES:

1. Support the Harpers Ferry Historic Town Foundation program's efforts to improve the economic climate of the Town.
2. Work with the Town of Bolivar on initiatives that will help both communities attract and maintain healthy businesses.
3. Develop a home occupation ordinance that allows different intensity of use, including limited retail where appropriate, with commensurate review and permit requirements.
4. Consider rezoning to allow limited expansion of commercial activities in certain circumstances, such as on lots immediately adjacent to existing commercially zoned property, or on property historically used for commercial purposes.
5. Consider incorporating additional space for commercial use within an expanded town hall/post office complex, possibly expanding onto the immediately adjacent vacant land along West Ridge Street through a private-public partnership.
6. Study the possibility of providing wireless Internet service to encourage more home based business development.

Safe and affordable housing and neighborhoods for all our residents

A small percentage of the houses in Harpers Ferry are less than 50 years old. While the age of a structure does not make it less safe than newer housing (after all, it has stood the test of time), it must be properly maintained, especially those conditions that, if not kept up, could lead to a fire hazard or public health risk.

As development pressures increase and more people move further out from the more developed areas in and adjacent to Washington, D. C. to find more affordable housing, the demand for housing in Harpers Ferry with its convenient commuter train access and attractive neighborhoods has grown. With little turnover in housing and a limited supply, prices increased significantly.

While this might be seen as a positive change to many who already own homes that they hope to sell soon, for many others, it has a downside. Property taxes are increasing and may become unaffordable for those on a fixed income, especially older residents. For persons who have not yet purchased a home, often younger residents, it can mean being priced out of the market altogether.

Harpers Ferry has been home to a diverse population since its inception. If it is to retain this healthy diversity, it must continue to offer diversity in housing, including affordable housing, both owner-occupied and tenant-occupied. One method for increasing affordability used in many communities is the accessory apartment. Allowing a small accessory apartment within a house or existing outbuilding would preserve the appearance of single family neighborhood while giving the property owner additional income and the potential tenant a more affordable unit.

GOAL: To have well built, safe and affordable housing for all the residents of Harpers Ferry.

OBJECTIVES:

1. Develop a property maintenance code to protect public health, safety and welfare of the residents and the historic resources of the town.
2. Encourage second story residential units in commercial zones, subject to conditions to ensure compatibility with surrounding development.
3. Evaluate the potential for, and impact of, providing rental housing in the form of accessory apartments in owner-occupied housing.
4. Study the potential for a mixed use development on the property fronting on West Ridge Street immediately adjacent to the Town Hall building.

Cultural and recreational facilities

The residents of Harpers Ferry enjoy more park land per capita and natural recreational facilities than most towns. These amenities include the land within the Harpers Ferry National Historical Park with its many miles of trails and, the C&O Canal National Historical Park between Washington, D. C. and Cumberland, Maryland, with a path popular for cycling and walking, and the Appalachian Trail linking Georgia and Maine. In addition, the Shenandoah and Potomac Rivers provide rafting, kayaking, fishing, and other water-related activities.

Town parks include the small park across from the town hall, the gazebo park and the children's park. Because the Town of Harpers Ferry was laid out in a grid pattern over fairly rough terrain, it has resulted in many portions of the grid being left undeveloped. The Town has the opportunity to use the remaining 'paper streets' for mini-parks and trails.

Although the town does not have a formal community center, many of the functions that would normally occur in such a center takes place at the Camp Hill-Wesley United Methodist Church hall and, to a lesser extent, in the town hall meeting room. The train center renovation will result in additional public space for community activities of an historic nature.

Harpers Ferry also does not have space for the display of valuable community-based personal and historical memorabilia, art and artifacts, such as the Jex paintings, associated with long-time or notable individuals and families who have contributed to the community. Nor does it have an indoor recreational facility for social activities for youth and senior citizens, such as basketball, bingo, dances, or musical venues.

GOAL: To have park, recreation, and cultural facilities within Harpers Ferry which complement the facilities in the adjoining National Historical Park so that residents and visitors can enjoy the forested stream valley areas and views of the rivers and mountains, and cultural events sponsored by the Town.

OBJECTIVES:

1. Work with property owners to develop an inventory of community use rooms in other publicly or semi-publicly owned buildings, including the train station, National Park Service buildings, and churches.
2. Work with the National Park Service to develop more bicycle friendly access to the C&O canal tow path.
3. Preserve paper streets that are too steep or are not needed to access existing developable lots, for use as trail ways and mini-parks, especially paper streets that provide pedestrian connections and access to stream valleys and views of the rivers and mountains.
4. Formalize hiking paths with signing and maintenance through volunteers, and work with the Park Service and the Appalachian Trail Conference to make maps of the local trails readily available to visitors and residents.
5. Work to acquire space for a town museum and a community center.
6. Seek ways to refurbish and rededicate the Shipley School site for public and community activities.
7. Develop a community-wide interpretation program that involves public art, wayside exhibits, and interpretative markers that tell the story of the town and its role in early industry and transportation, the Civil War, and the civil rights movement.

NOTE: Moved from the section *A 19th century village*.

SECTION V: TRANSPORTATION AND PUBLIC FACILITIES AND SERVICES

The purpose of the transportation system is to move people and goods within the town and region in the quickest, most efficient, and most convenient manner. A good transportation system will make available a number of choices to the people using the system, including public transportation, streets (and highways), bicycle paths, and pedestrian ways. The system should ensure accessibility to all residents and visitors to the destinations desired. The first half of this section identifies the problems and provides recommendations for improving the transportation

system.

The capacity of municipal public facilities and services is one of the most critical determinants of the town's future rate of development. Most residents and visitors are unaware of many of these facilities and services until they are not working properly. Included in the list of public facilities and services covered in the second half of this section are sanitary and storm sewerage systems, water distribution, public utility distribution and conservation, street maintenance, fire prevention, and crime prevention. Facilities referred to in this section can be found on the Transportation and Public Facilities and Services map.

Non-motorized transportation facilities

Providing good facilities for pedestrians and cyclists can lower our dependency on the automobile and need for parking, reduce pollution and noise levels, and provide healthy exercise. To attract pedestrians and cyclists, the facilities must be aesthetically pleasing, safe, and practical.

As a tourist destination, the Town of Harpers Ferry should build on the existing trail system provided within the National Historical Park and the C&O Canal National Historical Park and the Appalachian National Scenic Trail. This includes providing more connecting trails for hikers and secure bicycle parking for cyclists.

On many weekends, the roads within the downtown are full of pedestrians. The sidewalks are not wide enough to handle the pedestrian traffic, which spills out into the roadway. The National Park Service moved most of the parking for Park visitors to Cavalier Heights, in part to reduce the amount of auto traffic in this congested area. For the safety of pedestrians and to make visits to the downtown and National Park more enjoyable, through traffic should be limited when high numbers of visitors are expected.

GOAL: To have safe and pleasant access for pedestrians throughout the community and facilities that encourage greater use of bicycles for recreation, commuting and shopping.

OBJECTIVES:

1. Develop guidelines for the Town's roads that encourage pedestrian use, including attractive streetscape in scale with pedestrians, shorter crossings at intersections using reduced curb radii (e. g., 15'), marked midblock crosswalks in the downtown area, and curb ramps at sidewalk corners and midblock crossings.
2. Conduct a study of the sidewalks to determine where improvements are needed in drainage, lighting, and pavement surface.
3. Develop a lighting plan that provides adequate light for pedestrians while still allowing residents to enjoy the night sky.
4. Encourage property owners to plant street trees that shade the sidewalk or pedestrian portion of the street.
5. Provide off-street parking and locking facilities for bicycles in conjunction with automobile parking as well as near entrances to public facilities.

6. Develop guidelines for restricting through traffic in the Lower Town during event weekends.

Public transportation

The Town of Harpers Ferry benefits from its history as a major destination on the B&O Rail line. As a result, its residents are served with daily service for long distances via Amtrak and weekday service for shorter, commuter-oriented distances via MARC.

The National Park Service operates a shuttle service linking its Cavalier Heights facility with the rest of the park attractions. Visitors to the Park are encouraged to use the shuttle system, although some parking is available at the train station on weekends. The National Park Service has a proposal to use smaller shuttle buses routed through town, stopping at designated historic locations with the Park.

The County operates the limited regional Pan Tran bus service between Harpers Ferry, Charles Town, and Martinsburg. Although the ridership for destinations within Harpers Ferry is very small, the service is important to those who cannot afford to own, or are unable to drive (because of age or disability), a private vehicle.

GOAL: To have a transit system that results in a significant increase in transit use especially among commuters, and better service for transit dependent residents and visitors.

OBJECTIVES:

1. Work with the National Park Service to develop a park and ride lot at Cavalier Heights for weekday commuters, including those using the MARC train.
2. Encourage National Park Service to provide carpool parking in the train station lot for weekday commuters.
3. Evaluate potential for hazardous material spills from train traffic and method for containment.
4. Work with CSXT to obtain a controlled grade crossing Potomac Street.
5. Develop a brochure for tourists which features Amtrak and Pan Tran access to the Town.

Street System

After the federal government sold off the Federal Armory property, it was platted (in 1869) by the Department of War using a simple grid system, a common method for many communities developed in the 18th, 19th and early 20th centuries. There are many benefits to the grid layout besides being easy to draw up: it provides good access to all lots thus created, distributes traffic more evenly to all parts of the system and, if block lengths are not too long, reduces the distance between different points. It is also relatively easy to navigate, provided the

grid is not interrupted by incomplete connections.

The right-of-way width of the longest streets (Washington, Fillmore, Ridge and Putnam Streets) is 50 feet which is sufficient room for two way traffic, sidewalk, and on-street parking. The right-of-way width of Potomac Street is 40 feet and on the remaining streets (which connect these streets) have a 30 foot right-of-way width, which is not enough for anything more than a two-way roadway. Speed limits are set at 25 and 15 mph.

The relationship between the signed speed limit and the actual speeds drivers are likely to go depends on several factors. Designing the roadway to control speed can be just as effective as having a patrol officer present. Design components that contribute to limiting vehicle speeds on local streets include:

- a) road width appropriate to traffic volume and parking demand, so traffic is impeded and slowed by parked and opposing vehicles, but capacity is not unduly constrained;
- b) short block lengths;
- c) visually and physically tight intersections (small curb radii); and
- d) trees near road or in parking lane to narrow the perceived road width.

The Town of Harpers Ferry was not built on flat terrain, so some portions of the original street grid have never been built. Being a small town, this will not have an adverse impact on access by vehicles, but instead can provide an opportunity for providing interesting and more direct pedestrian connections.

In 2004, the Town, Park Service, and West Virginia Main Street commissioned a study that recommended several changes in circulation and parking lot design in Lower Town. To eliminate bottle necks in circulation into and out of the train station parking lot, the Park Service will widen the parking lot entrance to two lanes. A general turn around area for traffic further down on Potomac Street must still be provided.

GOAL: To have a street system that is safe to use and provides appropriate access to adjoining land uses with a minimum of adverse impact.

OBJECTIVES:

1. Incorporate applicable traffic recommendations from the 2004 Traffic and Parking Management Survey into a comprehensive plan for parking, signage, and traffic flow on Potomac and High Streets.
2. Evaluate the street system to determine where design changes can be incorporated to reduce speeding, including painted parking lane lines to reduce the travel lane.
3. Evaluate the maintenance needs of the street right-of-way, including pavement, curbing, sidewalks, and drainage ditches, to determine where improvements should be made.
4. Existing unpaved street rights-of-way (paper streets) too steep for cars or not legally needed for access should be used for trails or for mini-parks, or give to a local historic preservation foundation where these public uses are not desirable.
5. Major traffic generators should not be located on streets that do not have a safe

connection to Washington Street, including adequate pavement width and sight distance at the Washington Street intersection.

6. Determine if the steep intersections and drainage ways along Washington Street can be modified to reduce the bottoming out of vehicles turning onto these streets.

Parking

Harpers Ferry was built before the automobile was invented, so little attention was paid to providing parking for shoppers and visitors. As a result, parking is in short supply.

The 2004 Traffic and Parking Management Survey recommended replacing the on-street parallel parking with angled parking, redesigning the train station parking lot, and adding parking on CSXT land near the railroad crossing on Potomac Street. The survey also recommended instituting pay parking, improving way-finding signing, publicizing the new parking rules, and increasing the shuttle bus times and their routes and stops.

Parking demand and supply in the remainder of the Town varies in relation to the distance from the Lower Town and, to a lesser extent, the Hilltop House Hotel. To ensure adequate parking for residents, the Town installed signs designating certain spaces for resident parking only on streets within walking distance of the National Historical Park.

The width of many of the streets in Harpers Ferry is too narrow to permit on-street parking. Some property owners have created paved parking spaces within the public right-of-way for their own use.

GOAL: To have an adequate amount of parking, both on and off street, for residents, visitors, and workers.

OBJECTIVES:

1. Improve signing to direct Park visitors to the National Park Service Cavalier Heights parking lot.
2. Conduct a formal land survey of the Potomac Street right-of-way between Hog Alley and the railroad crossing as a first step towards obtaining grant money for design work.
3. Incorporate applicable parking recommendations from the 2004 Traffic and Parking Management Survey into a comprehensive plan for parking, signage, and traffic [flow on Potomac and High Streets].
4. Work with CSX, the National Park Service and owners of undeveloped property to lease or buy additional right-of-way to allow for a general turn around and parking restricted to Lower Town residents, workers, and shoppers who are not National Park visitors.
5. Work with the National Park Service and utility companies to eliminate utility poles from the train station side of Potomac Street and thereby increase parking.
6. Where feasible, mark side streets with parking spaces to provide for extra parking and to slow traffic, while providing a clearly marked and safe area for pedestrians to walk.

7. Evaluate the zoning ordinance for possible requirements and standards for off-street parking in conjunction with new development.

Water treatment and distribution

The Harpers Ferry-Bolivar water system was developed to a great extent by Harpers Ferry Water Works, Inc. As a dedicated system, it is to be used only by customers within the designated service district which is essentially east of the Bolivar Heights ridge. (Refer to map in Appendix.) In 1950, the Town purchased and improved the system with \$18,000 in revenue bonds. The National Park Service has spent over \$70,000 in water lines and fire hydrants to provide water for visitors and fire protection in the National Park Area.

The Park Service has agreed to help fund capital improvements on a shared basis with the Harpers Ferry water company to serve the Harpers Ferry National Historical Park and Harpers Ferry Center, provided the present service area is not expanded. Should such an expansion occur, the Park Service would no longer be required to share the costs related to development of any water source, treatment, storage or distribution.

The Harpers Ferry water system consists of a raw water pump station at the Elk Run stream and a backup raw water pump station at the Potomac River, a water treatment plant with a capacity for treating 500,000 gallons per day, three water towers (the oldest of which is to be replaced and is currently out of commission), and a 31,290 foot network of water lines ($\frac{3}{4}$ inch to 10 inch diameter). The two usable water towers were built in 1964 and 1989, and can be expected to last at least 40 and 85 years, respectively. The capacity of the two water towers is 750,000 gallons, or enough to provide water to the town for, at most, two days.

The oldest of the water lines were installed in 1917. Many of the lateral lines (between the main and the service meter) installed in the 1980-90s have been found to deteriorate when exposed to chlorinated water. For several years, West Virginia State Annual Audits show an increasing amount of water being produced, but not used, with a recent audit reporting an overage of 25 percent, which is twice the recommended expected loss rate. This is due to undetected leaks in the underground pipe system, which are being fixed as they are located.

Current water use in the Harpers Ferry-Bolivar water district averages about 250-300,000 gallons per day during the winter and 350-400,000 during the summer.

Urban development on land surrounding Harpers Ferry has placed a heavier burden on the treatment of water flowing into Elk Run from upstream. Higher rates of contaminated water, and federally mandated treatment standards, means greater use of chemicals at the Harpers Ferry water plant.

GOAL: To ensure a sufficient supply of potable water to the Town's current and future residents, including during drought conditions, natural disaster, or public emergencies.

OBJECTIVES:

1. Use the town newsletter and other media to encourage water conservation measures, including such things as the use of low flow shower heads and toilets, and to call for restrictions on lawn watering during times of high water use and during droughts.
2. Update the water system map to show age, condition, and size of the water lines, and coordinate repairs and upgrading of lines with any planned paving of streets and new service connections.
3. Direct Harpers Ferry Water Works to develop a system for back-up power during long-term electrical outages.
4. Coordinate with the Town of Bolivar to ensure a fair share of water capacity for all existing undeveloped lots in both towns.

Sanitary sewer system

The sanitary sewer system is administered by the Harpers Ferry-Bolivar Public Service District. Similar to the Harpers Ferry Water Works, the sewer treatment system is a dedicated system to be used only by customers within the designated service district. Built in 1976-77, the treatment plant is on National Park Service land and cannot be increased in size without Park Service permission. The plant was designed for a population of 3,000, including residential and nonresidential customers, all of which are metered water customers.

The permitted maximum capacity of the plant is 300,000 gallons per day, which is allowed to be exceeded no more than three consecutive months. Average daily flow at the plant in 2005 was about 200,000 gallons per day. Heavy rains and a rise in the water table can increase infiltration rates into the sewer pipes and cause excessive flow. Regulations allow plant capacity to be exceeded for short terms to accommodate these events.

Sewer lines run down the middle of each street in Harpers Ferry and Bolivar with gravity flow to the treatment plant. Secondary treatment in the form of air aeration is used to clean the wastewater before it is discharged into the Shenandoah River.

The federal Department of Environmental Protection inspects the plant on a regular basis and deficiencies are corrected. The plant meets current requirements for flow, biochemical oxygen demand, total suspended solids, and amount of nitrogen, copper, lead, and zinc. The plant will be upgraded to meet new National Pollutant Discharge Elimination System (NPDES) limits on nitrogen and phosphorus.

GOAL: To ensure that the quantity of wastes generated does not exceed the capacity of the treatment plant and that the quality of effluent leaving the treatment plant meets all standards of the regulatory agencies.

OBJECTIVES:

1. Maintain the limits of the existing service district so that the treatment plant capacity is not exceeded.
2. Evaluate potential for reducing energy costs of the treatment plant, including use of methane as an alternative energy source.

3. Direct Harpers Ferry-Bolivar Public Services District to develop a system for back-up power during long-term electrical outages for the primary pumping stations and the treatment plant.
4. Coordinate with the Town of Bolivar to ensure a fair share of sewer treatment plant capacity for all existing undeveloped lots in both towns.

Storm water management

Uncontrolled or inadequately controlled storm water runoff results in significantly increased peak flows to streams during storm events, as surface water which would otherwise infiltrate into the ground is conveyed through channels, storm drains, and other impervious surfaces directly to the stream system. These increased peak flows enter streams at very high velocities, resulting in stream erosion as well as increased stream temperatures and pollutant loads. Increased storm water flow and reduced groundwater infiltration alters natural stream hydrology and increases stream erosion and sedimentation with detrimental effects on aquatic communities and stream habitat.

The preservation of trees during construction, or landscaping with trees (along with shrubs and ground cover) after a site has been developed, reduces runoff by 30-50 percent, compared to runoff from grassed lawns.

Harpers Ferry does not have any storm water control and consequently there is some impact on the sewer treatment plant during periods of heavy rainfall.

GOAL: To control storm water run-off in a manner that protects the natural and built environment, and minimizes peak run-off.

OBJECTIVES:

1. Establish stringent storm water management design guidelines to minimize storm water runoff in areas that are being developed or rebuilt, and to eliminate future drainage problems for the occupants and neighboring properties.
2. Require property owners to direct storm water runoff so that it does not cause flooding or icing up of streets and pedestrian walkways.
3. Develop informational brochures and other media for property owners on the benefits of using pervious pavement for parking and driveways, and redirecting storm water runoff into natural areas for infiltration into the ground.
4. Encourage property owners to direct roof runoff onto private property in a manner that allows percolation into the ground, and to use pervious paving materials for driveways and patios.
5. Develop a professional storm water management plan for the town.

Energy facilities

Energy use contributes to both air and water pollution. For example, burning fossil fuels

releases carbon in to the atmosphere and contributes to global climate change. The efficient use of energy resources is critical to our environment, our economy, and our national security. The least expensive method of conserving energy is a good landscape design, with deciduous trees on the south and west sides to shade the house during the summer and evergreen trees as a windbreak on the northern corners. We can help conserve energy by taking advantage of improvements in lighting technology, building design, space heating and cooling equipment, and motor vehicles. We can help by using renewable energy resources such as photovoltaic systems that convert the sun's energy into electrical power.

The National Historic Park fuels its shuttle buses with bio-diesel. It has a program for recycling materials it uses, including used motor oil for heating oil, downed trees for mulch, as well as the usual paper, metal and glass products, printer cartridges, etc. In addition, it purchases green products (i.e., derived primarily from recycled materials). Town residents who are customers of Waste Management, which provides curbside pickup, can use the specially provided bins to recycle many materials.

GOAL: To reduce the Town's dependence on nonrenewable energy resources through conservation and development of renewable energy sources.

OBJECTIVES:

1. Encourage property owners to reduce heating and cooling needs by planting deciduous trees on south and west sides of houses and evergreen trees as a windbreak on the northern corners.
2. Encourage builders and home owners to incorporate energy efficient building materials in new construction and remodels.
3. Make available at the Post Office brochures for conserving energy and provide information to property owners and residents in the Town newsletter.
4. Encourage residents and businesses to separate recycle materials from other waste set out for pick up.
5. Support energy efficient modes of transportation through improved pedestrian and bicycle access, and use of transit facilities.
6. Allow solar panels when used unobtrusively and in keeping with the architecture and building materials of a structure.
7. "Mayor will arrange for an energy use audit of the town-owned properties including: Town Hall, Harpers Ferry Waterworks, and the sewage treatment plant and, where cost effective, implement changes recommended".

Public safety

The Towns of Harpers Ferry and Bolivar share in providing both police and fire protection. Emergency calls made to 911 go to a central dispatch used by all of Jefferson County which then determines which emergency service will be called out.

The Friendship Fire Company has a station centrally located to serve both communities. Their equipment consists of two ambulances, a brush truck, a 2200 gallon tanker, an engine with a 1000 gallon tank, a rescue engine, and a utility car. In 2005, there were approximately 350

calls for fires and 400 calls for medical emergencies. There has been a steady increase in the number of calls each year. One career (paid) staff person is on duty during daytime hours for medical emergencies. The hydrants in town are sufficient for fire suppression needs.

Lack of street tree maintenance in the right-of-way and narrow streets often blocked by parked vehicles has caused problems with access at times. New construction combined with a reduced number of volunteers has placed a burden on the Fire Company. There is a need for additional career staffing during daytime hours. There is also a need for a larger building to house equipment.

The police station is located within the Town municipal building and is centrally located to serve both Harpers Ferry and Bolivar. Of the major issues facing the Harpers Ferry-Bolivar service area, the only one that can be addressed through physical changes is speeding. The police station facility is too small to handle the growth in service and will need to be expanded.

GOAL: To provide effective response capability for emergency and non-emergency incidents to ensure the safety of residents, workers, and visitors in the Harpers Ferry-Bolivar service area.

OBJECTIVES:

1. Verify that all developed properties in the Town are in the 911 system.
2. Enforce the requirement for posting of street numbers and encourage property owners to ensure that house numbers are visible at night.
3. Install “no parking” signs only where necessary to allow enforcement of illegal parking, especially on narrow streets, so that access for emergency vehicle is maintained.
4. Ensure proper tree trimming so that emergency vehicles can safely negotiate the roads.
5. Work to increase the size of the police station.

SECTION VI: IMPLEMENTATION AND TIMELINE

Action items from Section III.				
Item	Priority	Due date	Funding and staff resources	Lead agency
<u>Specific plan for Ridge Street stream valley</u>	High		Budget, resident volunteers, grant	Town Council
<u>Mini-park evaluation</u>	High		Budget, resident volunteers	Town Council
<u>Property easement donation program</u>	Moderate		Resident volunteers	Town Council
<u>Street tree program</u>	Moderate		Budget, resident volunteers	Town Council
<u>Restrictions on forest removal on steep slopes</u>	High		Budget, resident volunteers	Town Council
<u>Resident tree planting program</u>	Moderate		Resident volunteers	Town Council
<u>Noise ordinance revisions</u>	High		Budget	Town Council
<u>Quiet Community designation</u>	[Moderate] High		Budget	Town Council
<u>Siren alternatives</u>	High		Budget	
<u>Reduce idling vehicles</u>	High		Budget	
<u>Manual/electric yard equipment</u>	Moderate		Resident volunteers	
<u>Lighting ordinance</u>	High		Budget, resident volunteers	Town Council

Action items from Section IV.				
Item	Priority	Due date	Funding and staff resources	Lead agency
<u>Entrance treatment</u>	Moderate		Budget	Town Council
<u>Historic resource mapping</u>	High		Budget, resident volunteers	Town Council
<u>Brochure on historic district guidelines</u>	High		Budget, resident volunteers	Town Council
<u>Uniform design guidelines</u>	High		Budget, resident volunteers	Town Council
<u>Historic district nominating statement modification</u>	High		Budget	Town Council
<u>Registration of building inventory survey with state</u>	High		Budget	Town Council
<u>Development guidelines revision</u>	High		Budget	Town Council
<u>Porch amendment</u>	Moderate		Budget	Town Council
<u>Interpretation program</u>	Moderate		Resident volunteers	
<u>Solid waste storage requirements</u>	Moderate		Budget, resident volunteers	Town Council
<u>Home occupation ordinance</u>	Moderate		Budget, resident volunteers	Town Council
<u>Property maintenance code</u>	High		Budget, resident volunteers	Town Council

Action items from Section IV.				
Item	Priority	Due date	Funding and staff resources	Lead agency
<u>Inventory of community use rooms</u>	Moderate		Budget, resident volunteers, NPS	
<u>Bicycle access to C&O path</u>	Moderate		NPS	NPS
<u>Paper street parks</u>	Moderate		Budget, resident volunteers	Town Council
<u>Hiking path maps</u>	Moderate		Budget, resident volunteers	
<u>Museum</u>	Moderate		Budget, resident volunteers, grant	

Action items from Section V.				
Item	Priority	Due date	Funding and staff resources	Lead agency
<u>Roadway guidelines</u>	High		Budget, resident volunteers	Town Council
<u>Sidewalk evaluation</u>	High		Budget, resident volunteers	Town Council
<u>Lighting plan</u>	High		Budget, resident volunteers, Allegheny Power	Town Council
<u>Bicycle parking</u>	Moderate		Budget	Town Council
<u>Lower Town traffic restrictions</u>	High		Budget	
<u>Cavalier Park & Ride</u>	High		NPS	
<u>Designated carpool parking</u>	High		NPS	
<u>Potomac Street RR crossing</u>	Moderate		Budget	
<u>Bus-train brochure</u>	Moderate		Budget, resident volunteers	
<u>Hazardous spill evaluation</u>	Moderate		Budget	Town Council
<u>Traffic recommendations from Survey</u>	High		Budget	Town Council
<u>Speed reduction design changes</u>	High		Budget	Town Council
<u>ROW Maintenance Needs</u>	Moderate		Budget, resident volunteers	Town Council
<u>Paper Street Evaluation</u>	High		Budget, resident volunteers, NPS	Town Council
<u>Steep intersection evaluation</u>	Moderate		Budget, resident volunteers	Town Council
<u>Signing to Cavalier parking</u>	High		NPS	NPS
<u>Potomac Street land survey</u>	High		Budget, consultant	Town Council
<u>Parking recommendations from Survey</u>	High		Budget, NPS	Town Council
<u>Lower Town turnaround and parking</u>	High		Budget, NPS	Town Council
<u>Lower Town utility poles</u>	Moderate		Budget, NPS	
<u>Side street parking</u>	Moderate		Budget	Town Council
<u>Water conservation education</u>	Moderate		Resident volunteers	

Action items from Section V.				
Item	Priority	Due date	Funding and staff resources	Lead agency
Water system map	High		Budget	Town Council
Back up power for water system	High			Town Council
Agreement with Bolivar on water capacity	High			Town Council
Energy needs at treatment plant	Moderate			
Back up power for sanitary sewer system	High			
Agreement with Bolivar on sewer treatment capacity	High			Town Council
Storm water guidelines for new development	High		Budget, resident volunteers	Town Council
Storm water run-off restrictions	Moderate		Budget, resident volunteers	Town Council
Storm water brochure	Moderate		Budget, resident volunteers	
Energy conservation brochure	Moderate		Budget, resident volunteers	
Solar panels	Moderate			Town Council
911 Verification	High		Budget, resident volunteers	
Street Numbers	High		Resident volunteers	
No Parking Signs	Moderate			
Tree Trimming	Moderate		Budget	
Police Station Expansion	Moderate		Budget	Town Council

Appendices

- A Compliance Chart with WV State Code Chapter 8A, Article 3 (Attached)
- B Resident Preference Survey

Additional information available in town office

Previous plans

- Harpers Ferry National Historical Park Draft General Management Plan
- Historic preservation plan (National Register of Historic Places Inventory – Nomination Form)
- Land use (zoning) plan
- Market studies

Other information documents

- Historic and current maps of Harpers Ferry
- Detailed history of Harpers Ferry