Town of Strasburg Community Plan

2012



The guiding comprehensive vision for future development in the Town of Strasburg.

Adopted: September 11, 2012

ACKNOWLEDGEMENTS

The following individuals and groups are recognized for their contributions, past and present, to the creation of the Strasburg Community Plan 2012.

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CHAPTER 1: INTRODUCTION AND BACKGROUND

PURPOSE AND INTENT

The Community Plan is to serve as the guiding comprehensive vision for future development in the Town of Strasburg. This Plan accomplishes its goal through generalized Future Land Use Maps and Transportation Plan, written goals, strategies, and recommendations. The Strasburg Town Government intends to use this Plan as the basis for creating and modifying policies affecting land development. Additionally, the Plan is a reference for residents, property owners, land developers, elected and appointed officials, and others who may be interested or involved in the many facets of the growth of our community.

The physical, cultural, economic, and political elements that influence how the Town will develop are dynamic and ever-changing. While the Plan attempts to project and estimate future development needs through scenarios based primarily on past trends, the future will undoubtedly present many factors that cannot be predicted. As a result, considerable effort was made to maintain flexibility within the Plan to react to the unknown conditions that will occur during the 40-year planning horizon. This flexibility cannot be completely defined nor incorporated, thus placing a burden on current and future leaders of the Town to adopt policies that implement the vision laid out in this Community Plan.

BRIEF HISTORY AND REGIONAL CONTEXT

The Town of Strasburg is located in north-central Shenandoah County at the northern end of the Shenandoah Valley. It is the largest of the six towns in Shenandoah County and is part of the Davis Magisterial District. The Town lies adjacent to the North Fork of the Shenandoah River in a small basin formed by the river as it loops through the Valley with one of its major loops creating a peninsula just south of Town known as Sandy Hook. Geographically the Town is generally surrounded by natural barriers with the Shenandoah River and Three Top Mountain lying to the south and east, and historic Cedar Creek and Little North Mountain lying to the north and west.

The Town's early growth and settlement pattern was primarily due to its location at the crossroads of major routes of travel and this is still true today. U.S. Route 11 and State Route 55 intersect in the center of Town and Interstate 81 is located approximately one and one-half (1 1/2) miles to the west and north of the downtown area with two interchanges serving the community. Interstate 66 joins Interstate 81 about four miles north of

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Strasburg and provides direct access to the Washington, D.C. Metropolitan area. The Town is located ten miles west of Front Royal, 78 miles west of Washington, D.C., 18 miles south of Winchester, and 15 miles east of the West Virginia State Line (see Map #1.1).

The Town of Strasburg was charted in 1761 and incorporated in 1922. It is well known for its pottery, antiques, Civil War history, and breathtaking views of the surrounding natural environment. The pottery industry began circa 1761 with at least seventeen potters producing earthen and stoneware commercially. The Strasburg Museum building was constructed in 1891 for use as a steam pottery until around 1909 when the last pottery was closed. In 1913, the Southern Railroad Company purchased the building and it served as a freight and passenger depot until the 1960s. It later became a museum and opened to the public as a National Historic Landmark in 1970. Displays include a large collection of original Strasburg Pottery, antiques, Civil War articles, Native American artifacts, farm tools, a red caboose, and a working model railroad depicting Strasburg and the Southern Railway in the 1930s.

Strasburg was an important part of the Valley Campaign in the early part of the Civil War and Stonewall Jackson knew its streets and often used its hostelry. It was he who made Strasburg "the fountainhead of Rail Traffic for the South", when he captured enemy engines in Martinsburg, West Virginia and pulled them by horsepower across roads to return them to the rails in Strasburg. From there they were sent south for the Confederate cause. During the closing phases of the war Strasburg was again in the midst of the action. The Town is located between Cedar Creek Battlefield on the north and Fisher's Hill Battlefield of the south, both accessible to the public with interpretive material. Strasburg is in the heart of the counties burned by Sheridan to eliminate the productivity of this "breadbasket of the Confederacy".

After the Civil War, Strasburg's importance as a crossroads of major railroads improved considerably. The railroad through Manassas Gap, which had first reached Strasburg in 1854, was repaired and the Town was again within a few hours ride of Washington, D.C. In 1870, the B. & O. Railroad extended its Valley Branch from Winchester to Strasburg making Strasburg the first town in the western part of the State to possess two railroads with a choice of shipping routes to the big markets eastward.

During the latter part of the 19th century, Strasburg's chief industry was the manufacture of pottery. Fine grade crocks, jugs, jars, pitchers, vases, and other wares were produced. This industry is said to have been started by Adam Keister, Sr., who afterwards operated kilns in Ohio. At one time there were as many as six potteries operating in Strasburg with four still in operation in 1900. This industry led to the widely accepted nickname of "Pot Town" for the Town. These old potteries were finally driven out of business by too keen competition of similar wares made in the Midwest.

In 1921 the Town annexed an area of the County, bringing its land area to a total of 448 acres, where it remained until the annexation effective at midnight December 31, 1984 that added an additional 578 acres for a total of 1,026 acres. As of January 1, 2000, Strasburg annexed the land surrounding Route 11 to Interstate 81. The land did not include the Industrial Park to the west of U.S. Route 11 and the land behind the frontage

property to the east of U.S. Route 11. Strasburg continues to grow and flourish with its rich history and community pride. The Town of Strasburg will continue to promote itself as one of the growth centers for Shenandoah County and yet retain its small town charm and character.

PURPOSE AND ROLE OF THE COMMUNITY PLAN

The Community Plan provides the policy basis for local government decisions regarding land use, regulation of development, infrastructure investments, and the provision of public facilities and services. It also provides guidance for how private landowners and businesses use land.

AUTHORITY

Every jurisdiction in Virginia must adopt and maintain a Comprehensive Plan; Strasburg has chosen to identify its plan as a Community Plan to more effectively reflect the ownership and stakeholders of the document. This requirement is set forth in § 15.2-2223 of the Code of Virginia, as follows:

"The local planning commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction and every governing body shall adopt a comprehensive plan for the territory under its jurisdiction.

In the preparation of a comprehensive plan, the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities."

§ 15.2-2223 of the Code of Virginia, cited above, also provides that:

"The comprehensive plan shall be general in nature, in that it shall designate the general or approximate location, character, and extent of each feature, including any road improvement and any transportation improvement, shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned, or changed in use as the case may be."

In addition to those general purposes, § 15.2-2232 of the Code specifically empowers the comprehensive plan to determine the location and extent of public facilities elements:

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"Whenever a local planning commission recommends a comprehensive plan or part thereof for the locality and such plan has been approved and adopted by the governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. Thereafter, unless a feature is already shown on the adopted master plan or part thereof or is deemed so under subsection D, no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than a railroad facility or an underground natural gas or underground electric distribution facility of a public utility...shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the commission as being substantially in accord with the adopted comprehensive plan or part thereof."

TOWN VISION STATEMENT

In October 2006, the Town formed a Vision Committee for the purpose of creating a vision statement for the community. The Committee consisted of citizens, staff members, and elected officials, who met for several months. On January 9, 2007 the Committee formally presented a vision statement to the Town Council. The vision statement specifically identifies the comprehensive plan and its importance in guiding growth and development. This vision statement says, in part:

OUR TOWN

Strasburg has a rich heritage, a beautiful natural environment and a spirit of community making it a wonderful place to live. Our economy consists of major industrial facilities, diverse privately owned businesses and a variety of museums, local restaurants and overnight accommodations. Geographically, Strasburg lies within the heart of Shenandoah Valley at the intersection of two interstate highways, the crossing of historic US Routes 11 and 55 and the junction of two railroad lines. Strasburg must resolve unprecedented challenges presented by dramatic growth in order to preserve our heritage, protect our quality of life and ensure a vibrant future.

VISION

Strasburg must preserve our cultural and natural heritage while attracting desirable growth through realistic and far-sighted planning, a focus on human and physical infrastructure and a citizenry committed to bringing prosperity, creating opportunity and ensuring equality to all who call Strasburg home.

KEYS TO THE FUTURE

Our success depends upon leaders of integrity, a government that is open, responsive and accountable, and a cooperative approach to our neighbors throughout the Shenandoah Valley. Strasburg's future must be based upon a "Comprehensive Plan" balancing the needs of today with the requirements of the future, defining human and physical infrastructure requirements, stressing adult and youth recreational needs, incorporating the revitalization of downtown, encouraging affordable housing, attracting quality employment, protecting historic sites and vistas while ensuring an adequate tax base. Most importantly, our vitality depends upon citizens who listen to one another, appreciate the diversity within our community, understand the issues confronting the Town, participate as partners with government, demand holistic long-term planning, and ultimately, are committed to their own family as well as the collective family called Strasburg. Together, we, the citizens of Strasburg, can and will control our destiny.

PLANNING PROCESS

The Town of Strasburg's Community Plan is the result of many meetings and technical work involving the citizens of the Town, the Town Planning Commission, Town Council, Town staff, and the Town's planning consultant. The plan has been refined as needed by the Planning Commission, held for public hearing by the Planning Commission and Town Council, refined as directed by the Council, and then adopted by the Governing Body on [enter date]. During the review process, comments were sought from residents, business owners, Shenandoah County officials, as well as state agencies such as VDOT and the Northern Shenandoah Valley Regional Commission in formal and informal meetings.

GENERAL TIMELINE

On August 15, 2006, the Planning Commission contracted with Herd Planning and Design, Ltd. to act as a consultant for the review of the 2003 Comprehensive Plan. The Commission determined that the review would direct the rebirth of a living and functioning document to direct the future growth of Strasburg. The process began with a public forum on February 8, 2007 to create a future vision of the Town. Participating in the visioning session were members of the Planning Commission, the Town Council and more than twenty citizens from the community. From this forum, subcommittees were formed consisting of elected and appointed officials, staff, and citizens. In September 2007, these subcommittees reported back to the Planning Commission. In October 2007, the Planning Commission authorized the consultant to compile the committee reports into a single document update of the 2003 Comprehensive Plan. In April 2009, a draft was submitted and reviewed by the Planning Commission. In the summer of 2009, the Planning Commission, with input from the Town Council, approved the Study Area and the density and growth assumptions to be used in the Plan. Staff quickly went to work on the technical aspects of the Plan, as the Commission focused discussion on future land uses within the Study Area. In February 2012, the Town presented draft future land use and transportation plans to the community during two public forums. Additional comments from the public were received during the forums and some revisions to the plans were made. On [date], the Planning Commission recommended approval of the Plan, following a public hearing, and on [date], Town Council approved the Strasburg Community Plan 2012.

OTHER PLANNING DOCUMENTS

In addition to seeking input from a number of stakeholders, the Plan relies on information and recommendations contained in past and present planning documents, including the 2003 Comprehensive Plan, 2006 Growth and Needs Study, VDOT's Small Urban Area Transportation Plan, and the Northern Shenandoah Valley Regional Commission's 2035 Rural Long-Range Transportation Plan. Readers are encouraged to refer to these documents for additional land use and transportation planning information pertinent to Strasburg.

SCOPE

The geographic scope of the Community Plan, the "Study Area", was defined through a series of discussions with the Strasburg Planning Commission and Town Council. Several factors influenced the extent of the Study Area, including the existing annexation agreement between the Town of Strasburg and Shenandoah County. The ability of the Town to provide services to adjoining land also influenced the final determined Study Area. As comprehensive plans are meant to be general in nature and far-reaching in terms of their temporal scope, the Town has chosen a 40 year planning horizon for the Community Plan.

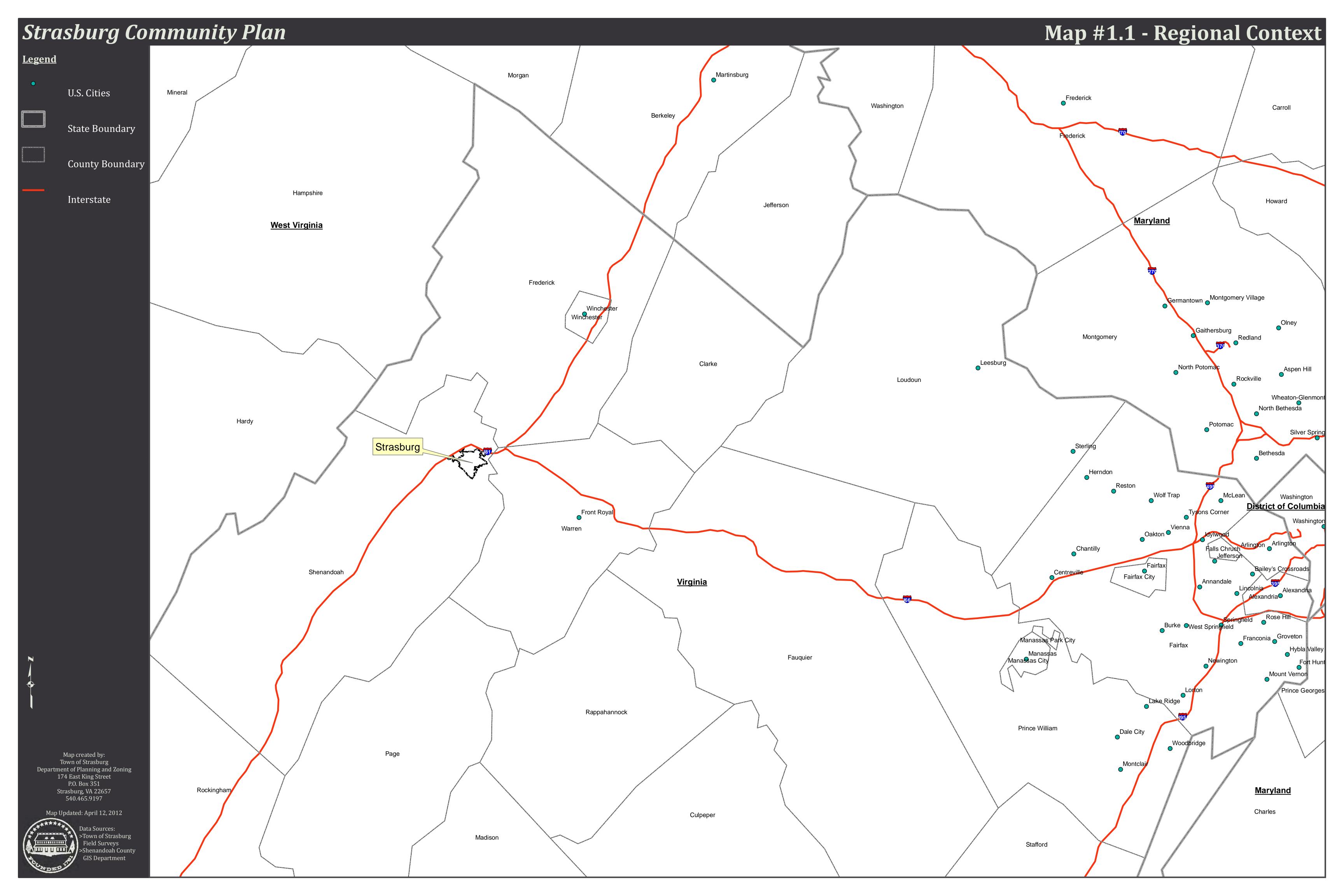
EXISTING ANNEXATION AGREEMENT WITH SHENANDOAH COUNTY

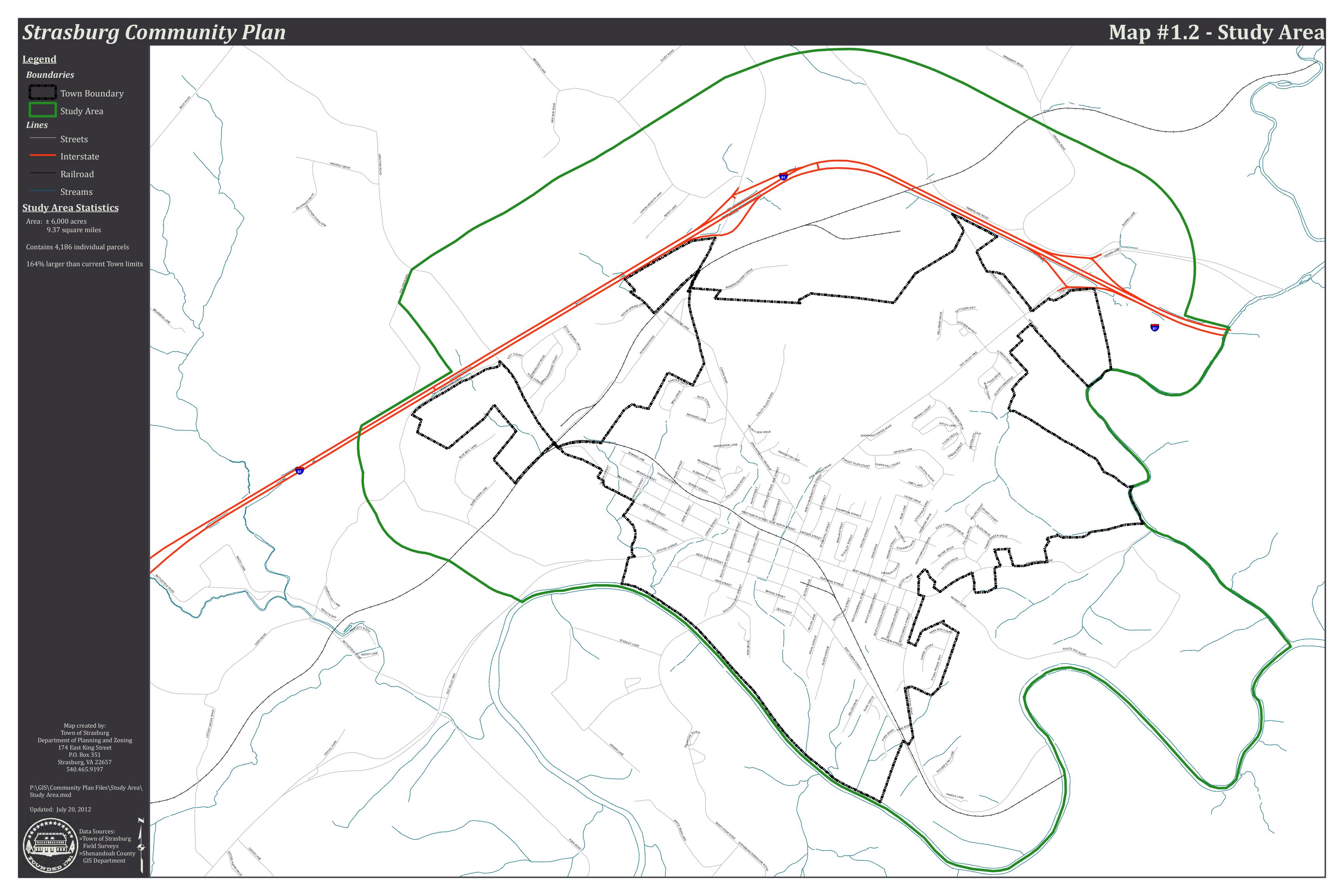
On December 21, 1984 the Town entered into an agreement with Shenandoah County to govern the future annexation of land. The agreement, which went into effect on December 31, 1984, immediately annexed approximately 500 acres and provided for the future annexation of over 2,000 acres. The total area covered by the agreement will eventually extend the Town boundary to Interstate-81 on the north and northwest, Green Acre Drive to the west and southwest, and the North Fork Shenandoah River and Cedar Creek to the south and east. As a result of this agreement, the Town Council and Planning Commission recommended including this area in the Community Plan Study Area.

STUDY AREA

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The Town of Strasburg operates water and wastewater facilities that are capable of serving the area outlined in the annexation agreement. Additionally, it is feasible for the Town, within the 40-year planning horizon, to provide urban services to areas immediately adjacent to the annexation area. As a result, the Community Plan Study Area was extended to include land within 1,000 feet of Green Acre Drive and within one-half mile (2,640 feet) of Interstate 81. The resulting Study Area includes the current Town boundary, totaling 2,274 acres, and an additional 3,727 acres – for a total Study Area of approximately 6,000 acres (see Map #1.2).





CHAPTER 2: CHARACTER AND ENVIRONMENT

CHARACTER AND ENVIRONMENT

The character of Strasburg is best described as a blending of historic, cultural, and natural assets set in a traditional rural small-town landscape. The Town's location relative to these assets places it in a strong position for future physical and economic growth

HISTORIC CHARACTER

The Town of Strasburg has its own rich history, and is in close proximity to numerous sites with historic significance. In 1984, after several years of study by the Virginia Historic Landmarks Commission (now the Department of Historic Resources), a large part of the old center of Town was designated as the Strasburg Historic District on the Virginia Landmarks Register and the National Register of Historic Places. Since receiving that designation, it has been a goal of the Town to increase the public awareness of the historical and architectural significance of the district. In addition, the Town seeks to encourage tourism and high-quality compatible commercial and residential development in and around the historic district. An example of significant historic sites within the Town includes the Strasburg Museum (440 East King Street, circa 1891), the Hotel Strasburg (213 South Holliday Street, circa 1880s), and the former Bell Pottery Shop (209 West Queen Street, circa late 1800s).

Two major Civil War battlefields are located near Strasburg and contribute to the historic character of the Town. Fisher's Hill battlefield is approximately two miles southwest of Town and Cedar Creek battlefield is approximately four miles to the northeast. The Battle of Fisher's Hill took place on September 22, 1864 after General Jubal Early's Confederate troops were forced to take refuge on Fisher's Hill and set up entrenchments. After heavy fighting including a heavy flank attack launched by Union General Sheridan, Early was forced to retreat through Woodstock to Narrow Passage. The Battle of Cedar Creek took place on October 19, 1864 and was one of the last Confederate offensives attempting to rid the valley of Sheridan. The preservation of both historic battlefield sites is a major goal of the Shenandoah Valley Battlefield Foundation and the Cedar Creek Battlefield Foundation, and has been aided by the recent creation of the Cedar Creek and Belle Grove National Historical Park in December 2002.

CULTURAL HERITAGE

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The first residents of Strasburg and the surrounding area were Native Americans who occupied the area for ages prior to the first arrival of European settlers. The Native Americans primarily used the area as hunting and fishing ground, and as a major roadway between the north and the south for war and migration. The first settlement of Strasburg by non-Native Americans occurred around 1730 primarily because of Strasburg's location relative to two major roads serving the Shenandoah Valley. The Indian or Great Road running north and south and the road through Manassas Gap to Cold Springs Gap running east and west formed the crossroads. The Great Road was the major immigrant route of the area primarily because of the barrier of the Blue Ridge Mountains.

The majority of the area's first migrant settlers were second generation Pennsylvania Germans. These Germanic immigrants had come to America during the early 18th Century at the invitation of William Penn, Proprietor of the Province of Pennsylvania, due to religious wars and persecutions in their homeland. In Pennsylvania they established their homes and eventually they and their descendants and children went on to populate the Shenandoah Valley. These immigrants, wherever they settled, became generally known as Pennsylvania Dutch because their English neighbors believed the word "Deutsch" meant Dutch instead of German. The early settlers to Strasburg were entirely selfsufficient farmers, but the growing settlement led to a diversified economy. All the settlers were farmers in the summer, but in the winter each farm had its own craft. The miller, carpenter, blacksmith, cooper and soon other trades began to move the settlement out of its pioneer existence. Significantly, one of the first names of the population center was derived from the most important early trade, Funk's Mill. Records as of 1743 refer to the settlement as Funk's Mill. Other records from the period of 1747 to 1753 give the settlement a variety of names including Funk's Mill, Funkstown, Stovertown, Staufferstadt, and simply Shenandoah River.

NATURAL ENVIRONMENT

The environment of Strasburg consists of natural resources and features including woodlands and forest, agricultural areas, steep slopes, Karst topography, water bodies, sensitive soils, wetlands, and flood plain (see Map #2.1: Environmental Hazards). The natural environment of the Town provides many opportunities, but also poses potential environmental hazards. The location of future development shall be guided away from areas with serious environmental limitations, such as steep slopes, shallow depth to bedrock, flood plains, prime agricultural lands, wetlands, and sinkholes.

TOPOGRAPHY AND STEEP SLOPES

Strasburg and the surrounding area feature a diverse topography ranging from flat river beds and floodway to steep hills and mountains. In general, the core downtown area is situated on relatively flat ground adjacent to a bend in the North Fork

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Shenandoah River. Immediately north of the downtown area the terrain gradually rises among small rolling hills. Steep slopes occur on the edges of Town adjacent to Cedar Creek, almost creating a bluff. Development on steep slopes must be properly regulated with appropriate setbacks, erosion and sediment control measures, and grading requirements.

The majority of Strasburg overlies carbonate rock, primarily limestone. This bedrock material is characterized by numerous caves and caverns, sinkholes, underground solution channels, and fractionated layers. When these conditions are present the term Karst is applied. Groundwater in Karst terrain is noted for easy entry from surface water sources, rapid lateral movement, and susceptibility to contamination which can spread rapidly over large underground areas. Future development in the Town should be sensitive to the challenging topography and bedrock conditions, and appropriate regulations should be sought to protect these areas. In addition, the Town should work with property owners to ensure the protection of the caverns at Hupp's Hill.

WATER RESOURCES

The water resources of the Town must be protected, both surface water and groundwater. Because of the rock and soil conditions and the hydro-geologic cycle, the water resources within and surrounding the Town are directly inter-connected. The Town will continue to support the Northern Shenandoah Valley Regional Commission in their efforts to maintain a regional water committee.

WATER SOURCES

On average, the Strasburg area receives approximately 36 inches of precipitation per year. Approximately 26 inches of rainfall water returns to the atmosphere through evapotranspiration, 6 inches enters area streams as surface runoff, and 4 inches infiltrates the soil and eventually recharges the groundwater supply.

Surface runoff (water which does not infiltrate the soil) becomes part of approximately 1,150 miles of permanent and intermittent streams within Shenandoah County. All of these streams or tributaries, whether or not they originate in Shenandoah County, eventually enter the North Fork of the Shenandoah River, which has averaged, over the past 75 years, some 375 million gallons per day as it passes the USGS gage near Strasburg. Approximately two miles downstream, the North Fork leaves the county and enters, in order, the Shenandoah River, the Potomac River, and the Chesapeake Bay. Shenandoah County land represents 49 percent of the total North Fork watershed, and 7 percent of the total Potomac River watershed. In 2001, the Northern Shenandoah Valley Regional Commission formed a Regional Water Supply Committee to study the demand for water in the region and to create a Water Supply Plan. In October 2011, the Town Council adopted the Regional Water Supply Plan created by the Committee, which projects that the Town will have adequate water supply through the planning period of 2040.

Water that infiltrates and percolates into bedrock enters one of four hydrogeological regions. Water may remain here, depending on local hydrogeological conditions, for days, years, decades, or longer. At some point, however, much of this water returns to the surface by one of three routes: 1) through one of the numerous springs in the county; 2) through one of the thousands of wells, both private and public; or 3) through subsurface connections between groundwater and stream channels. During periods of base flow, when no surface runoff is occurring, all of a stream's flow comes from groundwater inputs.

Surface water may also enter the groundwater system. This may occur through subsurface connections, or by way of surface depressions or sinkholes which occur especially in areas underlain by carbonates (limestone and dolomite). Groundwater Under the Influence of Surface Water (GWUISW) is the term applied to this phenomenon.

WETLANDS

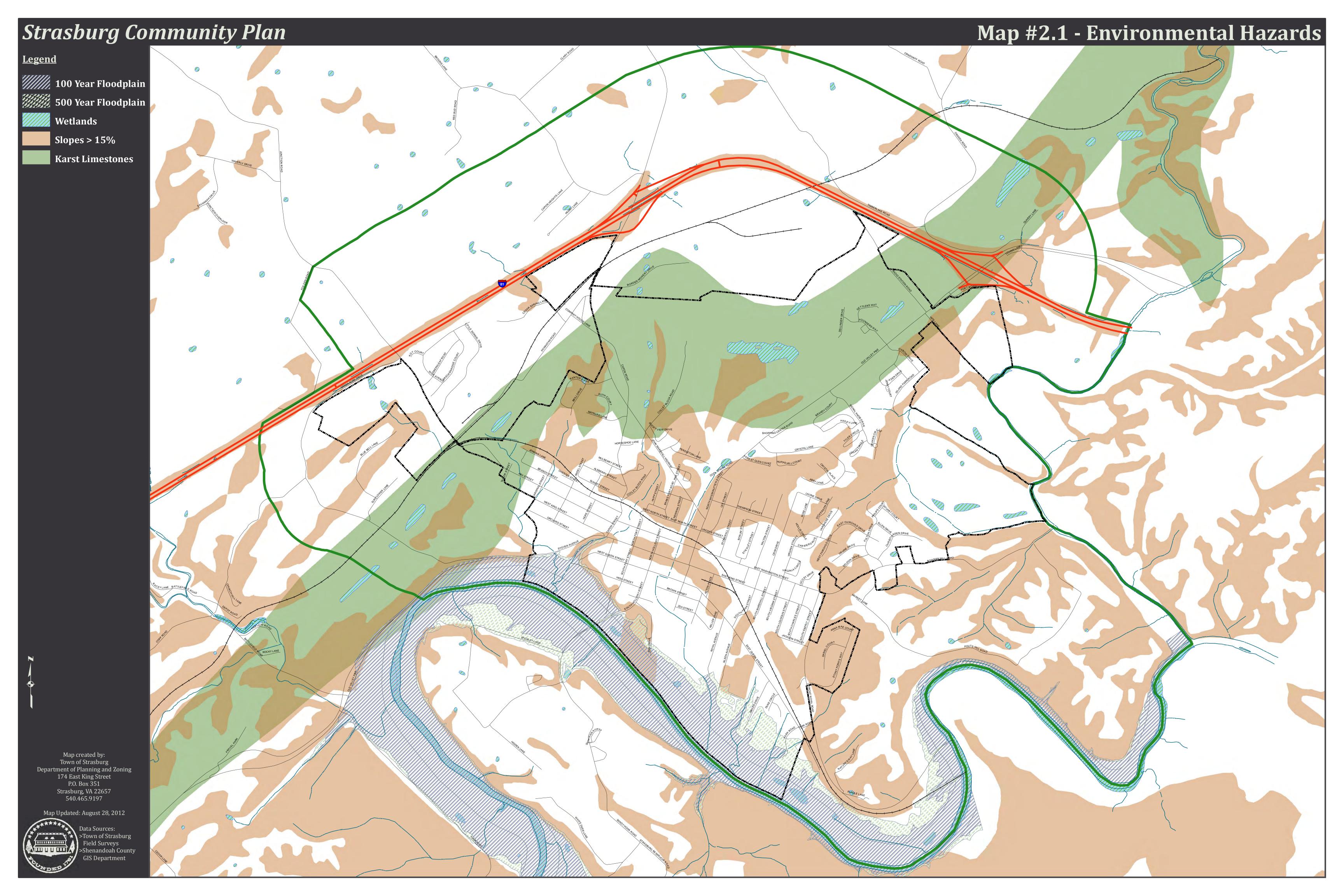
Aside from several freshwater ponds, there are few wetlands within and around the Town of Strasburg. The few wetlands that exist are of the Freshwater Emergent type and are located in the Cedar Creek oxbow or Island Farm area. There are several smaller wetland areas located sporadically adjacent to the North Fork Shenandoah River. Federal and State regulations restrict development on wetlands.

FLOODPLAINS

Floodplains follow the North Fork Shenandoah River and many of its tributaries. Historically, these areas have flooded on a recurring basis during high flow events; some records and documentation of these events are available at the Strasburg Museum. Future development of the Town should be sensitive to mapped and unmapped flood-prone areas and the riparian lands adjacent to streams should be kept in their natural state.

VIEWSHED

The Town should protect natural vistas from Route 11 looking east by enacting appropriate zoning restrictions and lighting regulations. Signal Knob and Massanutten Ridge are valuable natural resources to the citizens and visitors of this community. The viewshed to these areas should be protected by limiting high-rise development and garish colors on new development. The Town is also concerned about the views looking from and into the Cedar Creek Belle Grove National Historic Park and will work with landowners to protect these vistas.



CHAPTER 3: LAND USE AND COMMUNITY DESIGN

CURRENT LAND USE

The general land use pattern of the Town has been well documented in previous comprehensive plans (1968, 1979, 1991, and 2003), the annexation studies prepared in 1984 and 2000, and the downtown revitalization study prepared by University of Virginia architectural students in 1987. In addition, Town staff completed a survey of land uses within the study area in 2009 using Geographic Information System (GIS) data and field studies. The current land use survey in 2009 resulted in the creation of a Current Land Use Map of the Study Area (see Map #3.1).

The Town has a mix of residential, commercial, industrial, and institutional uses, with residential dominating most of the land use within the current Town limits. Rural Residential/Agricultural and Vacant/Undeveloped land dominate the parts of the study area outside the current Town limits. As of the 2009 land use survey, the total area within the current Town limits was 3.6 square miles or approximately 2,274 acres. Following is a description of each of the current land use categories and their general patterns within the study area.

RESIDENTIAL

Residential uses form the predominant land use throughout the current Town limits and, for purposes of surveying, are grouped into four categories: Rural Residential/Agricultural, Low Density, Medium Density, and High Density.

Current Land Use Designation	Area (acres)	Percent of Study Area
Rural Residential/Agricultural	1,662	28.0
Low Density Residential	311	5.2
Medium Density Residential	300	5.0
High Density Residential	37	0.6
Mixed Use	10	0.17
General Commercial	81	1.3
Office	13	0.2
Industrial	247	4.1
Parks/Open Space	160	2.7
Institutional	225	3.7
Vacant/Undeveloped	2,372	39.5
Vacant Platted Lots	102	1.7
Right-of-way	481	8.0
Total	6,001	100.0

RURAL RESIDENTIAL/AGRICULTURAL

Areas shown as Rural Residential/Agricultural on the current land use map indicate residential property with a lot size greater than one acre, or land used for agricultural purposes. A total of 1,662 acres or 28.0 percent of the study area is designated as Rural Residential/Agricultural. In general, these areas can be found outside the current Town limits and represent a transition between the urban and rural environments.

LOW DENSITY RESIDENTIAL

Areas shown as Low Density Residential on the current land use map indicate residential property with a density between 0 and 2.99 units per acre. A total of 311 acres or 5.2 percent of the study area is designated as Low Density Residential. In general, Low Density Residential areas are newer housing developments constructed within the last 40 years that surround the older, denser residential neighborhoods near Downtown. This includes neighborhoods such as Madison Heights and Crystal Hills north and east of Downtown and Taylor's Ridge and The Meadow's northwest of Downtown.



Areas of Rural Residential and Agricultural Land Uses Surround the Town of Strasburg.

MEDIUM DENSITY RESIDENTIAL



Areas shown as Medium Density Residential on the current land

use map indicate residential property with a density between 3 and 9.99 units per acre. A total of 300 acres or 5.0 percent of the study area is designated as Medium Density Residential. In general, Medium Density Residential areas can be found in the older residential neighborhoods surrounding Downtown where single-family homes on small lots (less than 10,000 square feet) are predominant. More recently, Medium Density Residential areas have been constructed on the Town's developed fringe, including neighborhoods such as Stony Pointe and Strasburg Station, which consist of twinhomes or duplexes.

A variety of rooftops dot the developed portions of the Town of Strasburg.

HIGH DENSITY RESIDENTIAL

Areas shown as High Density Residential on the current land use map indicate residential property with or exceeding a density of 10 units per acre. A total of 37 acres or 0.6 percent of the study area is designated as High Density Residential. In general, High Density Residential areas can be found in either the older residential areas of downtown or where more recent developments of townhomes or multi-family dwellings are located. Neighborhoods including Hupp's Ridge and Oxbow Estates are examples of recently constructed High Density Residential areas dominated by townhome-style dwellings. Additionally, the multi-family dwellings constructed as part of Forest Glen and the Charles Street Apartments are examples of High Density Residential land uses.

COMMERCIAL

Commercial land uses can primarily be found in the Downtown area or along the arterial streets leading into Strasburg, and for purposes of surveying, are grouped into three categories: Mixed Use,

General Commercial, and Office.



Historic Downtown Strasburg Includes Many Buildings Which Are Used For Both Commercial and Residential Purposes.



A Number of Townhouse-style Units Have Been Constructed in Recent Years, Representing a High Density Residential Land Use.

MIXED USE

Areas shown as Mixed Use on the current land use map indicate property used for both residential and commercial purposes. A total of 10 acres or 0.17 percent of the study area is designated as Mixed Use. Mixed Use areas are primarily found in the Historic Downtown area; however, the Queen Street Square development is a more recently constructed example of mixed use.

GENERAL COMMERCIAL

General Commercial land uses include areas dedicated to personal and business services and general retail

businesses. In the study area, these areas can be found primarily along Route 11 between Interstate 81 and the Downtown area, and along King Street in the Downtown area. General Commercial areas make up a total of 81 acres or 1.3 percent of the study area. The Strasburg Shopping Square, which includes a grocery store and other various retail enterprises, is an example of a General Commercial area.

OFFICE

Areas shown as Office on the current land use map indicate property used for professional and general office space. A total of 13 acres or 0.2 percent of the study area is designated as Office use. Examples of Office use include the Stony Pointe Professional Building and several downtown buildings.



INDUSTRIAL

Industrial areas include manufacturing and light industrial uses, and are concentrated primarily in two areas: the North Shenandoah Industrial Park and in the East Queen Street area. Industrial land uses make up a total of 247 acres or 4.1 percent of the study area.

PARKS/OPEN SPACE

Mercury Paper is the most recent addition to the North Shenandoah Industrial Park.

Approximately 160 acres or 2.7 percent of the study area is currently used for Parks/Open Space. These areas include both public and private open space along with land dedicated to park

uses. This includes the Town Park in the southeast portion of the study area and private open space within several housing developments in the Town.

INSTITUTIONAL

Areas shown as Institutional are land uses dedicated to public or private non-business related activities such as churches, schools, and municipal facilities. Currently, a total of 225 acres or 3.7



The Strasburg Town Park is an example of an existing Parks/Open Space land use.

percent of the study area is currently used for Institutional land uses. Many Institutional uses such as the Strasburg High School and the Town's water and wastewater treatment facilities are located near the North Fork Shenandoah River. Churches, another example of Institutional uses, are scattered throughout the study area, but primarily in the older developed parts of Town.

VACANT/UNDEVELOPED

Vacant/Undeveloped land makes up the greatest percentage of land within the study area. This designation is assigned to land that is not associated with one of the other current land use designations. A total of 2,372 acres or 39.5 percent of the study area is currently designated as Vacant/Undeveloped. This land is generally located in the triangle area bounded by Route 11, Route 55, and I-81, and in parts of the study area outside the current Town limits.



The Cedar Valley area is an example of vacant/undeveloped land within the Town of Strasburg.

VACANT PLATTED LOTS

The study area includes a number of residential building lots that were created through approved subdivisions, but current do not contain any structures. These are shown on the current land use map

as Vacant Platted Lots, and make up 102 total acres or 1.7 percent of the study area. Most of the areas designated as Vacant Platted Lots are located within the current Town limits in existing neighborhoods; however, there are several existing large-lot subdivisions in the study area outside Town limits which include vacant building lots. These include Meadow Wood Acres and Peach Tree Estates in the Green Acre Drive area.

RIGHT-OF-WAY

The remainder of the study area not designated with a specific land use is shown as Right-of-Way. Right-of-Way makes up 481 acres or 8.0 percent of the study area.

POPULATION PROJECTIONS AND LAND DEMAND

The primary task and goal associated with the Community Plan is the establishment of future land uses within the study area. Designating future land uses within the study area provides the Town with a general plan for future growth and development. Before designating future land uses, the amount of land use demand must be calculated for the 40-year planning horizon. Detailed calculations and methodology for population and land demand projections can be found in Appendix A: Population Projects and Land Demand.

The 2010 U.S. Census established the population of Strasburg at 6,398 and the estimated population for 2050 is 12,557. Based on this population and using the assumptions outlined in Appendix A, between 811 and 947 additional acres of residential land use should be designated in the Community Plan. The Future Land Use map shows approximately 815 acres of future residential land, which includes future land designated as mixed use. Furthermore, based on the projected residential land demand and the assumptions detailed in Appendix A, an additional 327 acres of commercial and industrial land demand can be projected in 2050. Assuming the same mix of commercial and industrial land uses are achieved in the future as exist currently, a total of 98 acres of commercial land is projected and a total of 229 acres of industrial land is projected.

FUTURE LAND USE

With land demand projected through the horizon year, 2050, future land uses can now be designated for all land within the study area. In order to focus the effort of designating future land uses to the land areas most likely to develop, the Planning Commission established four target areas: Route 11/I-81 Interchange and Corridor, Golden Triangle Area, Industrial Park/Route 55 Corridor, and Downtown Historic District (see Map #3.2).

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) ANALYSIS

Prior to designating future land uses within the target areas, the Planning Commission completed a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of each area. The results of the SWOT analysis can be found in Appendix B: SWOT Analysis.

LAND USE PRINCIPLES

Following the SWOT analysis, the Commission established a series of land use principles for each target area. The principles were developed in order to assist in designating future land uses within the target areas.

ROUTE 11/I-81 INTERCHANGE AND CORRIDOR

- 1. Land uses north of I-81 shall be compatible with the "National Park experience" low impact uses in form and function.
- 2. Transportation Plan shall include a bypass road that connects Route 11 and Route 55; construction shall be a short-term high priority.

- 3. Non-retail, commercial uses are recommended along the corridor outside of ½ mile radius of the interchange.
- Retail, restaurants, and other highway commercial uses shall stay within ½ mile of the interchange.
- Pedestrian/multi-use trails shall generally parallel Route 11 in order to connect the area with the rest of Town
- A collector street shall generally parallel Route 11 from Route 55 to Radio Station Road in order to provide an alternative route.
- Radio Station Road shall transition from retail uses at Route 11 to industrial uses to the west.
- Additional residential development shall be generally avoided in this area.
- Utility corridors shall be used to create trail connections.
- 10. Establish a plan for retail development that complements and feeds downtown.

GOLDEN TRIANGLE AREA

- 1. Area shall be primarily residential uses of various densities.
- 2. The principles of Traditional Neighborhood Design (TND) shall be incorporated into the developments in this area.
- 3. Allow denser, clustered residential development in proximity to Hupp's Hill and the Industrial Park in order to provide space for a natural buffer.
- 4. Utilize the quarry and surrounding property for passive recreational uses, and connect with the rest of Town using pedestrian/multi-use trails.
- 5. Limited neighborhood-scale commercial uses shall be allowed adjacent to Route 11 in the Cedar Valley area.
- 6. Create a grid-style street network, including a street that generally parallels Route 11 from Route 55 (Mineral Street) to Radio Station Road.
- 7. Connect Colley Block Road to the Industrial Park access road.
- Limit the amount of commercial development along the Route 55 corridor; low density/rural residential is preferred.
- 9. Utility corridors shall be used to create trail connections.
- 10. Buffer around electrical substation and other non-compatible uses.

INDUSTRIAL PARK ROUTE 55 CORRIDOR

- 1. Designate the proposed retail commercial area at the southeast corner of the interchange as industrial as the site does not lend itself to good commercial development due to access problems.
- 2. Designate an alternative location for a community-scale retail commercial development to compliment, not compete with, downtown commercial uses.
- 3. Area should be an employment center; focus on uses that create jobs.
- 4. Maintain rural residential character of Route 55 corridor.
- Limit additional residential uses in this area.
- Continue pattern of using utility corridors for trail connections.

DOWNTOWN HISTORIC DISTRICT

- 1. Continue allowing mixed uses along major corridors.
- 2. Focus on improving form rather than limiting function.
- 3. Increase bicycle and pedestrian access by indicating a trail to parallel Town Run and connect with Riverwalk.
- Invest in aging infrastructure, above and below ground.
- Use public transportation opportunities to get people downtown.
- Provide additional off-street public parking areas strategically locate.

FUTURE LAND USE MAP

Following the SWOT analysis and establishing of land use principles, future land uses were established within the study area through the creation of the Future Land Use Map (see Map #3.3). The map includes a total of nine categories of future land uses which are shown on the table below. All future development shall be compatible with the Future Land Use Map, unless amendments are approved by the Planning Commission and Town Council.

Future Land Use	Description	Example
Rural Residential/Agricultural	Existing or proposed areas of rural residential or agricultural land uses. Rural residential land uses generally indicate a single-family home on a large rural-type lot greater that one-acre in size.	Land on either side of Route 55 east of Strasburg.

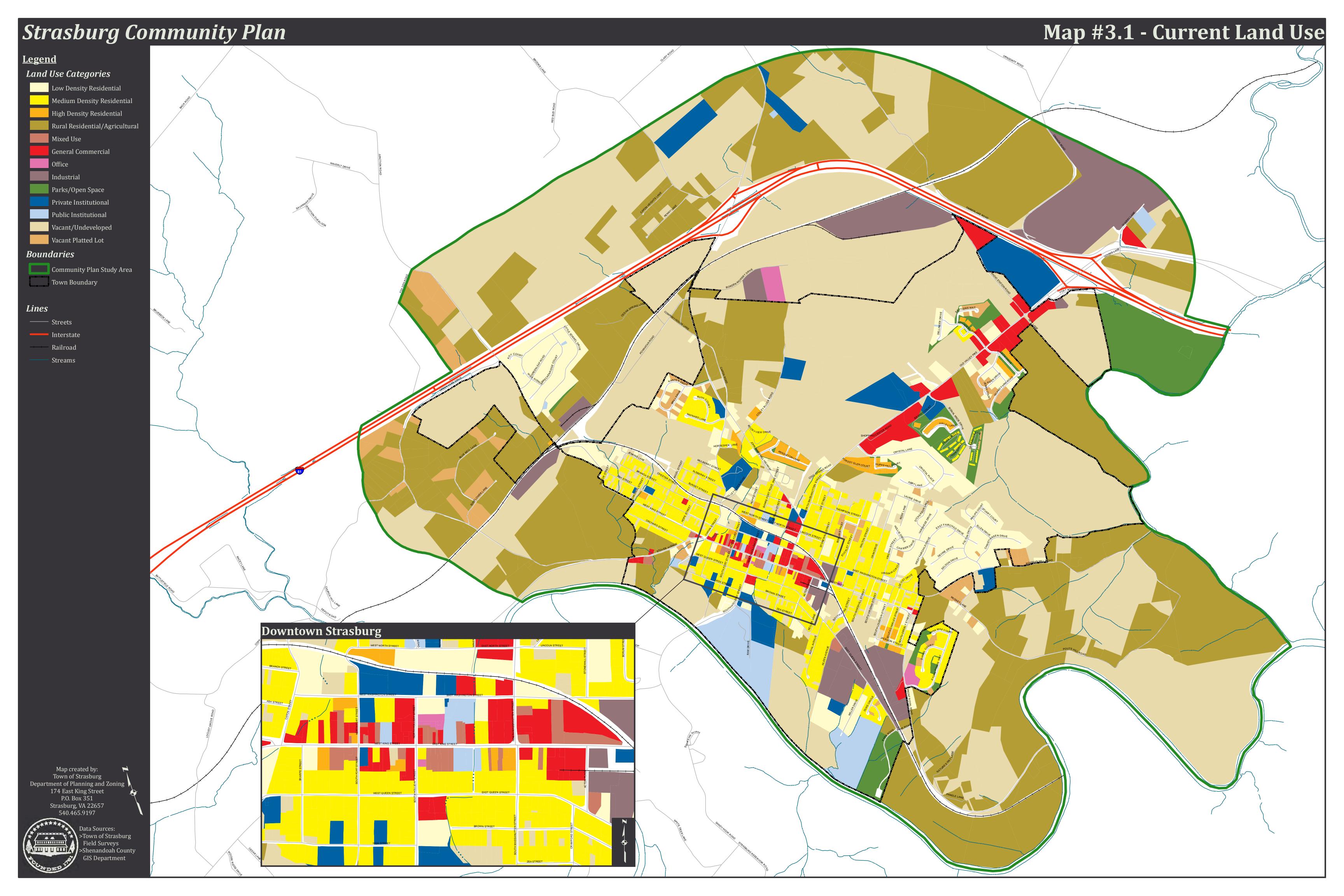
Strasburg Community Plan 2012

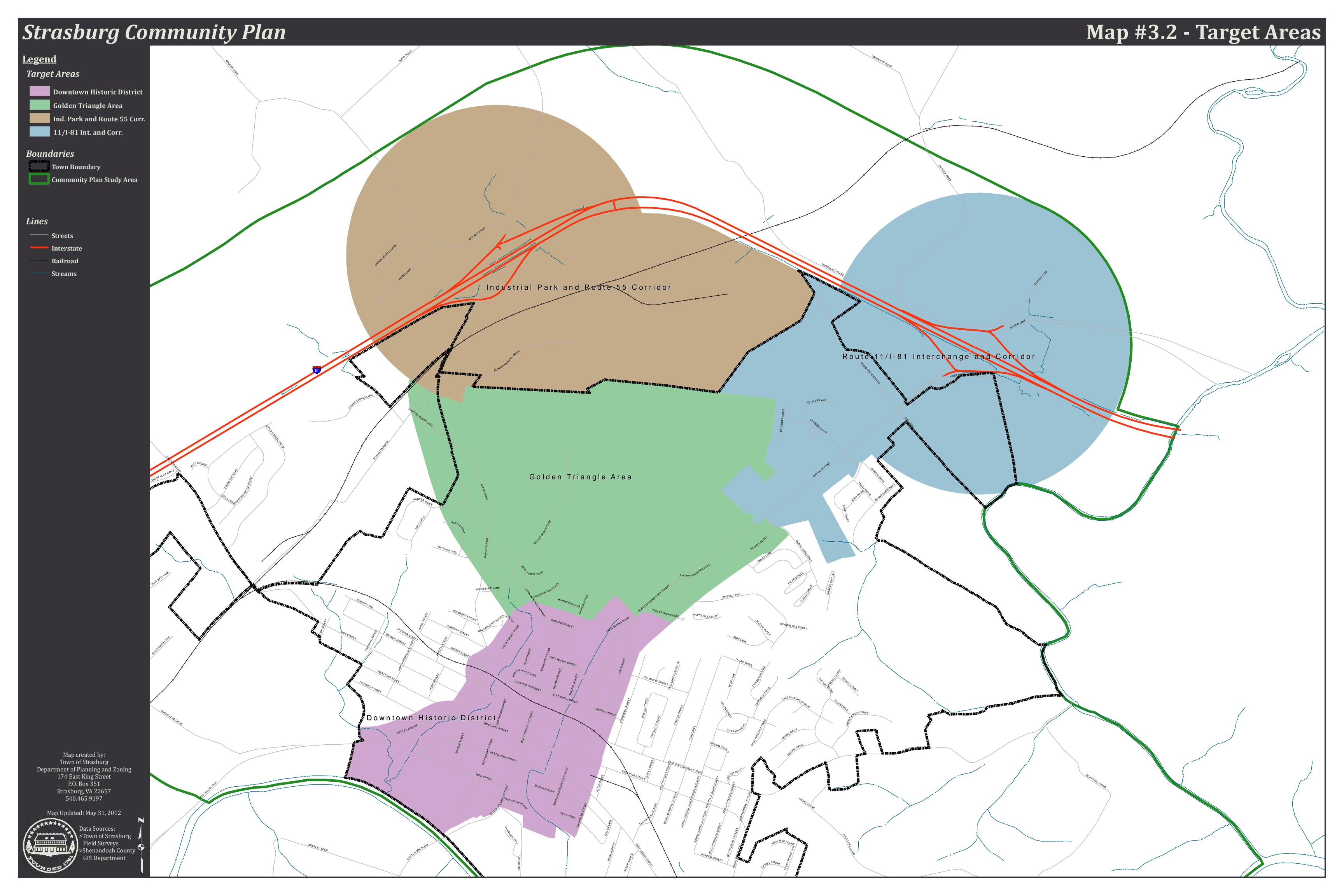
Existing Residential	Existing areas of developed residential uses that include single- and multi-family dwelling with a density greater than one unit per acre.	The Madison Heights development.
Future Residential	Areas designated for future residential development.	The Golden Triangle area between Route 11 and Route 55.
Mixed Use	Existing or proposed land dedicated to both commercial and residential uses.	King and Washington Streets in Downtown Strasburg.
Limited Commercial	Existing or proposed areas designated for more restrictive commercial uses that are generally known to have less impact on public facilities. In addition, limited commercial uses are more employment orientated (professional services) and less focused around the automobile (no drivethru windows, smaller parking areas). Commonly known as "9 to 5" commercial land uses.	The Founder's Landing and Stony Pointe commercial developments.
General Commercial	Existing or proposed areas dedicated to general purpose commercial uses such as retail and drivethru restaurants.	The Food Lion Shopping Center and the Ramada Hotel.
Industrial	Existing or proposed areas of industrial land uses such as warehousing, manufacturing, and distribution.	The North Shenandoah Industrial Park.
Institutional	Existing or proposed areas of public or private institutional uses.	Strasburg High School, Town government facilities, and churches.
Parks/Open Space	Existing or proposed areas of public or private parks and open space.	Strasburg Town Park and Hupp's Hill Civil War Park.

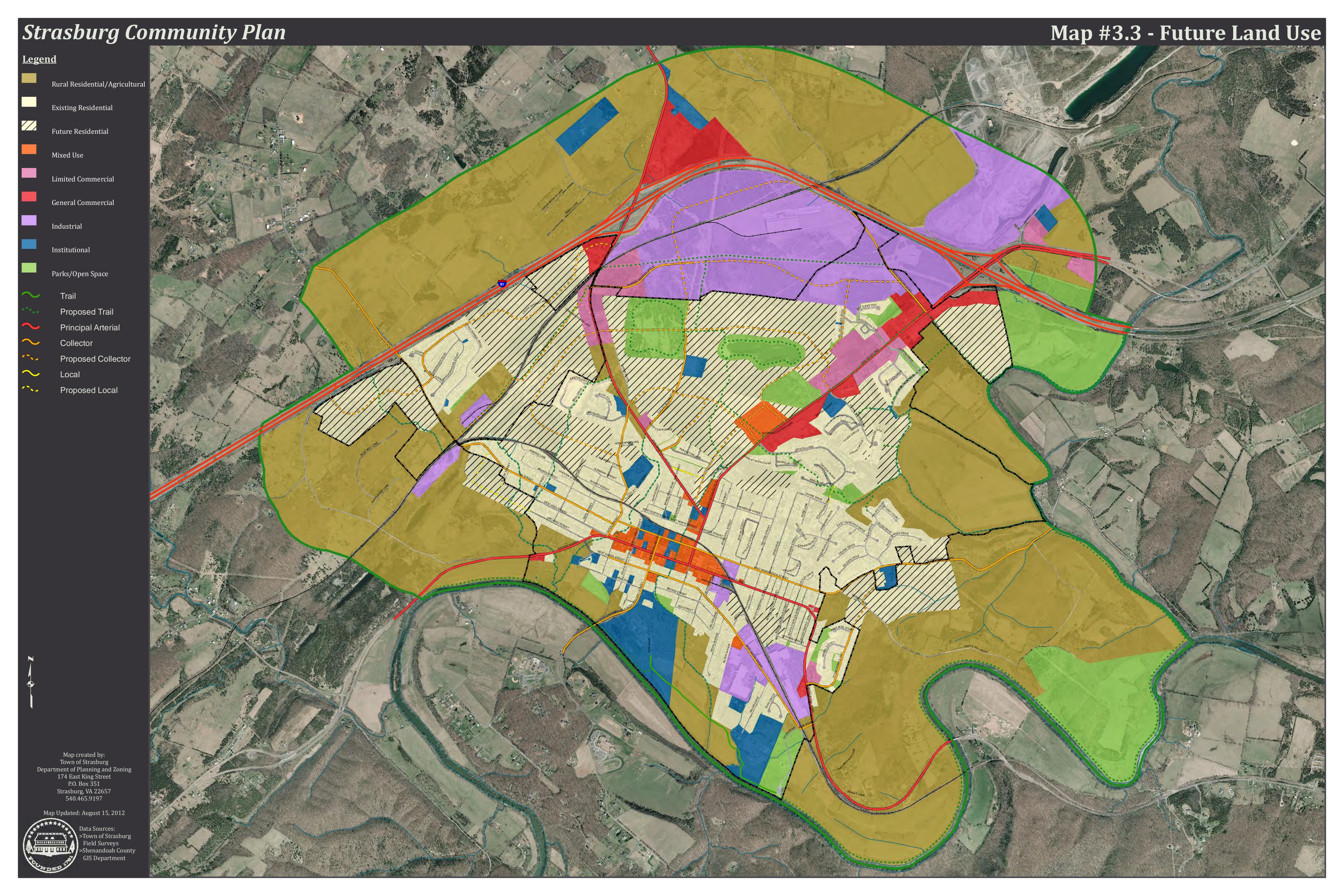
The following table shows the total area and percentage of the study area designated for each future land use type.

Future Land Use Designation	Area (acres)	Percent of Study Area
Rural Residential/Agricultural	2,546	42.4
Existing Residential	735	12.2
Future Residential	785	13.1
Mixed Use	59	1.0

Limited Commercial	99	1.7
General Commercial	122	2.0
Industrial	594	9.9
Institutional	167	2.8
Parks/Open Space	422	7.0
Right-of-Way	472	7.9
Total	6,001	100.0







CHAPTER 4: TRANSPORTATION

INTRODUCTION

Transportation plays a key role in the development of a community. The current and planned transportation network in the Study Area will be presented in this chapter. The recently completed 2035 Rural Long Range Transportation Plan provides significant background for the information and recommendations contained in this chapter, and should be used as a reference to this chapter.

CURRENT TRANSPORTATION NETWORK

Within the Town of Strasburg, streets in public rights-of-way are the primary infrastructure for transportation. It is important to note that the function and purpose of streets extends beyond their use as conduits for vehicles and pedestrians. Streets are also public spaces that define the character and livability of a community. A well developed and planned streetscape – the combination of physical features and amenities within the public space of a street - can contribute significantly to the viability and success of a community. The existing transportation network system is shown on Map #4.1.

VEHICLE

The most visible part of Strasburg's transportation network is the vehicle road system. This consists of the streets accepted into the State highway system, which are maintained by the Virginia Department of Transportation (VDOT), and other local streets that are maintained by the Town. Rights-of-way for State and locally maintained streets vary from 30 feet to over 50 feet. The Town is served by streets grouped into three functional classifications: arterial, collector, and local streets.

ARTERIAL STREETS

Arterial roadways accommodate large volumes of vehicle traffic over long distances at high travel speeds. Under the functional classification system, I-81 is a principal arterial while U.S. Route 11 and State Route 55 are minor arterials. Interstate 81, which extends from New York to Tennessee, connects the Town of Strasburg to the greater Mid-Atlantic region, and includes two

interchanges in the study area. This important corridor also connects the Strasburg area to the Washington D.C. metropolitan area via Interstate 66. Route 11 is minor arterial within the Town that generally parallels I-81 through Virginia and serves as the Town's main street (King Street). Route 55 also bisects the Town east to west, and moves traffic between West Virginia and metropolitan Washington D.C.

COLLECTOR STREETS

Collector roads bring together traffic from smaller local streets and feed this traffic onto the arterial system. Collector streets are generally used for shorter trips than arterials, and provide access to local commercial and industrial activity areas. Queen Street, Washington Street, Capon Street, Holliday Street, and Ash Street are classified as collector streets within Strasburg.

LOCAL STREETS

All streets not classified as arterial or collector are considered local roads. The local road system serves to provide access to private property and to carry vehicles to collector streets. Vehicle trips on local streets are generally short and take place at low speeds.

PEDESTRIAN

Pedestrian movement within the Town is primarily accommodated through sidewalks and trails. Sidewalks exist adjacent to public streets in newer residential developments and within the downtown area. The Strasburg Riverwalk is one existing trail that provides pedestrian mobility between Strasburg High School and the Town Park.

RAIL AND PUBLIC TRANSPORTATION

The Town of Strasburg is fortunate to be connected to a larger regional network serving the railroad industry. This includes both Norfolk Southern and CSX lines which meet at the Strasburg Junction. Norfolk Southern's Manassas-Edinburg line enters Strasburg adjacent to Route 55 east and turns south toward Edinburg. The CSX line runs from Strasburg Junction north toward Winchester, and serves the North Shenandoah Industrial Park.

The Town is not currently served by any public transportation routes; however, as recently as 2010 a private commuter bus service connected the Town to the Washington D.C. metropolitan area.

PLANNED TRANSPORTATION NETWORK

Based on the land uses established on the Future Land Use map along with the projects outlined in the 2035 Rural Long Range Transportation Plan, a planned transportation network has been created (see Map #4.2). A brief description of the most relevant planned network improvements can be found below, grouped by mode and functional category.

VEHICLE

ARTERIAL STREETS

No new arterial streets are needed to serve future growth; however, the capacity of existing arterial streets will need to be expanded in order to meet future vehicle demand. The following recommendations are made regarding arterial streets:

- Route 11 between I-81 and downtown Strasburg will need to be widened to an urban four-lane roadway with a median/turn lane.
- The Town desires to maintain the rural character of Route 55 between I-81 and Route 11, so this segment shall remain a two-lane highway, except around the I-81 interchange and North Shenandoah Industrial Park.
- The following improvements should be completed for the Route 11 and Route 55 intersection:
 - o Short-term: Restrict Route 11 northbound approach to a ten-foot left turn lane and a twelve-foot through lane.
 - Mid-term: Signalize intersection, add separate eastbound right turn bay, and coordinate signal with adjacent signals on Massanutten Street from Route 11 to King Street.
- The intersection of Route 11 and Radio Station Road should be monitored in the long-term to determine the need for additional lane improvements.
- The following improvements should be completed for the Route 11 and Shopping Center Road intersection:
 - o Mid-term: Install street lights and convert one access point to a right-only entrance.
- Long-term: Evaluate further widening of Route 11.
- The signal timing for the intersection of King Street and Massanutten Street should be adjusted to coordinate with other signals on King Street.
- The following improvements should be completed on Massanutten Street from Route 55 to East Thompson Street:
 - Short-term: Eliminate on-street parking and restripe roadway to provide a center turn lane.

- Long-term: Widen to urban two-lane roadway.
- Route 11 (Stover Avenue) between Capon Street and the Town limits should be restriped to provide a center turn lane.

COLLECTOR STREETS

A number of new collector streets will be needed to serve new growth areas, and these are shown on Map #4.2 Planned Transportation Network. Other recommendations regarding collector streets include:

- The following improvements should be completed for Holliday Street:
 - Mid-term: Monitor the intersection of South Holliday Street and Queen Street for signal warrants.
 - o Long-term: Further study needed to determine possible need to widen Holliday Street or work with the County to develop a second crossing over the river as a secondary access to the schools.
- The entire Queen Street corridor should be improved to meet urban two-lane standards, including full-width lanes and shoulders.
- Ash Street from Capon Street to the I-81 crossing should be reconstructed to meet urban two-lane standards and to address geometric deficiencies.
- Washington Street from Massanutten Street to Eberly Street should be improved to meet urban two-lane standards, including full-width lanes and shoulders.
- In the mid-term, a collector bypass should be constructed from Capon Street/Route 55 to Route 11/Crystal Lane. This street is proposed to be constructed with the Cedar Valley development.

LOCAL STREETS

In general, local streets will be constructed in conjunction with the development of a specific parcel in order to serve the subdivided lots or businesses. However, the Planned Transportation Network includes several specific local road connections:

- In the long-term, Eberly Street from Route 55 to Washington Street should be improved to urban two-lane standards.
- Orchard Street should be extended west to serve the future residential area indicated on the Future Land Use map. This extension should include connections to Ash Street.
- In the mid-term, Crystal Lane should be extended to connect to Dickerson Lane as a two-lane urban facility.

Burgess Street should be extended east to connect with Mineral Street, a future north/south collector street.

PEDESTRIAN

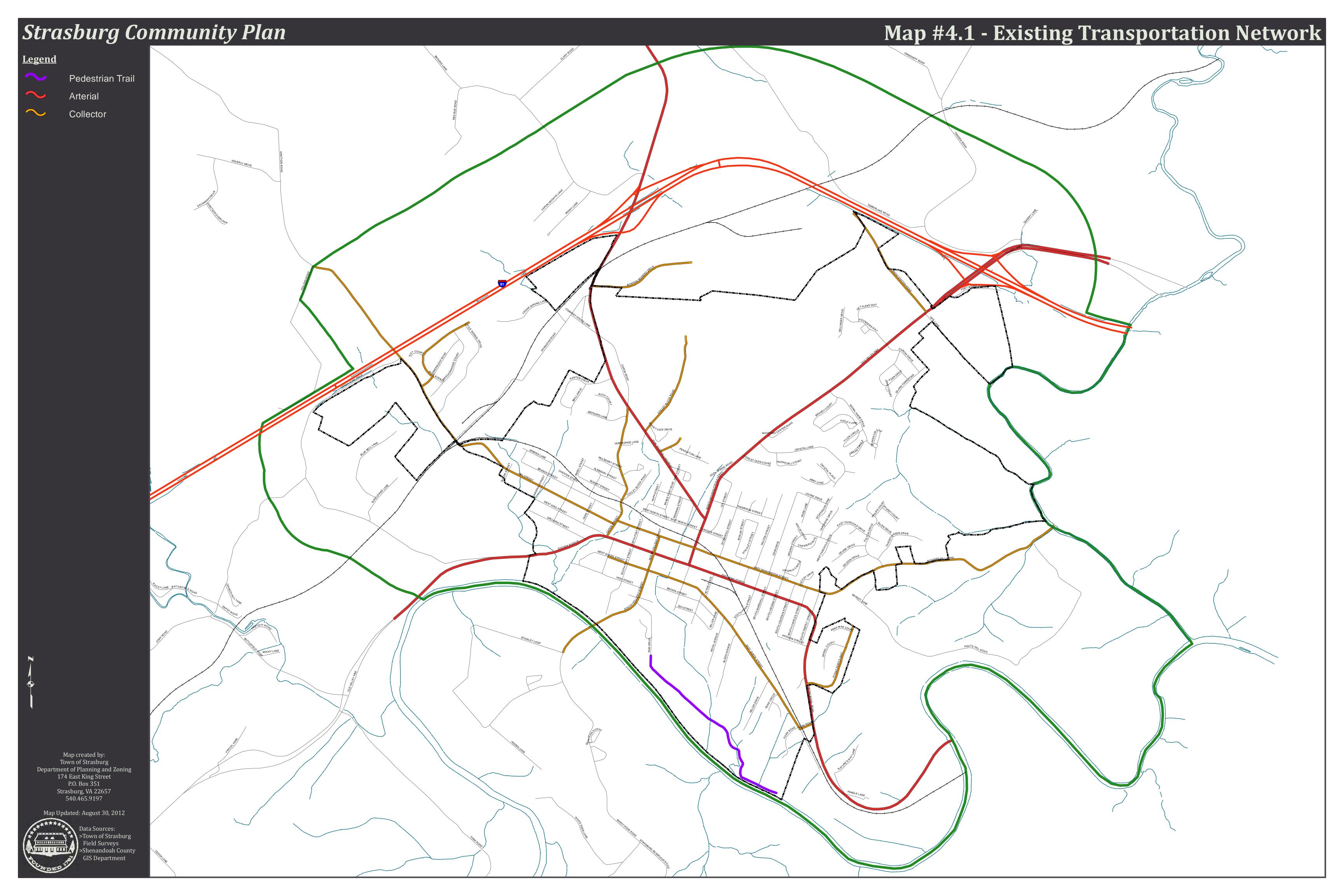
Future pedestrian facilities are needed to serve new development, increase connectivity between neighborhoods, and maintain the livability and success of downtown Strasburg. The Town intends to invest in constructing new sidewalks where none exist, and set aside funds for constructing the trails shown on the Planned Transportation Network map. Crosswalks and bike paths are also essential for the safe transportation of pedestrians. Special consideration should be given to the safety of pedestrians and bicyclists when designing and reviewing any new development projects. The public right-of-way should make equal accommodation for vehicles, pedestrians, and bicyclists. The success of the Strasburg Riverwalk is indicative of the importance of constructing pedestrian trails to connect the different neighborhoods within the Town. Of note are the following pedestrian trails which are included on the Planned Transportation Network map:

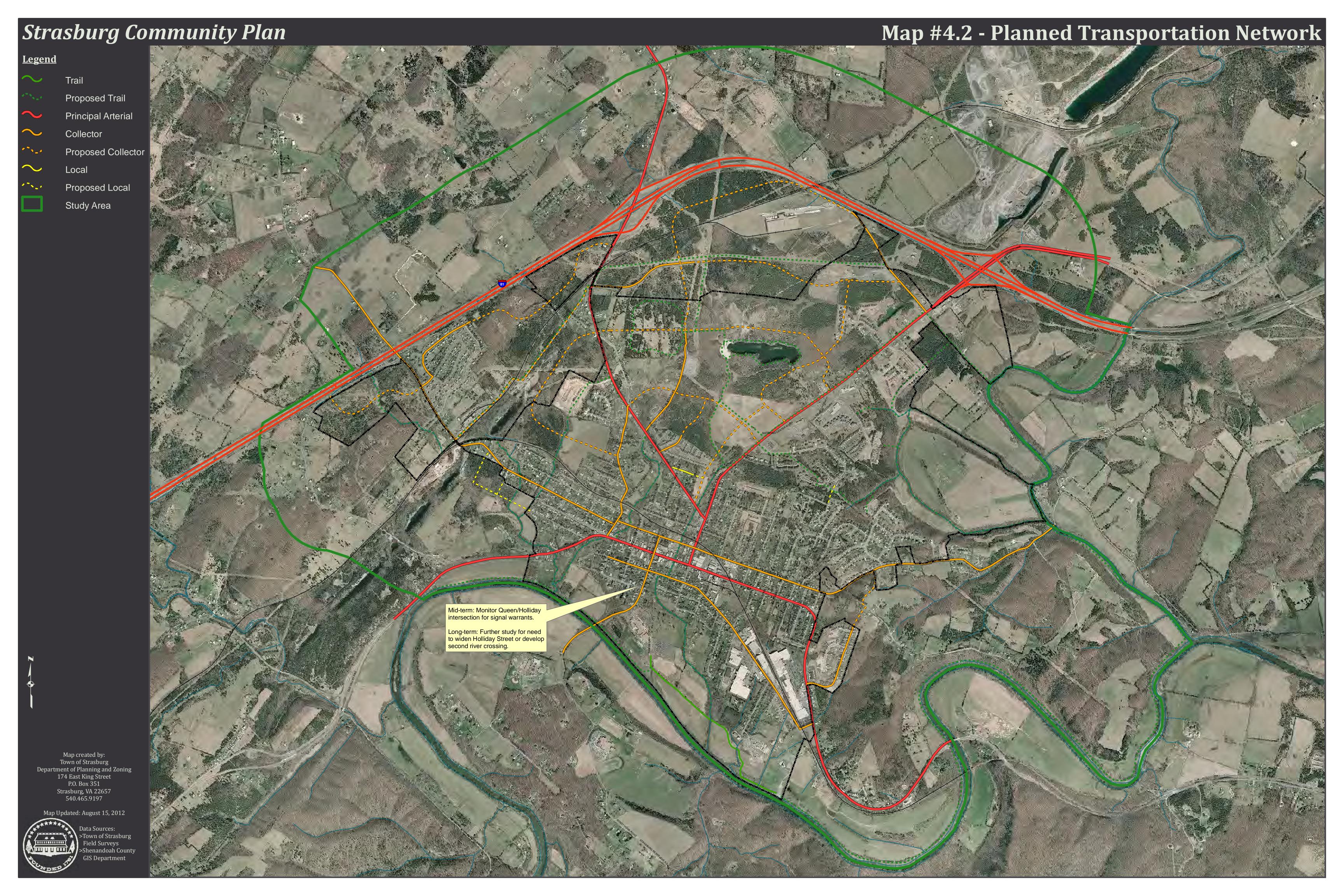
- Town Run Greenway: A multi-use trail which generally parallels Town Run should be constructed from the Strasburg Riverwalk north into the Industrial Park. This key pedestrian corridor serves as the backbone for a Town-wide trail network, and would connect all areas with downtown Strasburg.
- Riverwalk: The Strasburg Riverwalk should be extended to parallel the North Fork Shenandoah River and Cedar Creek. This corridor would tie into the regional trail planned to connect Fisher's Hill and Cedar Creek battlefields.
- Utility and Stream Corridors: The Plan includes a number of pedestrian trails that parallel stream and utility corridors. The gas pipeline corridor in the Industrial Park and the stream corridor near Capon Street are examples.
- Arterial Trails: Pedestrian trails are proposed adjacent to Route 11 and Route 55. These corridors will connect the residential neighborhoods of Strasburg with the commercial areas near the I-81 interchanges.

RAIL AND PUBLIC TRANSIT

The CSX line that serves the North Shenandoah Industrial Park should be taken advantage of when marketing the park to potential businesses. A portion of the Norfolk Southern Manassas-Edinburg line has been classified as inactive between Mount Jackson and Woodstock. This may signal the possible future abandonment of this line. If abandonment occurs, the right-of-way could be converted to a regional trail corridor. The Town should work with its public and private partners to plan for the possible abandonment and reuse of this line. If abandonment does not occur, the Town should work with Norfolk Southern and other entities to explore the possibility of converting the use of the Manassas-Edinburg line to serve commuters to the Washington D.C. metropolitan area.

In 2009, the Northern Shenandoah Valley Regional Commission conducted a survey of the community regarding public transit opportunities. The survey revealed an interest in and demand for public transit service for travel both within the Town and within the region. A feasibility study has not yet been conducted on the possible creation of a public transit service; however, as Strasburg continues to grow and become more connected to the greater Washington D.C. area the Town should consider joining with regional partners to conduct a feasibility study for a local and regional transit service.





CHAPTER 5: INFRASTRUCTURE

CURRENT INFRASTRUCTURE

The Town of Strasburg operates and maintains facilities for the treatment, storage, and distribution of drinking water; the collection and treatment of wastewater; and the collection, storage, and release of stormwater. This chapter describes the current infrastructure associated with these services and makes recommendations for future infrastructure needs. Water, wastewater, and stormwater infrastructure that has been electronically mapped can be seen on Map #5.1. Please note that not all utility lines have been electronically mapped, particularly many existing water mains and stormwater facilities.

WATER

TREATMENT

The Town owns, operates, and maintains a public water supply system, and the source of raw water for the system is the North Fork Shenandoah River. Water withdrawn from the river is pumped to the Town's water treatment plant located adjacent to Strasburg High School. The newly constructed plant has a treatment capacity of 3 million gallons per day, with a daily average flow of approximately 800,000 gallons. At the plant, the raw water goes through a fairly standard procedure of chemical treatment, filtration, chlorination, and fluoridation. It is then pumped into the storage and distribution system.

STORAGE

The water storage system in Strasburg consists of three water storage tanks (known as the Fort Hill, Route 55, and Junction tanks), one water storage reservoir, and five booster pumping stations. The Fort Hill tank is a bolted steel, elevated storage tank with an approximate volume of 250,000 gallons. This tank, originally constructed in the 1930s, is centrally located in Town off Banks Fort Road. The Route 55 tank is a welded steel, ground storage tank with an approximate volume of 2.0 million gallons. Built in 1999, this tank is located outside the Town limits along Route 55 north of the I-81 interchange. The Junction tank is a glass-lined, bolted

steel, ground storage tank with an approximate volume of 86,000 gallons. This tank is located within the Strasburg Junction residential development and essentially represents a standpipe. This tank was constructed in 1989. The reservoir is a concrete structure with a floating polyethylene cover and an approximate volume of 1.0 million gallons. The reservoir is located on the south side of the North Fork Shenandoah River along the northwest slope of Three Top Mountain. Reportedly, the reservoir was constructed around 1938.

DISTRIBUTION

The water distribution system consists of approximately 36 miles, or 190,000 linear feet, of water mains ranging in size from one to 16 inches in diameter. The system currently serves approximately 2,700 residential, commercial, and industrial users located in the Town and in parts of Shenandoah County surrounding the Town.

WASTEWATER

The Town owns and operates a public wastewater collection and treatment system. The system serves the entire Town within the corporate limits and portions of Shenandoah County.

TREATMENT

The current wastewater treatment plant, located off Miller Drive, has a permitted capacity of 975,000 gallons per day and an approximate daily flow of between 700,000 and 800,000 gallons. During high-flow events, such as sustained wet periods, the plant's capacity has been exceeded. The Town will begin construction on an upgrade to the plant in early 2013, which will increase the capacity to 2.0 million gallons per day. The current plant is an activated sludge type, and includes oxidation ditches for biological treatment, clarification tanks, and chlorination of the treated water. The sludge is treated in an aerobic digester, and then placed into drying beds. Dried sludge is removed from the site and land-applied to property outside the Town.

COLLECTION

The wastewater collection system consists of gravity lines, force mains, and pump stations. Most of the Town is served by gravity-fed lines; however, portions of Route 11 north and the Sandy Hook area are served by pump stations and force mains. Some of the existing collection system suffers from inflow and infiltration (I&I) which increases the flows to the treatment plant during wet weather events.

STORMWATER

The stormwater system in Strasburg is a composite of several types of facilities that include open ditches, culverts, underground pipes, and detention basins. Stormwater that is collected outflows to either detention basins or to streams such as Town Run. In the past, the Town has taken an active role in trying to resolve stormwater management problems on both public and private property; however, this piecemeal approach does not address this inherently regional issue. The eastern part of Town, including the Crystal Hill and Madison Heights subdivisions, has the most pressing needs at this time.

FUTURE INFRASTRUCTURE

In general, future improvements to the Town's utility infrastructure should be consistent with individual models for each system. It is vital that the Town prepare and maintain a current model for each of the utility systems to ensure that proposed development adequately considers the longterm sustainability of the systems.

WATER

In 2007, the Town completed a water system model and analysis that provided a series of recommendations for improving the storage and distribution portions of the system. An updated model and system analysis began in July 2012 as the writing of the Community Plan was underway. The updated model and any future studies are hereby adopted by reference as part of the Community Plan. Any future expansion of the water system will need to be built consistent with and take into consideration the most updated water model. The Town should maintain an updated model of the water system in order to respond to and evaluate any future development proposals in a timely manner.

WASTEWATER

Upon completion of the proposed upgrade to the wastewater treatment plant, the Town will be capable of treating wastewater for anticipated growth well into the 40-year planning horizon. In general, the upgraded plant will be able to treat twice the amount of wastewater as the current facility; however due to an unknown amount of current and future infiltration and inflow (I/I) in the wastewater collection system, it is difficult project the long-term capacity of the plant. A detailed and lengthy evaluation of the Town's collection system is needed to determine the current effect of I/I on influent flows at the treatment plant. Such an evaluation could also identify problem areas in the collection system that, if repaired, could drastically reduce peaking factors at the plant and free up capacity for treating actual wastewater. The Preliminary Engineering Report (PER) prepared prior to beginning the design of the upgrade to the treatment plant provides additional information on the plant's design criteria. It is recommended that a full wastewater system model and analysis be completed and subsequently maintained, and that report should be incorporated by reference into the Community Plan. This will help ensure that all future collection system improvements are designed for ultimate buildout.

STORMWATER

Future improvements to the Town's stormwater system will be driven by enhanced State regulations and the need to deal with specific runoff issues in the Town. In order to proactively address the issue of stormwater runoff, it is recommended that the Town prepare a master stormwater management plan in conjunction with Shenandoah County, the Northern Shenandoah Valley Regional Commission, and other regional partners. This plan will be used as a guide for the development community and will provide regional solutions to parcelspecific stormwater issues. The responsibility of administering State regulations for stormwater runoff will be shifting to local governments beginning in 2014. The Town should work with Shenandoah County, the Northern Shenandoah Valley Regional Commission, and other regional partners to address this added responsibility. Anticipated regulations will force communities to address the quality in addition to the quantity of stormwater runoff.

The Town has adopted the Northern Shenandoah Valley Regional Urban Manual for Low Impact Design. Specific policies for implementing Low Impact Development (LID) and stormwater Best Management Practices (BMP) should be developed as requirements within the Town Code. As the Town works to improve the existing stormwater infrastructure, it is expected that proposed development will also provide the appropriate stormwater controls. Since most of the new development areas are located at elevations higher than existing stormwater facilities, there is a tremendous need to provide for adequate outfall.



CHAPTER 6: COMMUNITY FACILITIES AND SERVICES

CURRENT FACILITIES AND SERVICES

The Town of Strasburg provides a number of municipal services and operates the facilities necessary to deliver such services. These services and facilities include parks and recreation, public safety, general administration, and solid waste collection. Residents of Strasburg also receive services from Shenandoah County; of particular relevance is the public school system. This chapter briefly describes these facilities and services, and details recommendations and considerations for their future provision. The physical location of current facilities is shown on Map #6.1.

PARKS AND RECREATION

The Town Park is situated on approximately 23 acres in southeastern Strasburg adjacent to the North Fork Shenandoah River. Facilities at the park include a swimming pool, picnic shelters, pavilions, basketball and tennis courts, playground facilities, soccer and baseball fields, and a boat landing. The soccer and baseball fields are provided for use by the Shenandoah County Soccer League and the Strasburg Little League, respectively. In the recent past, the Town acquired an additional 53 acres along the river, which now connects the Town Park with Strasburg High School. The Master Plan for this property includes a multi-use path, with the possibility of future recreation facilities such as sports fields. In 2009, the Town completed the Strasburg Riverwalk, a multi-use trail connecting the park and High School. The Town also owns and maintains a small park in the downtown area, Hometown Park, which features a gazebo, seating, and landscaping. Shenandoah County maintains a 68-acre park near Maurertown with numerous facilities including pavilions, sports courts and fields, a walking trail, and open meadows.

PUBLIC SAFETY

The Town of Strasburg provides 24-hour police protection. The Police Department, located within the Town Hall building, includes approximately 20 full-time officers along with administrative staff. Separate volunteer fire and rescue departments exist within the Town, both of which partner with the Shenandoah County Fire and Rescue Department to ensure adequate coverage. The Town of Strasburg supports both organizations with an annual donation. The Strasburg Volunteer Fire Department runs their operations out

of a building in downtown owned by the Town of Strasburg. The Strasburg Volunteer Rescue Squad maintains their facility also located in the downtown area.

ADMINISTRATION

The Town of Strasburg administrative services are housed at the Town Hall located on King Street in the downtown area. Municipal services provided at this location include finance, utility and tax billing and collection, planning, zoning, code enforcement, and general administration. The Town Hall building was completed in 1993 and houses all of the administration and Police Department staff for the Town. The building has a meeting room for public meetings as well as public hearings.

SCHOOLS

The Shenandoah County School Board operates all public schools within the County, and the schools act as a unifying force within the community. Three schools are located in or near Strasburg to serve the needs of the school children from Pre-K through 12th Grade: Strasburg High School, Signal Knob Middle School, and Sandy Hook Elementary School. Student-age residents also have access to Triplett Business and Technical Institute for training in skilled trades. Strasburg residents also have convenient access to Lord Fairfax Community College in Middletown, which is less than seven miles north of Town.

SOLID WASTE COLLECTION

The Town of Strasburg contracts for the collection of solid waste, including curb-side collection of trash and recycling. This service results in the collection of approximately 1,700 tons of trash and 200 tons of recycling annually, or approximately 1,600 pounds of trash and 180 pounds of recycling per household per year. Trash that is collected is delivered to the Shenandoah County Landfill in Edinburg, which facility is funded in part by tipping fees and taxes collected from Shenandoah County residents. Recycling is collected single-stream and is taken to a scrap facility where it is sorted for reuse.

FUTURE FACILITIES AND SERVICES

As the population and area of Strasburg grows, the existing facilities will need to be expanded in order to deliver the Town's services. The following recommendations and considerations are offered regarding community facilities and services.

PARKS AND RECREATION

The Town will need to continue to improve the facilities of the Town Park in order to address population growth and the changing demand for recreational facilities. Additional park space spread throughout the community will also be needed. National park and recreation industry guidelines recommend 10 acres of park space per 1,000 people, which represents a minimum acreage that should be exceeded when possible. This area can include neighborhood and community recreation areas. Using this standard, the Town should have 64 acres of park space based on the 2010 Census population figure. A total of 126 acres of parks and open space is needed to meet the standard in the 40-year planning horizon. The Future Land Use Map designates adequate additional parks and open space land within the Study Area which could be used for active and passive recreational uses in order to meet the demand. Future parks and open space shown on the Map include the former quarry near Hupp's Hill (for passive recreational use) and a large 50-acre parcel on the west side of Colley Block Road south of the Industrial Park (for active recreational use).

It is important to disperse parks and recreational opportunities evenly throughout the Town so that each neighborhood has convenient access. In addition, the parks and recreation planning and development process should provide for as many different kinds of activities as resources will allow. The Town will seek to provide small parks within each new development and look for opportunities to add park space in existing residential areas. The Town will work closely with the Shenandoah County Parks and Recreation Department to expand joint recreation opportunities to Town and County citizens. The Town will need to provide recreation facilities and opportunities to citizens of all ages and abilities.

PUBLIC SAFETY

In 2008, the Town conducted a space needs analysis for the Police Department. The size of the department and their need for space has grown significantly since the completion of the Town Hall building, and the space within Town Hall has been deemed inadequate for the future of the Police Department. The analysis determined the amount of space needed to accommodate the department now and in the future, and led to the Town purchasing the property immediately east of the Town Hall ("Brill property"). A number of options were presented for utilizing the Brill property to provide additional space for the department. If the population of the Town increases consistent with projections in the Community Plan, additional staffing will be needed within the Police Department.

The Town should continuously work with the volunteer fire and rescue organizations and Shenandoah County to ensure that their space needs are being met. While the delivery of fire and rescue services is a function and service of the County, the effective delivery of these services is vital to the success of the Town.

ADMINISTRATION

Assuming the relocation of the Police Department out of Town Hall, additional building space may not be needed for the administrative functions of the Town within the 40-year planning horizon. As the population of the Town grows, additional administrative and support staff may be needed to serve the public. The Town will regularly review the level of staffing needed to administer services and programs as part of the annual budget process.

SCHOOLS

In 2009, the Shenandoah County School Board purchased additional acreage adjacent to Sandy Hook Elementary School in order to build additional space for the school. While not located within Study Area, this school serves residents of Strasburg and is served by the Town's water and sewer system. Additional space will likely be needed for another middle and/or high school within the 40-year planning horizon. The Town should work with the County and private land owners and developers to identify land for new schools which may be acquired through the land development process. In addition, the Town should create and regularly maintain proffer guidelines that demonstrate the impact of development in order to exact financial support for the capital needs of the County schools.

SOLID WASTE COLLECTION

As population increases, additional consideration will need to be given to how the Town provides the solid waste collection service. At some point, it may become more cost effective for the Town to perform the collection service rather than an outside contractor. Alternatively, the Town should work with other nearby localities to determine regional opportunities for providing this service. Town officials should review how this service is provided on a regular basis, perhaps upon expiration of a collection contract. In addition, the Town should work with Shenandoah County to ensure the continued long-term operation and sustainability of the landfill as a disposal site.



CHAPTER 7: IMPLEMENTATION

IMPLEMENTATION MEASURES

Recommendations for the implementation of the plan are a fundamental and critical step in the comprehensive planning process. Responsibility for plan implementation rests ultimately with the Town Council, but also relies on the supporting efforts of the Planning Commission, members of the community, community groups and organizations, and County officials.

The Town Council and the Planning Commission shall create and maintain a process for dealing with planning matters on a regular basis. This must include an annual report from the Planning Commission to the Town Council on planning activities.

The Community Plan should be viewed as a tool responsive to both short- and long-term problems. Actions for plan implementation and promoting continuing planning activities are primarily summarized within the Goals and Strategies section. Like all localities in Virginia, the Town has three major sets of tools for implementing its Comprehensive Plan:

- Regulations, including subdivision and zoning ordinances
- Investments, including capital facilities and services
- Policies and Programs, including public/private partnerships, voluntary efforts, and policies for land use and infrastructure decisions, etc.

Subdivision regulations prescribe accepted standards for street design, lot layout and procedures for dedicating private land for public uses. These regulations also set the procedures for the review and filing of plats and for approval by the governing body or its representative. As many of the goals and strategies outlined below include changing the form and appearance of streets, lots, and open space, the Town's subdivision ordinance requires significant revisions in order to implement the vision of the Community Plan. It is recommended that the subdivision ordinance be revised in conjunction with other sections of the Town Code including the Zoning Ordinance.

Zoning is one of the most important tools authorized by the Code of Virginia by which a comprehensive plan may be implemented. Significant adjustments will need to be made to the Zoning Ordinance in order to incorporate the goals and strategies of the Plan, such as encouraging mixeduse development. It is recommended that the Zoning Ordinance be revised to more effectively regulate form rather than function; this may be accomplished through the incorporation of a form-based code.

The Capital Improvement Program (CIP) process involves the scheduled allocation of public investments. The CIP should be coordinated with the Community Plan as a method for guiding public improvements in an orderly and cost effective manner. A CIP is developed for five fiscal years, and includes a comprehensive inventory of desired projects and how and when they are to be funded. These projects are then ranked according to importance. On an annual basis, the Planning Commission, Town Council, and staff select those projects which are most important in terms of community needs and which can be realized with the available community resources. Capital improvement planning thus provides for continual review and implementation of the long-term and intermittent programs vital to maintenance and development in the Town. It is directed that the Town staff create and maintain an active Capital Improvement Program that funds the facilities and improvements outlined in the Community Plan.

GOALS AND STRATEGIES

Through the process of preparing this Community Plan, a series of goals and strategies were created. The goals and strategies shall serve as a basis for Town policies regarding the future physical development of the community. Goals describe the broad desires for the development of the community, while strategies serve as more specific policy recommendations to help achieve the goals. The following goals and strategies best reflect the needs and desires of the community as discovered through the Community Plan process.

GOAL #1: MANAGE FUTURE GROWTH SO AS TO MAINTAIN THE TOWN'S DISTINCTIVE RURAL SMALL-TOWN CHARACTER.

Strategy A: Create and adopt strict guidelines and standards appropriate to ensure that both the form and function of future development will complement and not compete with the rural small-town character of Strasburg and the surrounding area. Future development shall not take on the form and function of typical suburban development, but shall include traditional building materials and pedestrian-scale architecture compatible with the historic architecture of the Town.

Strategy B: Use Interstate-81 as the northern and western edge of residential land uses to encourage a compact, efficient, and cohesive pattern of land use indicative of a rural small town.

Strategy C: Modify the Town's Land development regulations (Zoning and Subdivision Ordinances) to ensure that redevelopment and new development follows the traditional forms of downtown Strasburg such as grid-style streets, an appropriate mix of uses, and pedestrianscale architecture. Consider form-based regulations as a means to achieve this strategy.

GOAL #2: ENCOURAGE THE MAINTENANCE AND DEVELOPMENT OF HISTORIC AND CULTURAL RESOURCES, AND THE PRESERVATION OF NATURAL RESOURCES.

Strategy A: Adopt and promote tax incentives as a method for encouraging the maintenance and rehabilitation of historically and culturally significant buildings and properties.

Strategy B: Preserve, protect, and enhance Civil War battlefield areas, the Strasburg Historic District, and other historic sites and buildings in Strasburg.

Strategy C: Adopt zoning regulations that will prohibit or limit development within environmentally sensitive areas such as waterways, wetlands, floodplains, woodlands, etc.

GOAL #3: ENSURE THAT STRASBURG RESIDENTS, BOTH PRESENT AND FUTURE, WILL HAVE ADEQUATE HOUSING CHOICES IN A SAFE, HEALTHY, AND ATTRACTIVE ENVIRONMENT.

Strategy A: Establish residential areas that provide for varying densities and different housing types, in a form and pattern that is compatible with the traditional, small-town character of Strasburg. The availability of various types of housing units, such as townhouses, apartments, condominiums, in addition to single-family, detached dwellings at different housing densities, should be developed to ensure homes for Town residents of all ages, income groups, and family sizes.

Strategy B: All new residential development shall be designed to reflect the human-scale and traditional, pedestrian-orientation of the Town. Neighborhoods shall be designed to balance the motor vehicle realm (streets, parking areas, and driveways) with the pedestrian realm (sidewalks, yards, and porches), to ensure that physical environments reinforce the traditional look and feel of the Town.

Strategy C: Use regulatory tools to ensure that all residential growth shall occur only when and where services and facilities, such as public water and sewer, storm water drainage and transportation have available capacity. In addition, regulations should be modified to require coordinated, interconnected, and comprehensively planned development of residential land to avoid piecemeal development.

Strategy D: Enhance land development regulations to require appropriate transition areas where residential areas adjoin incompatible uses such as commercial and industrial.

Strategy E: Allow higher densities for new residential development where it encourages infill development and revitalization, promotes cost-effective stormwater management and public service delivery, and protects surrounding farm and forest land.

Strategy F: Enact and enforce ordinances and programs that promote the maintenance of real property. Identify and secure sources of funding to assist property owners with the maintenance of their property.

GOAL #4: ENCOURAGE THE GROWTH OF COMMERCIAL USES THAT WILL SERVE THE COMMUNITY, AND CREATE A SUITABLE ENVIRONMENT FOR COMMERCIAL USES.

Strategy A: Commercial uses shall be placed in areas such as downtown Strasburg, near the Route 55/I-81 interchange, and along the Route 11 corridor, consistent with the Future Land Use Map. This will reduce traffic hazards and congestion, and prevent the encroachment of commercial activities on residential properties.

Strategy B: Provide adequate off-street parking in downtown Strasburg in a manner that strengthens the viability of the downtown area, offers greater convenience for shoppers and workers, and facilitates movement of traffic.

Strategy C: Provide areas for highway-oriented commercial uses that require more land than is available or affordable within the existing downtown area. Sections of Route 11 north and Route 55 west are particularly suited to this type of commercial development. Commercial growth along these corridors shall be coordinated and interconnected within and between developments, with managed vehicle access points to ensure free flow of traffic, and convenient and safe access for pedestrians and bicyclists.

Strategy D: Enhance regulations to include a higher level of aesthetic control over the development of commercial buildings and sites. Regulations shall require ample landscaping for screening and site beatification, proper stormwater management, and architectural standards for building materials and scale.

GOAL #5: CONTINUE TO WORK IN A COLLABORATIVE EFFORT TO FURTHER DEVELOP THE NORTH SHENANDOAH INDUSTRIAL PARK AND THE SURROUNDING PERIPHERY FOR BUSINESS AND INDUSTRIAL USES.

Strategy A: Perform an in-depth analysis of the costs and benefits of annexing the Industrial Park prior to the expiration of the current annexation moratorium. If appropriate, work with Shenandoah County to create a mutually beneficial revised agreement governing annexation in this area and potential areas of non-residential development beyond I-81.

Strategy B: Include funds for the completion of the Industrial Park access road in the five-year Capital Improvement Program. Work in collaboration with the County to extend Radio Station Road to the west side of the railroad tracks in order to serve the undeveloped parcels in this area.

Strategy C: Proactively work to rezone the proposed retail commercial area at the southeast corner of the Route 55/I-81 interchange to business/industrial.

Strategy D: As the undeveloped land in the North Shenandoah Industrial Park becomes within the control of the Town's zoning ordinances, permitted and conditional land uses should be reviewed to ensure that high-quality users are attracted and that heavy industrial uses are avoided.

Strategy E: Select and adopt available tax incentive programs which would help attract quality employers to the Industrial Park.

GOAL #6: PROVIDE A TRANSPORTATION NETWORK THAT ENSURES SAFE, CONVENIENT, AND EFFICIENT TRAVEL FOR VEHICLES AND PEDESTRIANS, PROMOTES REGIONAL TRAVEL, AND ENHANCES THE HUMAN-SCALE ENVIRONMENT OF THE TOWN.

Strategy A: Ensure street standards, specifications, and regulations comply with VDOT standards, and reflect best management practices and the latest industry innovations.

Strategy B: Expand the capacity of existing and new streets and highways when consistent with the goals of the Community Plan and where traffic volumes warrant such action.

Strategy C: Provide for the separation of pedestrian and vehicular traffic through the construction of new sidewalks and trails and the reconstruction of sidewalks in need of repair. The annual budget should include an appropriate allocation for sidewalk and trail construction and repair.

Strategy D: Plan the development of alternative routes or bypasses of travel to alleviate the congestion caused by Routes 11 and 55 intersecting in Town and by the area's growth.

Strategy E: Implement the Virginia Department of Transportation 2020 plan and the 2035 Rural Long-Range Transportation Plan.

Strategy F: Seek opportunities to collaborate with regional partners to establish a regional transit service to better connect Strasburg to surrounding communities and regions.

GOAL #7: PROVIDE AN ENVIRONMENT THAT ATTRACTS BUSINESSES COMPATIBLE WITH THE RURAL SMALL-TOWN CHARACTER OF THE TOWN IN ORDER TO INCREASE EMPLOYMENT OPPORTUNITIES AND BROADEN THE TAX BASE.

Strategy A: Encourage businesses to locate on sites with proper access to transportation and utility infrastructure. Where existing areas are not served by adequate access, new access roads should be developed when fiscally justified and in keeping with the small-town character of the Town.

Strategy B: Require compliance with all current environmental regulations to ensure there is no harmful pollution, waste, or stormwater generated by business and that construction does not take place in environmentally sensitive areas.

Strategy C: Require the inclusion of buffer areas and/or screening between differing land uses.

Strategy D: Capitalize on the unique features of the Town's historic downtown to attract employers that can benefit from the downtown's pedestrian-friendly, human-scale streetscapes, and its compact, mixed land use pattern.

GOAL #8: PROVIDE A VARIETY OF HIGH QUALITY COMMUNITY FACILITIES AND SERVICES TO MEET THE NEEDS OF THE RESIDENTS.

Strategy A: Expand and improve existing community facilities to ensure they meet current and future needs of citizens. Strategy B: Create and maintain water and sewer master plans that take into consideration the land uses designated in the Future Land Use Map to ensure that extensions to the Town's water or sewer systems will be of sufficient capacity to serve current and expected future development.

Strategy B: Provide for and maintain adequate park land and recreation facilities at least at the level recommended by the National Recreation and Park Association (10 acres of recreation space per 1,000 people), and modify zoning and subdivision ordinances to require that parks, play lots, trails, and other recreational and open space areas are included in development plans, consistent with the Future Land Use Map.

Strategy C: The Town shall continue to develop the park space and path along the Shenandoah River.

- Strategy D: Enhance the Town Run as an environmental open space asset, to include a greenway, multi-use trail, and other amenities.
- Strategy E: Improve the landscaping and beautification of Town-maintained facilities and streetscapes.
- Strategy F: Continue to work with the Strasburg Community Library, Strasburg Museum, and other groups who provide community services that meet the needs of the Town.
- Strategy G: Update the Town's Capital Improvements Program consistent with this plan. Aggressively seek state and federal grants for capital improvements and other public projects.

GOAL #9: ENCOURAGE ACTIVE PARTICIPATION BY AND COLLABORATION WITH CITIZENS AND OFFICIALS OF SHENANDOAH COUNTY AND OTHER NEIGHBORING JURISDICTIONS IN PLANNING EFFORTS THAT WILL BENEFIT THE TOWN AND REGION.

- Strategy A: Closely coordinate with the County regarding plans for development in the study area. Collaborate with the County in updating both the Town and County comprehensive plans, and in carrying out programs and regulations to implement those plans. Formally adopt joint comprehensive planning policies for the study area, in conjunction with the County.
- Strategy B: Coordinate with the County in planning and fostering compatible land uses surrounding the Town, in harmony with these strategies and the Future Land Use Map.
- Strategy C: Work actively with regional entities such as the Northern Shenandoah Valley Regional Commission to identify planning and operational areas that could benefit from regional collaboration and partnerships.
- Strategy D: Seek out innovative ways to actively involve members of the community in specific future planning efforts, such as updating the Town's zoning and subdivision ordinances, creating corridor design guidelines, and creating plans for small areas within Town.
- Strategy E: Collaborate with property owners to proactively rezone land within the Target Areas through a Town-initiated rezoning process in order to be prepared for growth rather than react to development proposals.

APPENDIX A: POPULATION PROJECTIONS AND LAND DEMAND

POPULATION ESTIMATE

The 2010 U.S. Census established the population of Strasburg at 6,398. Using this figure as the baseline, the population for the 2050 horizon year can be estimated using an assumed rate of growth. After reviewing historical population growth data and upon the recommendation of staff, the Town Council and Planning Commission recommended using an annual rate of growth for the Plan of 1.7 percent. Based on this assumption, a population of 12,557 is estimated for 2050 (see table below).

Year	2010	2015	2020	2030	2040	2050
Population Estimate	6,398	6,961	7,573	8,963	10,609	12,557

RESIDENTIAL LAND DEMAND

The next step in establishing future land use is to use the horizon year population to estimate the amount of land to plan for residential use. Based on population figures, the number of units can be estimated assuming a population per household of 2.17 (2010 Census figure). For purposes of estimating residential land demand, the Town Council and Planning Commission recommended using an average residential density of between 3 and 3.5 dwelling units per acre (DUPA). Based on these assumptions, between 811 (based on 3.5 DUPA) and 947 (based on 3.0 DUPA) additional acres of residential land use (see tables below) should be designated in the Community Plan. The Future Land Use map shows approximately 815 acres of future residential land, which includes future land designated as mixed use.

Residential Land Demand (based on 3.0 DUPA)								
Year	2010	2015	2020	2030	2040	2050		
Population Estimate	6,398	6,961	7,573	8,963	10,609	12,557		
Total Dwelling Units	2,950	3,209	3,492	4,133	4,892	5,790		
Total Residential Land Demand (acres)	806	892	986	1,200	1,453	1,753		
New Residential Land Demand (acres)	0	86	181	394	647	947		

Residential Land Demand (based on 3.5 DUPA)								
Year	2010	2015	2020	2030	2040	2050		
Population Estimate	6,398	6,961	7,573	8,963	10,609	12,557		
Total Dwelling Units	2,950	3,209	3,492	4,133	4,892	5,790		
Total Residential Land Demand (acres)	806	880	961	1144	1361	1617		
New Residential Land Demand (acres)	0	74	155	338	555	811		

COMMERCIAL AND INDUSTRIAL LAND DEMAND

Residential land demand is used as the basis to estimate the future demand for commercial and industrial land. This is done by using an acres-perdwelling unit multiplier for commercial and industrial land. The multiplier is determined by first using the most recent employment data (2007 Virginia Employment Commission) to project the amount of land area used for each employment sector and cross-checking that number with the amount of commercial and industrial land found during land use survey (see table below). Based on the employment data, a total of 340 acres of commercial and industrial land can be expected, and this number is close to the number of acres, 341, identified as commercial and industrial in the current land use survey. Each sector is identified as being either an industrial or commercial land use (or both) and, based on the data, industrial uses make up 70 percent of the land area (239 of 340 acres) and commercial makes up 30 percent of the land area (101 of 340 acres).

Sector	Number of Establishments	Number of Employees	Building Area per Employee (sq. ft.)	Total Building Area	Floor/Area Ratio (FAR)	Total Area (acres)		
Construction (Industrial)	30	127	600	76,200	0.20	9		
Manufacturing (Industrial)	10	1,959	950	1,861,050	0.20	214		
Transportation, Communications, & Utilities (Industrial)	8	65	600	39,000	0.10	9		
Wholesale & Retail (Commercial)	30	287	750	215,250	0.10	49		
Finance, Insurance, & Real Estate (Commercial)	10	94	300	28,200	0.10	6		
Services (Commercial)	37	234	750	175,500	0.10	40		
Other (Split)	2	143	750	107,250	0.20	12		
Total	127	2,909	4,700	2,502,450		340		
			Commercial	Commercial and Industrial area per land use survey				

Using the 340 acres figure and the total number of 2010 dwelling units, a commercial and industrial demand multiplier of 0.115 is calculated (340/2010 = 0.115). Using the multiplier and the estimated number of future dwelling units, demand for commercial and industrial land can be projected. Through the 2050 planning horizon, an additional 327 acres of commercial and industrial land demand can be projected (see table below). Assuming the same mix of commercial and industrial land uses are achieved in the future as exist currently, a total of 98 acres of commercial land is projected and a total of 229 acres of industrial land is projected.

Year	2010	2015	2020	2030	2040	2050
Dwelling Units	2,950	3,209	3,492	4,133	4,892	5,790
Commercial and Industrial Land Demand (acres)	340	370	403	477	564	668
New Commercial and Industrial Land Demand (acres)	0	30	62	136	224	327
New Commercial Land Demand (30 percent of total)	0	9	19	41	67	98
New Industrial Land Demand (70 percent of total)	0	21	43	95	157	229

APPENDIX B: SWOT ANALYSIS

RESULTS OF TARGET AREA SWOT ANALYSIS

ROUTE 11/I-81 INTERCHANGE AND CORRIDOR

Strengths

- Major access point for the Town
- Represents a gateway to the Town
- Major utilities/infrastructure is in place
- Visibility from I-81 and surrounding area
- Close proximity to natural/cultural resources

Opportunities

- Change the type and appearance of future development
- Economic development and job creation
- "Present" the community first impression
- Area most likely to develop in the near future
- Undeveloped land to create greenways

Weaknesses

- Karst topography (limestone, sinkholes, caverns, etc.)
- Heavy truck traffic
- "Fast Food Alley" and "Roofscapes" highway commercial appearance
- Lack of aesthetic tie-in with rest of community
- Lack of pedestrian connectivity

Threats

- Highway commercial creep toward the Downtown area
- Traffic flow and access
- Tendency toward "strip-mall" or "fast food alley" development; difficult to change

GOLDEN TRIANGLE AREA

Strengths

- Large, undeveloped tracts of land
- Access and proximity to Route 55, Route 11, I-81, Downtown Strasburg
- Proximity to natural and cultural resources at

Weaknesses

- Karst topography (limestone, sinkholes, caverns, etc.)
- Some plans for development have already been approved

Hupp's Hill Civil War Park

Availability of utilities and infrastructure

Opportunities

- Land mostly undeveloped; opportunity to influence future look of area
- Recreational and residential opportunities
- Preserve trees and other natural resources
- Large cohesive development

Little existing vehicle/pedestrian connectivity inside the triangle

Threats

- Commercial and industrial creep from Route 11 and the Industrial Park
- Past tendency toward "strip-mall" development along corridors
- Liability associated with recreational uses

INDUSTRIAL PARK/ROUTE 55 CORRIDOR

Strengths

- Existing Industrial Park allows for concentrated industrial/business uses
- Proximity to I-81 interchanges at Route 55 and Route 11
- Availability of utilities and infrastructure
- Rail access
- Existing established business uses in the **Industrial Park**

Opportunities

- Entrance corridor presentation to Strasburg
- Flexibility of space; plenty of land in which to grow
- Preservation of rural residential uses and character

Weaknesses

- Electrical and gas transmission corridors
- Heavy truck traffic
- Land mass separated by I-81
- No existing road connecting Route 55 and Route 11
- Potential for placement of truck stop

Threats

- External competition for commercial and industrial development
- Over-development could lead to excessive truck traffic that takes away from desired character
- Lack of current access to commercial and industrial pad sites

DOWNTOWN HISTORIC DISTRICT

Strengths

Compact, walkable, and pedestrian friendly

Weaknesses

Perceived or real lack of parking

- Natural resources such as Town Run and mature trees
- Pedestrian scale of buildings
- Distinctive architectural, cultural, and historical setting
- Unique businesses

Opportunities

- Brand and market the Town based on its historic downtown
- Create a Strasburg niche
- Construct trail along Town Run and connect to other trails such as the Riverwalk
- Create civic spaces
- Wireless infrastructure
- Rail connection
- Facilitate economic development

- Heavy traffic count on Route 11
- Lack of unified signage
- Condition of sidewalks and crosswalks/ramps
- Lack of business base and mix; underutilized physical assets (buildings)
- Pigeons!
- Business hours no night life
- Lack of gathering places
- Aging infrastructure
- Mostly professional offices little retail
- Condition of buildings

Threats

- Vacancy
- Property maintenance and neglect
- Competition from commercial development outside downtown
- Unattractive nodes and entrances
- Distance from interstate

APPENDIX C: URBAN DEVELOPMENT AREA

URBAN DEVELOPMENT AREA (UDA) SUPPLEMENTAL INFORMATION

UDA DEFINITIONS AND STATEMENTS

- Urban development areas are areas that may be appropriate for development at a density on the developable acreage of at least four singlefamily residences, six townhouses, or 12 apartments, condominium units, or cooperative units per acre, and an authorized floor area ratio of at least 0.4 per acre for commercial development, any proportional combination thereof, or any other combination or arrangement that is adopted by a locality in meeting the intent of Virginia Code Section § 15.2-2223.1
- The urban development areas designated by a locality may be sufficient to meet projected residential and commercial growth in the locality for an ensuing period of at least 10 but not more than 20 years, which may include phasing of development within the urban development areas.
- The boundaries and size of each urban development area shall be reexamined and, if necessary, revised every five years in conjunction with the review of the comprehensive plan and in accordance with the most recent available population growth estimates and projections.
- The boundaries of each urban development area shall be identified in the locality's comprehensive plan and shall be shown on future land use maps contained in such comprehensive plan.
- Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include but need not be limited to (i) pedestrian-friendly road design, (ii) interconnection of new local streets with existing local streets and roads, (iii) connectivity of road and pedestrian networks, (iv) preservation of natural areas, (v) mixed-use neighborhoods, including mixed housing types, with affordable housing to meet the projected family income distributions of future residential growth, (vi) reduction of front and side yard building setbacks, and (vii) reduction of subdivision street widths and turning radii at subdivision street intersections.
- The comprehensive plan shall describe any financial and other incentives for development in the urban development areas.
- A portion of one or more urban development areas may be designated as a receiving area for any transfer of development rights as part of an ongoing effort to promote economic development and promote the coordination between transportation and land use planning, the Virginia General Assembly has continued to support programs and policies within its transportation agencies that promote Urban Development Areas (UDAs).
- Through legislation, the General Assembly has directed that transportation improvements to support UDAs be considered in both the needs assessment contained in the long range plan known as VTrans, as well as be considered in the HB2 statewide prioritization process for project selection. VTrans focuses on a multifaceted strategy that recognizes the importance of the Corridors of Statewide Significance, Regional Networks, and Urban Development Areas to help maximize the Commonwealth's public transportation investments.

TRADITIONAL NEIGHBORHOOD DESIGN

Traditional Neighborhood Development embodies classic characteristics of traditional communities such as:

- A. Walkable neighborhood centers
- Interconnected streets and blocks
- Diversity of land uses
- D. Easy access to jobs, housing and recreation by a variety of travel options (auto, bus, walk, bike, etc.)
- E. Traditional Neighborhood Development (as defined by language from The Town Paper, a news publication focused on New Urbanism. The text below is co-written by Diane Dorney and Claire Fleischer)
 - a) The acronym TND stands for Traditional Neighborhood Development, a comprehensive planning system that includes a variety of housing types and land uses in a defined area. The variety of uses permits educational facilities, civic buildings and commercial establishments to be located within walking distance of private homes. A TND is served by a network of paths, streets and lanes suitable for pedestrians as well as vehicles. This provides residents the option of walking, biking or driving to places within their neighborhood. Present and future modes of transit are also considered during the planning stages.
 - b) Public and private spaces have equal importance, creating a balanced community that serves a wide range of home and business owners. The inclusion of civic buildings and civic space -- in the form of plazas, greens, parks and squares -- enhances community identity and value.

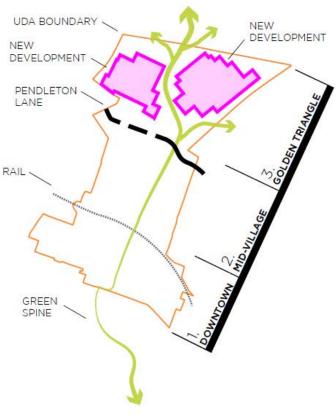
UDA BOUNDARY AND CONTEXT

Within the Town of Strasburg, the UDA encompasses a concentrated land area running north centered along Town Run. This area includes the northern side of Queen Street within Downtown and spans north to the southern edge of Hupp's Hill and the Bernstein property.

In the west, the boundary stretches from Capon Street in the west to Lee Street in the east. In total, the UDA area encompasses about 245 acres or .4 square miles. This boundary contains three focus areas: Downtown, Mid-Village, and Golden Triangle. Just north of the northern UDA boundary is Quarry Lake. Just south of the UDA is the North Fork of the Shenandoah River.

STRASBURG UDA CONTEXT & CHARACTER AREAS





RHODESIDE & HARWELL

UDA URBAN DESIGN FRAMEWORK

The UDA Urban Design Framework consists of the following:

- Establish a Green Spine along Town Run, which unites Quarry Lake, Golden Triangle, Mid-Village, Downtown and the North Fork of the Shenandoah.
 - Town run, which runs north to south through the UDA, pick up significant flow from Hupps Spring and flows through town into the North Fork of the Shenandoah. This environmental entity is conveniently located as to provide a central connection to the UDA's three focus areas and neighborhoods. This is a great asset to the town and should be further built upon as a central green artery.
- II. Use the Green Spine as a foundation for new and infill development, preserving open space for active and passive recreation.
 - The Green Spine, a central green artery for Strasburg, should be preserved and supported for active/passive recreation as well as a green buffer between Town Run and surrounding existing and future development. New development, which should be primarily oriented to an extended street grid, should also be signed to support the Green Spine. Paved pathways that can accommodate bikers, pedestrians and other types of active transportation should be constructed within the Green Spine. New paths should be designed to connect existing and future development. This UDA plan does not specifically designate where new shared-use paths should run within the Green Spine.
- III. Extend Mineral Street as a parallel, local vehicular route to Route 11.
 - Currently, Route 11 is the only vehicular path that fully unites all three UDA focus areas. While this UDA calls for many small connections within its boundary, Mineral Street has been designated as a priority connection that should be extended (in full) from Downtown at East Washington Street to the Bernstein property at the UDA's northern edge. While Mineral Street should be a consistent vehicular connection, the roadway's character should be flexibly designed to support each focus area's character.
- IV. Extend the Downtown/Mid-Village street grid through small street connections within downtown.
 - Using the pre-existing grid, Mineral Street, the Green Spine, and topography as a guide, Strasburg's historic street grid should be extended north into the Golden triangle to further unite new development with existing development. As new development occurs, extended streets should be designed to TND standards and proportions. Such design principles will match and complement the street proportions of streets in Downtown and Mid-Village. While private development will likely construct the road extensions into the Golden Triangle, the Town should take an active role in making new street grid connections within pre-existing neighborhoods. Infill streets should be "complete" where appropriate and provide more opportunities for pedestrian connections.
- Focus Downtown around the CDBG Event Space. ٧.
 - Infill development within Downtown should be designed to support and compliment surrounding buildings while also maintaining a focus around the new Event Space. This should allow for a critical mass of users while also providing Downtown with a clear heart and identity, in keeping with the Historic District Guidelines.
- VI. Develop vacant, pre-existing parcels in Downtown and Mid-Village to fill urban fabric gaps.

Complete pedestrian infrastructure that does not exclusively encourage people to walk. Studies suggest that people are more likely to walk when their walking path is well defined by uniform street tree planting and consistent, activated building facades. People are less likely to walk when there are holes in the urban fabric. Strasburg should actively promote infill TND development on various opportunity parcels within Downtown. Doing so could help to increase walkability, create a critical mass, and support economic vitality.

VII. Preserve Mature Neighborhoods

Strasburg houses numerous healthy residential neighborhoods within the UDA. While this UDA encourages infill development, added development should only be compatible with its surrounding built environment. Appropriate infill development as well as connected, "complete", green infrastructure can strengthen future neighborhood vitality.

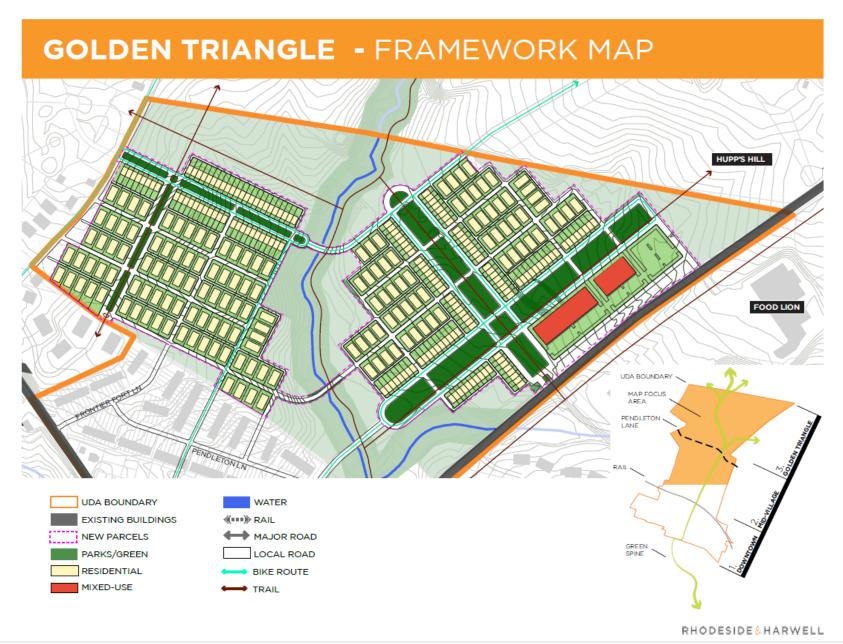
DOWNTOWN FOCUS AREA



RHODESIDE&HARWELL

MID-VILLAGE - FRAMEWORK MAP





UDA FOCUS AREA VISIONS

A. Downtown

- a. The Downtown Focus Area consists of the southern-most portion of the UDA area and contains all areas immediately south of the Town's Norfolk Southern railway. All properties within this focus area are also situated within the Strasburg Historic District and are regulated by a specific list of design guidelines.
- b. To support the goals of Strasburg's historic district, this UDA focus area promotes an infill development strategy that supports and strengthens the heritage of this area's built environment. Infill development will be designed to TND standards, which promotes flexible uses and added residents. This in turn will help support a critical mass to support the Downtown's small businesses.
- c. Complete infill development tied to a "complete" street grid can promote more walking and biking in Downtown. More pedestrians and bikers will create more patronage and demand for existing and future local businesses.
- d. All infill development and adaptively reused buildings should be focused around the Green Spine and new Event Space. Doing so will unify the Downtown and establish a clearer identity.

B. Mid-Village

- a. The Mid-Village Focus Area for the purposes of this UDA is defined by a series of undeveloped, connected parcels north of Route 55, south of Pendleton Lane, and west of the extended Mineral Street/Green Spine. In total, Mid-Village contains 25 developable parcels.
- b. When Strasburg was first platted, it was the intention of its founders that Mid-Village would be developed with a defined street grid and building stock that matches the area south of Route 55. The UDA plan for Mid-Village proposes to fulfill that plan's goals.
- c. Mid-Village's 25 parcels should be strategically designed to match the village fabric south of Route 55. Development here should be designed as cottage or small-scale housing. New buildings here should utilize Strasburg's historic design traditions, maintain narrow setbacks, include front porches, and be mindful of building materiality. Ideally, new housing in this Focus Area should include rear alleys and avoid front-loaded driveways and/or garages. In compliance with the Town's UDO, all new streets should have sidewalks. Bicycle infrastructure should be included where appropriate.
- d. Developing Mid-Village using the methodology expressed above will successfully extend Strasburg north into the Golden Triangle while complementing the design strategies of the Green Spine.

C. Golden Triangle

- a. While the Town's Comprehensive Plan refers to the Golden Triangle as the land area north of Routes 55 and 11, for the purposes of the UDA, the Golden Triangle only includes the previous Cedar Valley development property. In total, the Golden Triangle is 79 acres.
- b. The design for this Focus Area is to create a new neighborhood north of Downtown that could achieve the following:
 - i. Extend the historic street grid (with complete streets) north
 - ii. Accommodate most of the town's ten year projected population growth

- iii. Design a neighborhood configuration of at least 244 residential units (Cedar Valley's previously approved number of residential units)
- iv. Design a TND inspired community footprint (at least 4 du/acre)
 - 1. A community that includes a mix of uses and housing types.
- v. Cluster parcels and building footprints to promote walkability and well-defined community parks.
- vi. Design a neighborhood that is well integrated with the Green Spine.
- c. The new Golden Triangle development is built on a new street grid that resolves the conflicting geometries of Strasburg's historic street grid with that of Route 11, the Green Spine, and existing utility lines. This grid includes the extension of Mineral Street, east-west connections between Route 11 and Colley Block Road, dedicated Green Spine right-of-way, central open spaces, and 11 new street connections to existing and future roadways. This is in no way intended to create an urban beltway or bypass.
- d. This development plan adds 57 new residential units to Cedar Valley's 244, a total of 301 residential units. New commercial areas within Golden Triangle are focused along Route 11. These areas attempt to mediate suburban style retail configurations with that of a village. Therefore, parking is situated along Route 11, while linear storefronts line its eastern edge with Mineral Street.
- e. Additional development figures:
 - i. All new developed parcels account for 38.9 acres
 - ii. New building footprints account for 11.0 acres
 - iii. Total developed areas (including new streets) account for 57.2 acres
 - iv. Overall development accounts for 72.4% of the Cedar Valley parcel with a residential density of 4 dwelling units per acre
 - v. The preserved, Green Spine area accounts for 27.6% of the Cedar Valley parcel or 21.8 acres.
- f. In designing new development within the Golden Triangle Focus Area, 17 new "historic Strasburg" blocks are created. These blocks include the following characteristics:
 - i. Rear alleys
 - ii. Narrow setbacks
 - iii. 5-6 foot sidewalks
 - iv. 30 foot wide collector streets with 50 foot or 100 foot wide central greens
 - 1. On-street parking on both sides of the street
 - v. 20 foot wide local streets
 - 1. On-street parking on one side of the street
 - vi. 30 foot on center street trees along all streets (except alleys)
 - 1. Street trees should be planted (ideally) within a 5-6 foot landscaped strip between the roadway and sidewalk.
 - vii. 10 foot wide alleys
 - viii. Row houses with elevated front stoops or porches
 - ix. Single family houses with elevated front porches

D. Green Spine

- a. The Green Spine is designed to run from Quarry Lake within the Bernstein property through the entire UDA to the North Forth River.
- b. The Spine is designed to do the following:
 - i. Mitigate flooding
 - ii. Preserve green buffers for Town Run
 - iii. Provide opportunities for active and passive recreation
 - iv. Provide a dedicated shared-use path, which runs parallel to Route 11 and could connect with Route 11's planned shared-use path
 - v. Provide bike/ped connections to the new Town Run Park
 - vi. Allow trail access to the future North Fork riverwalk