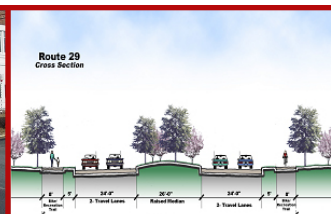




Lovington Safety Study

Thomas Jefferson Planning District Commission

A Virginia Department of Transportation study conducted by:



The Thomas Jefferson Planning District Commission wishes to thank the citizens and staff of Nelson County for their valuable contributions to this Study. The Planning District's Rural Transportation Technical Committee (comprised of local planning staff, JAUNT, VDOT, and RideShare staff) has assisted throughout in the preparation of this Study. Consultants Draper Aden Associates and Alternate Street Design collaborated with Planning District staff to identify and develop key transportation elements of this Study. Land Planning & Design Associates coordinated this Study with the master planning process. The Virginia Department of Transportation's Rural Transportation Planning Grant program made this Study possible.

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Acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvement, nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

Lovingston Safety Study

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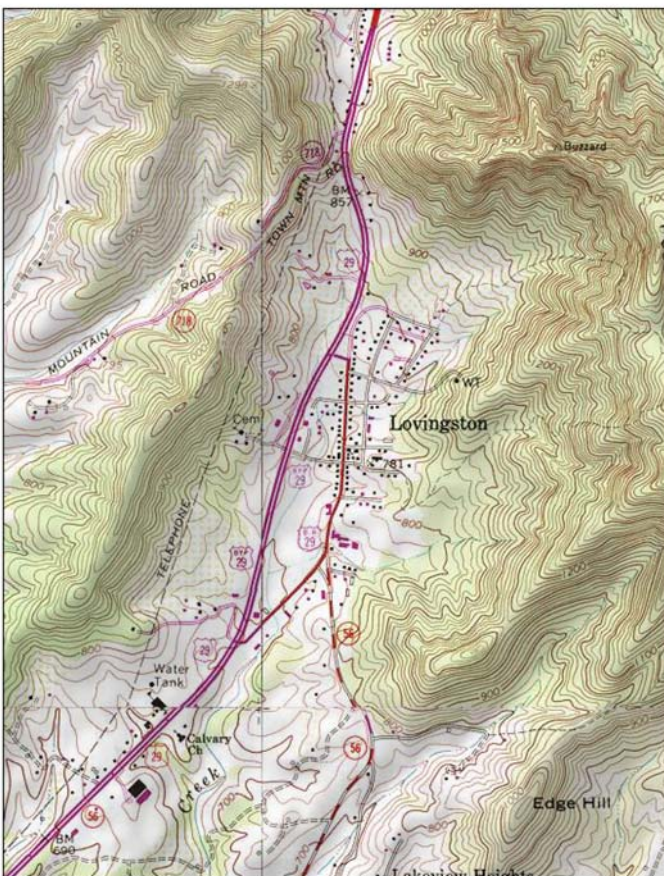
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Executive Summary

Historic Lovington Village lies at the heart of Nelson County, at the intersection of US Route 29 and State Route 56. It is the county seat, and although not incorporated as a town, is the activity center for the County. Route 29, which used to serve as Lovington's main street, is now a four-lane bypass. The courthouse and Front and Main streets are contained within the historically developed area on the eastern side of Route 29. New growth, primarily commercial strip development is occurring south of 56 and on the western side of Route 29, across from Lovington. Development across these major roadways is leading to safety and mobility problems for people attempting to access new stores and services. The public, County leaders, and VDOT have made it a priority to develop potential solutions for the increasing pressure on Lovington roads.

The purpose of this plan is to enhance the small town, pedestrian-oriented character of historic Lovington and to achieve a safer, more efficient connection between historic Lovington and the growth occurring on the western side of Route 29. This Study is designed to achieve a balanced, multi-modal system that allows pedestrians, bicyclists, and drivers to safely travel in the greater Lovington area while maintaining and improving the capacity of Route 29 for regional through traffic.



The study area for this project includes both historic Lovington and the western side of Route 29. The northern boundary is the interchange of Route 29 and Business Route 29, and the southern boundary is Route 29 at the Nelson Community Center and Library complex. The mountains define the eastern and western edges of the study area.

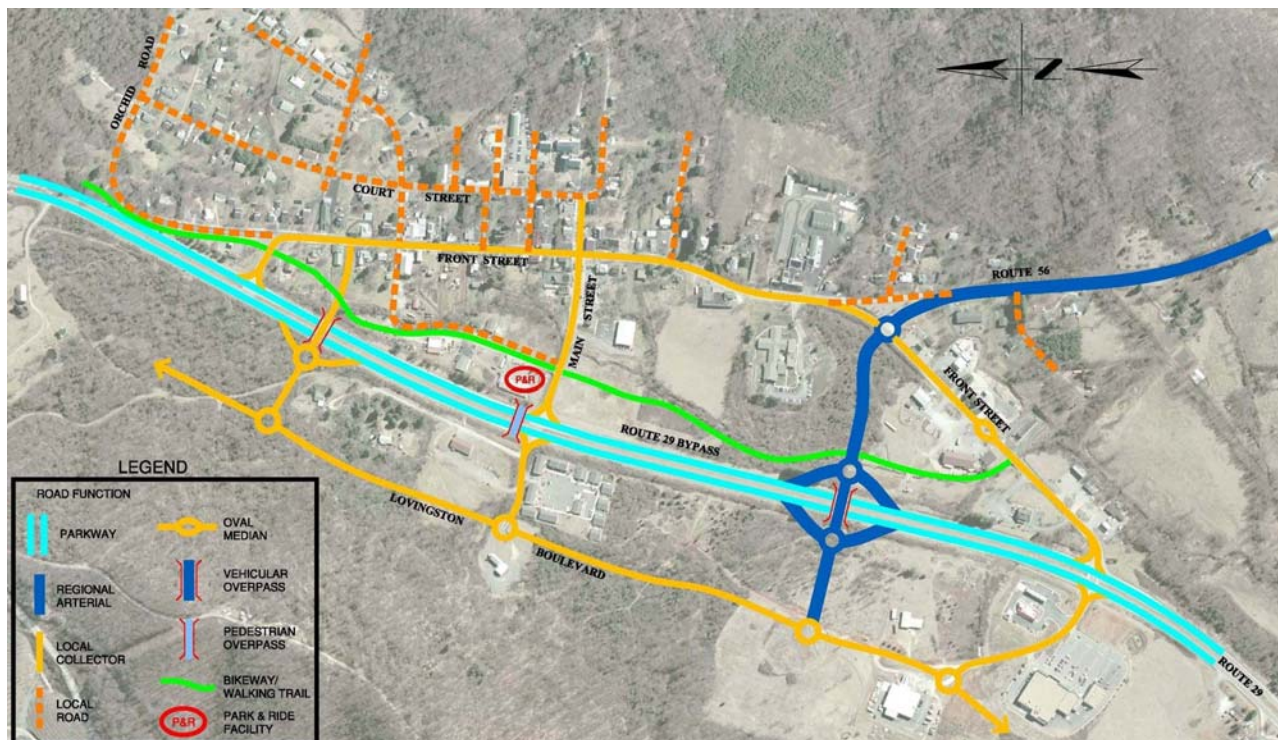


The success of this Study is the result of significant input from Nelson County citizens, business owners and staff, VDOT, and consultants with expertise in transportation engineering. The Study is consistent with and reinforces the County’s master planning efforts for historic Lovingson. The Study focuses on two main goals:

- **Maintain and enhance the historic, small town pedestrian-oriented character of Lovingson** and;
- **Provide a safe and efficient connection between the two sides of Route 29** to alleviate the safety problems for drivers, pedestrians, and bicyclists.

The key transportation recommendations designed to achieve these goals include:

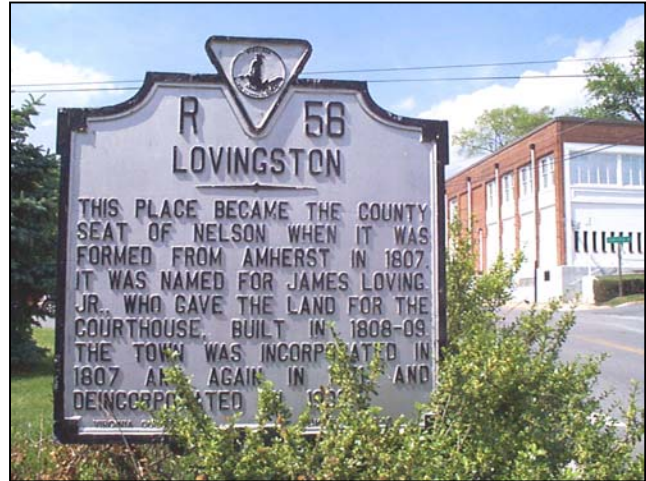
- Achieve the goal of the VDOT “Route 29 Corridor Development Study” to upgrade Route 29 to restricted access;
- Enhance the access between both sides of Route 29;
- Extend Route 56 from its current Front Street connection west to a new interchange with Route 29;
- Reinforce the traditional grid street network of historic Lovingson.
- Extend Front Street south to Route 29;
- Establish a two-lane roadway parallel to Route 29 on the western side of Lovingson; and
- Enhance Lovingson as a walkable community with sidewalk upgrades in historic Lovingson, bulbouts and pedestrian crosswalks at key intersections, streetscape enhancements, and a pedestrian and bike trail along the east side of Route 29.



The key transportation recommendations are expressed in the Lovingson Transportation Master Plan.

Summary of Recommendations

The transportation recommendations of this Study will become a part of the overall master plan for Lovington and will **enhance safety and efficiency for vehicles, pedestrians, and bicyclists in the study area.** These recommendations resulted from a collaborative planning effort that included the Thomas Jefferson Planning District Commission, Nelson County citizens, business owners, and staff, VDOT, study consultants Draper Aden Associates, Alternate Street Design, along with the firm of Land Planning & Design Associates, who are preparing the Lovington Master Plan.

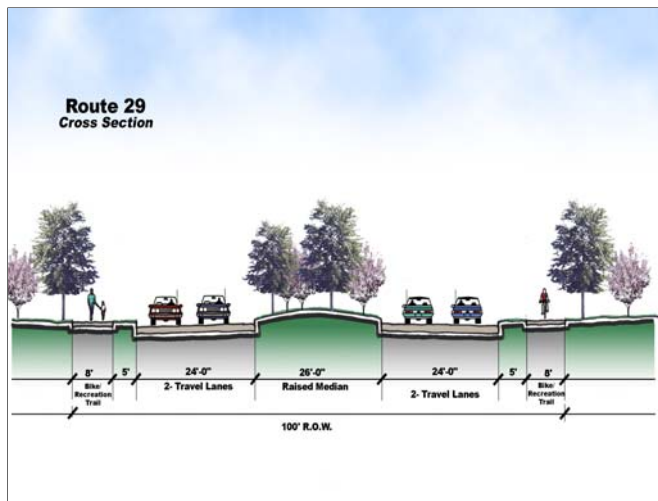


These transportation recommendations will fulfill **two primary goals**:

1. **Maintain and enhance the historic, small town pedestrian-oriented character of Lovington and;**
2. **Provide a safe and efficient connection between the two sides of Route 29 to alleviate the safety problems for drivers, pedestrians, and bicyclists.**

The **key transportation recommendations** designed to achieve these goals include:

1. **Achieve the goal of the VDOT “Route 29 Corridor Development Study” to upgrade Route 29 to a restricted access parkway** by upgrading existing turning lanes from Route 29 to local streets, eliminating median breaks (the ability to make left turns to and from Route 29), and providing landscaping consistent with a parkway and small town.



VDOT Parkway Design

2. **Enhance the access between both sides of Route 29** by constructing several grade-separated facilities that will offer greater roadway capacity and safer connections.
3. **Extend Route 56 from its current Front Street connection west to a new interchange with Route 29** that will continue westward to provide primary access to the future growth areas of western Lovington. This will achieve better access between Routes 56 and 29, better access

between historic Lovington and Route 29, and more controlled growth in western Lovington.

4. **Reinforce the traditional gridded street network of historic Lovington** in order to better achieve the County goals of economic development and downtown revitalization. Recommended improvements include traffic calming features and streetscape enhancements.
5. **Extend Front Street south to Route 29** consistent with the downtown pedestrian-oriented feel of existing Front Street and create a gateway to historic Lovington. Expand the traditional gridded street pattern to accommodate future development.
6. **Establish a two-lane roadway parallel to Route 29 on the western side of Lovington.** This will enhance access to and from Route 29 and support internal circulation through a grid system of roads consistent with historic Lovington.
7. **Enhance Lovington as a walkable community** with sidewalk upgrades in historic Lovington and a pedestrian and bike trail along the east side of Route 29 that will eventually connect with a proposed Route 29 corridor trail.

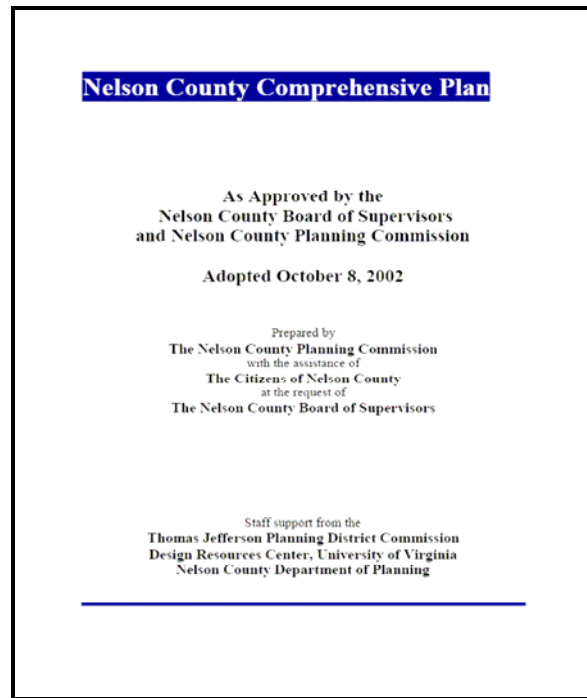
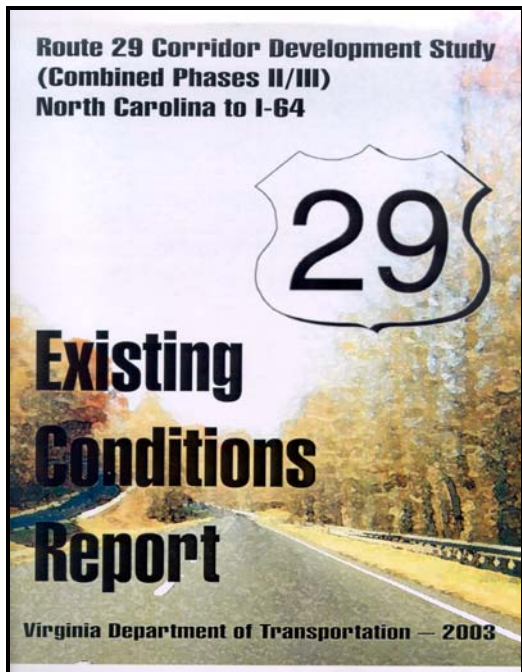


Front Street is both the County's major historic commercial business district and a delightful main street focus for area residents.

Planning Process

The Lovingston Safety Study is a joint effort of the Thomas Jefferson Planning District Commission, the Virginia Department of Transportation (VDOT) and Nelson County. Assistance with specific transportation recommendations and the implementation plan was provided by Draper Aden Associates and Alternate Street Design, P.A.. Land Planning & Design Associates is developing a Master Plan for Lovingston as part of the Lovingston Revitalization Project supported through the Virginia Department of Housing and Community Development's Community Development Block Grant program. This Lovingston Safety Study will serve as the Master Plan's transportation element. The list of prioritized short-term transportation projects will be further refined in the master planning process to fit with overall master plan priorities. The revitalization project emphasizes Economic Development, Downtown Revitalization (Main Street Program), and Historical District Designation. The public workshops also included information and discussion with consultants about the Courthouse Square project and expansion of existing County facilities being conducted by Wiley & Wilson. The efficient planning process emphasized coordination and consistency among all the different agencies, projects, and funders.

The planning process began with the research and analysis of existing and planned conditions. Transportation conditions were assessed based on traffic volumes, traffic patterns, accident data and speed samples. Existing land use, demographic and economic conditions were gauged based on Nelson County land use maps, the Nelson County Comprehensive Plan, as well as census and economic data. Several existing plans and reports were consulted for consistency and relevance to the Safety Study. These plans include the Comprehensive Plan, VDOT's 6-year program, and the Route 29 Corridor Development Study. Excerpts of the existing and planned conditions are included in Appendix D.



Assessing the existing and planned conditions included a review of prior plans and studies.

Following the research and analysis period, Nelson County citizens and business owners, TJPDC staff, Nelson County officials, and the consultant teams gathered for a series of two intensive workshops. The site-specific knowledge brought to the planning process by long-term residents and business owners—coupled with technical knowledge of consultants and agency staff—have produced a practical set of recommendations.



Prior to breaking into small groups, participants at the May 31 meeting were briefed on the progress of the study by the project team.

The first public workshop occurred on November 18, 2004. At this session, participants gathered around tables to identify the needs and issues from the residents' perspective. TJPDC staff assessed these issues and generated statistical data in preparation for a more technical workshop on May 31, 2005 and June 1, 2005. The two-day event featured a walking tour of Lovington with the project team and local officials and residents. On the evening of May 31, TJPDC staff and the consulting team hosted a workshop for local residents to discuss pertinent issues and possible solutions. More than 36 individuals attended this event. The following day, the Study team reviewed the results of the workshop and began the process of defining specific transportation needs and methods for addressing these needs. Citizens were invited to meet with the project team on both the 31st and 1st to offer any additional comments.



The two-day workshop included technical meetings with the project team and a walking tour of Lovington.

Workshop Results

Participants in small groups at the two public workshops identified a series of priority issues for the Lovingson area. These issues are summarized under the headings of Transportation, Town Character and Livable Streets, and Parks and Recreation.

Transportation

Transportation concerns included general and specific safety problems for the area adjacent to Route 29 as well as the need for more defined pedestrian and bicycle facilities. Specific comments included:

- Creating safer intersections (especially 29/1001 and 29/Callohill) without stoplights and reducing the amount of truck traffic through the core of Lovingson
- Extending turn lanes and deceleration lanes on Route 29 while improving pedestrian crossings
- Developing parallel side roads west of Route 29 with eventual access to the high school
- Implementing bike routes, both on road and separated trails, that are tied to parks
- Working with VDOT to include all Lovingson streets in the VDOT road system
- Improving the connection between the east and west sides of Route 29
- Completing the pedestrian network in the village in keeping with the existing small-town character



Citizens carefully study map of Lovingson.



A small group presents their map and ideas to the full group.

Town Character and Livable Streets

Several comments focused on the need to establish, promote and maintain the town/village character of Lovingson. Observations ranged from fostering street life to maintaining the historic assets that make Lovingson a unique and enjoyable area. These comments included:

- Keeping the courthouse complex and enhancing it as a central feature for the village
- Restoring and/or renovating key historic buildings
- Increasing the diversity of activity in the village
- Encouraging affordable housing infill developments (medium income and minimum wage rentals)
- Creating livable streets by improving building facades and streetscapes, ensuring quality pedestrian amenities, and reducing traffic speed in the core area
- Permitting higher density west of Route 29 south of Lovington Ridge Apartments and lower density north of the apartments
- Improving signage style, location, and visibility to enhance safety and town character

Parks and Recreation

Several comments conveyed the importance of establishing parks and recreation amenities and protecting the rural character of the countryside surrounding the Lovington area. Particular comments included:

- Creating park and recreation opportunities, including those that cater to children and senior citizens
- Protecting the wooded area behind Lovington from new development
- Creating a greenway system throughout the village with pathways connecting parks to residential areas
- Establishing a park in the northeast of the Route 29 and Main Street intersection
- Constructing a ball park between the Dollar General and Lovington Health Care Center

Other issues discussed included improving regional bus service to Richmond, Charlottesville and Wintergreen, improving Park & Ride facilities, connecting the village with the Nelson Center and Nelson County High School, and creating a central gathering place for the citizens of Lovington.



Active citizen participation at the May 31, 2005 workshop.

Transportation Recommendations

These transportation recommendations presented here are the result of efforts to date in a variety of specific areas:

1. These recommendations will be part of a larger, on-going, master plan that includes land use, economic development, recreation, and neighborhood livability. This plan should enhance and reinforce the key elements of the larger study.
2. Considerable data collection and analysis of existing conditions—traffic volumes, street inventory, roadway classification, etc.—have been gathered and summarized in Appendix D.
3. Public input has been obtained for the larger study and, more specifically, at a workshop focused specifically on transportation needs. Results of this assessment provide a key component of the plan [Appendices A and B].
4. Data collection and analysis, public input, and land use and development goals and objectives developed to date were utilized in a subsequent work session to develop a coordinated plan. Participants in that work session included representatives of the Thomas Jefferson Planning District Commission, Virginia Department of Transportation, Nelson County, and the study consultants comprised of Draper Aden Associates, Alternate Street Design (Michael Wallwork), and Land Planning & Design Associates.

This collaborative planning effort resulted in a transportation master plan, which establishes an overall transportation approach, or concept, for the Lovingston area. The Lovingston area, in turn, is divided into five functional and geographical areas, which are presented in greater detail. Finally, a suggested priority plan for all specific recommendations is presented. Priority is set forth essentially in short-term or long-range terms.



Key intersection connecting east and west Study Area, showing conflicts of turning movements.

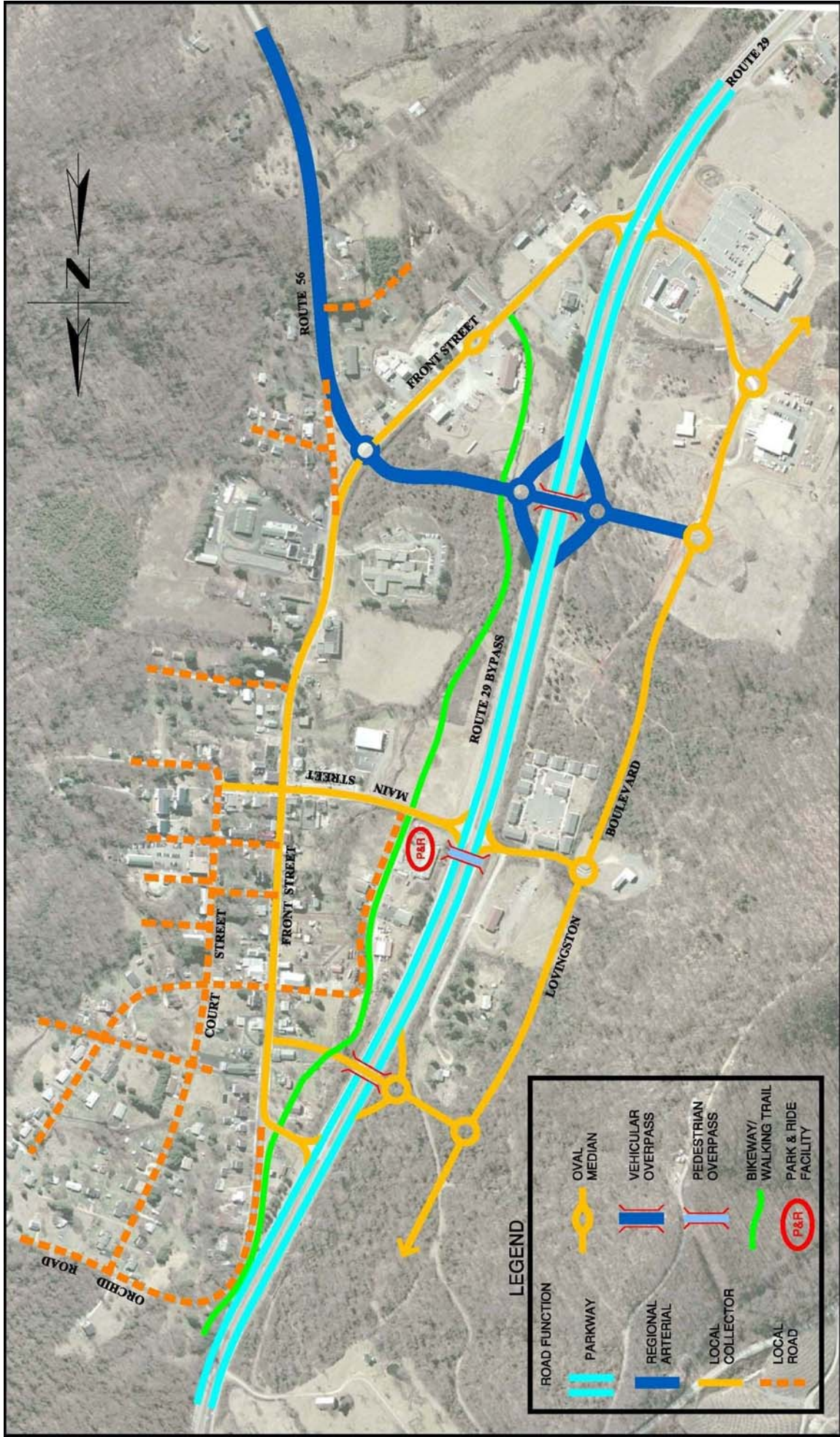
Transportation Master Plan

The Transportation Master Plan, in concept form, is presented in **Figure 1**. Several key conditions, or objectives, are reflected in the plan:

1. A primary goal for Lovingston is to maintain the village, pedestrian oriented, small-town feel of the older, historic area and its unique features such as older buildings, narrow streets and sidewalks, and a traditional downtown street grid pattern. Further, it is important to minimize the Route 56 cut-through and truck traffic, which travels through the village area, without restricting or eliminating convenient automobile access.
2. Although Route 29 is a vital regional corridor serving Lovingston, it also is a major barrier between the historic village area (east) of Lovingston and the newer developing areas on the west side. Part of the barrier effect is the safety concern for drivers, pedestrians, and bikers crossing between the two sides of Lovingston as determined by data and engineering analyses and significant public input.
3. Future development likely will occur primarily on the west side of Lovingston, but there is no specific plan for guiding the orderly development of this area.

These circumstances provide the framework for the key elements of the transportation master plan as highlighted below:

1. The regional goal of upgrading Route 29 to a restricted access parkway, as presented in VDOT's "Route 29 Corridor Development Study," is endorsed and included in the recommendations. This includes the upgrading of existing turning lanes from Route 29 onto local streets, the elimination of all median breaks—the ability to make left turns to and from Route 29—and landscaping more consistent with a parkway and town/urban environment versus rural highway. The overpass should be of high quality design with attractive finishes and include bikeways and sidewalks.
2. The plan also addresses the barrier effect concern of Route 29 by enhancing access between both sides of Route 29 as well as access on and off Route 29 to the local street network. Short-term strategies for improving access include regrading medians to provide a smoother, safer transition between local streets and Route 29. In the long-range plan, improved access is accomplished by the provision of one or more grade-separated interchanges, which will provide more convenient, greater roadway capacity, and safer connections.
3. Route 56 should be extended from its current Front Street connection west to a new interchange with Route 29, and then continue to provide primary access to the future growth areas of western Lovingston. This will have the benefit of improving the connection between Route 56 and Route 29, providing better access between Route 29 and the historic Lovingston area, and permitting better managed growth of the undeveloped western areas of Lovingston.
4. The gridded street network in historic Lovingston will remain essentially in its current form in terms of function, but will be enhanced to support revitalization and small town ambiance. Specifically, much of Front Street will be upgraded with traffic calming features and streetscape enhancements including expanded tree plantings. There will be similar improvements at other locations in the historic area.



MASTER PLAN
 LOVINGSTON TRANSPORTATION SAFETY STUDY
 NELSON COUNTY, VIRGINIA

FIGURE 1

5. The downtown, pedestrian-oriented, sense of Front Street will be extended south to Route 29 via Business Route 29, which has a rural type road section (wide road, edge of pavement). This roadway section is proposed to be upgraded with curb and gutter, sidewalks, tree plantings, and an “oval median” to provide for gateway and speed control enhancements.
6. A key feature in directing the form of future development in Lovington is the establishment of “Lovington Boulevard”. This two-lane facility would run parallel to and west of Route 29 and provide the basis for development in the surrounding areas. This road would assist in internal circulation as well as access to and from Route 29, and also establish a grid road system, similar to the historic Lovington area. The intent is that Lovington Boulevard would evolve as development occurs, and gradually be built by the developers. To the south, Lovington Boulevard should connect to the library and the Nelson Center complex and, more immediately, the well-used driveway connection between the library and the Nelson Center should be formalized.
7. The encouragement of Lovington as a “walkable community” is further reinforced with the establishment of a pedestrian and bike trail, winding along the east side of Route 29 within Lovington. The intent of this facility is to connect with a proposed Route 29 corridor trail, as well as to provide increased recreational facilities serving Lovington residents.

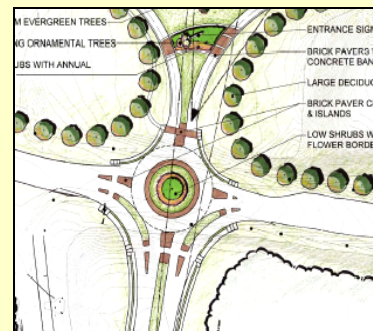
Roundabouts

Modern roundabouts are an alternative to traffic signals at arterial intersections. Unlike conventional signalized intersections, which tend to speed traffic up at the most critical locations, roundabouts slow traffic down as they approach and pass through the intersection. Due to the lower speeds, they reduce crashes 50-90% and handle 30% more traffic at intersections previously controlled with traffic signals or stop signs. They improve the efficiency of all forms of traffic, increase safety, create terminating vistas, and add to green space. Designed correctly, roundabouts provide a safe atmosphere for pedestrians and bicyclists. Splitter islands and marked crosswalks form a network for pedestrian travel that is separate from motorized traffic, while bicyclists benefit from the slower speed and constant movement. As well, roundabouts create a sense of place and can act as an entry to a particular neighborhood or district.

In Lovington, roundabouts provide traffic solutions at several key intersections, most notably at the intersection of Route 56 and Business Route 29. By slowing vehicles and alerting motorists of a change in surroundings, they could provide an attractive and functional gateway into the downtown area. Also, roundabouts play a key role in managing traffic flow at the planned grade-separated interchanges with Route 29. The transportation master plan includes roundabouts at the following locations:

- Ridge Lane and Lovington Boulevard
- Route 56 Extension and Lovington Boulevard
- Callohill Drive and Lovington Boulevard

(See more details on roundabout benefits in Appendix C.)



A well-designed roundabout will improve both safety and efficiency.

Area Recommendations

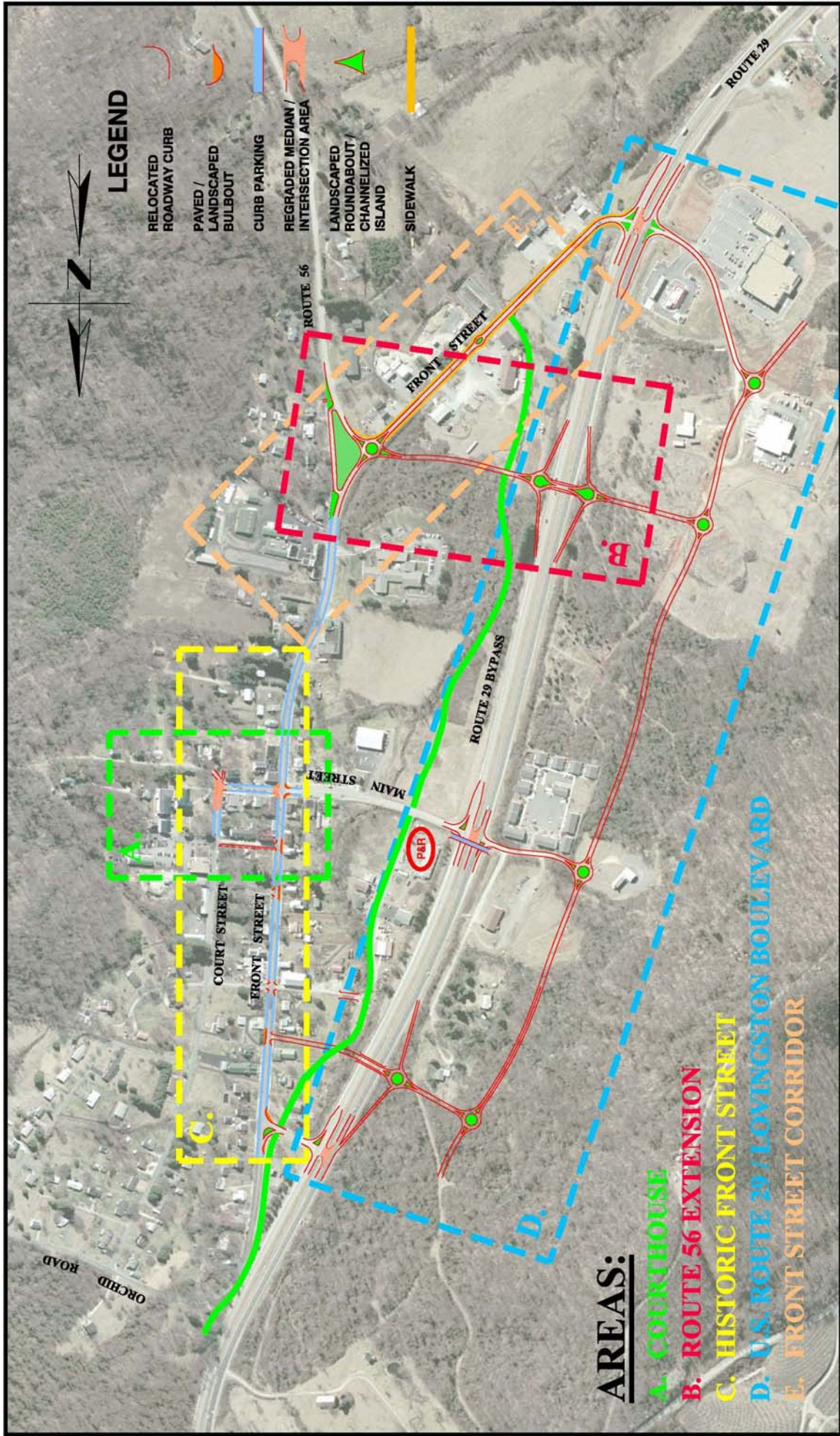
Specific recommendations for five areas within Lovingson are presented below. **Figure 2** identifies each of these areas.

Area A—Courthouse (Figure 3)—The Nelson County Courthouse area has served as a focal point for Lovingson as well as Nelson County. Current plans provide for major renovation of the complex, reinforcing its continued importance for the Town and area.



Historic Courthouse

Figure 3 describes specific transportation recommendations in the Courthouse area that will complement the continued importance of this area. Currently, the intersection of Front and Main Streets serves as the gateway to the Courthouse area. A significant upgrading of this intersection is proposed, in order to enhance access to the courthouse area as well as reinforce the Front Street plan, to be discussed later. Intersection curb extensions or “bulbouts” are proposed for each of the four corners. These serve the dual purpose of reinforcing vehicular travel movements through the intersection, while enhancing the pedestrian priority versus the automobile, that is, the bulbouts enable sidewalk area to be expanded and paved area of pedestrian/vehicle conflicts reduced. They also shorten the crossing distance for pedestrians. The other improvement to this intersection is the re-grading of the west leg of Main Street to provide a more even transition between the Main Street and Front Street vertical grade differentials.



LEGEND

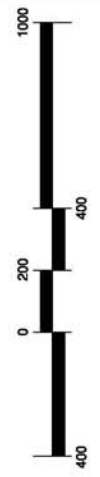
- RELOCATED ROADWAY CURB
- PAVED / LANDSCAPED BULBOUT
- CURB PARKING
- REGRADED MEDIAN / INTERSECTION AREA
- LANDSCAPED ROUNDABOUT / CHANNELIZED ISLAND
- SIDEWALK

AREAS:

- A. COURTHOUSE
- B. ROUTE 56 EXTENSION
- C. HISTORIC FRONT STREET
- D. U.S. ROUTE 29 / LOVINGSTON BOULEVARD
- E. FRONT STREET CORRIDOR

FIGURE 2

CONCEPTUAL PLAN
 LOVINGSTON TRANSPORTATION SAFETY STUDY
 NELSON COUNTY, VIRGINIA





ENHANCE COURTHOUSE AREA ACCESS:

- WIDEN ROUTE 1002 TO ALLOW 2-WAY TRAFFIC
- WIDEN TO 18' WITH NO PARKING; OR ALTERNATIVELY 24' WITH PARKING ON ONE SIDE

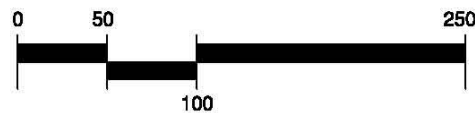
ENHANCE COURTHOUSE GATEWAY:

- REGRADE COURT STREET AT FRONT STREET TO IMPROVE TRAFFIC / PEDESTRIAN FLOW
- BULBOUTS TO IMPROVE PEDESTRIAN MOVEMENT
- PAVE SECOND STREET DRIVEWAY
- ADD SIDEWALK ADJACENT TO COURTHOUSE STEPS
- LOWER MAIN / SECOND STREET AT COURT STREET TO IMPROVE VISIBILITY AND OPERATION



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AREA A



COURTHOUSE
 LOVINGSTON TRANSPORTATION SAFETY STUDY
 NELSON COUNTY, VIRGINIA

FIGURE
3

Curb extensions or bulbouts are used for:

- Encouraging pedestrians to cross at designated locations;
- Increasing visibility for both pedestrians and motorists;
- Reducing the speed of turning vehicles;
- Preventing motorists from parking at corners; and
- Providing location for landscaping, benches, and public amenities.



Substantial changes are recommended for the critical Main Street/Court Street intersection which functions as the ceremonial gateway to the Courthouse complex. First, the entire intersection roadway pavement should be lowered to facilitate both pedestrian and vehicular travel. Limited bulbouts at two of the corners are suggested to further enhance the pedestrian focus at this intersection. The south leg of the intersection, located within the Second Street public right-of-way, functions essentially as an adjacent business driveway for access to its parking. As part of the intersection grade revision, this portion of the intersection should be upgraded and paved to allow orderly transition for vehicles between the intersection and the adjacent private parcels.

Route 1002, between Front and Main Streets, is a narrow 1-way street. It is recommended that this one block section of road be widened to either 18 feet (with no curb parking) or 24 feet (with curb parking on one side). This will enable the street to operate as a 2-way street providing additional flexibility, as well as relief to the adjacent Main Street roadway section. The “T” intersection of Route 1002 and Front Street should be provided with bulbouts, as part of the Front Street streetscape plan.



*Intersection of Court Street and Front Street
(Area A)*



*Southbound Route 29 Business at Route 56 intersection
(Area B)*

Area B—Route 56 Extension (Figure 4)—A significant transportation recommendation, as shown in Figure 4, is the extension of Route 56. Beginning at its intersection with Front Street, Route 56 should be extended west to Route 29 with a new full interchange, then terminate to the west at future Lovington Boulevard. This will have the following features and impacts:

1. The plan allows for the upgrading of the triangular, state owned property at the Route 56/Front Street intersection into a passive neighborhood park and an additional gateway to Lovington. This will fundamentally change the visual presence of this southern gateway into historic Lovington.
2. The existing “T” intersection is proposed to be reconfigured as a 4-leg, single lane roundabout to provide significant landscaping, reinforcing the new park and the sense of entering the village area of Lovington. More important, the single lane roundabout will safely and efficiently accommodate projected future volumes.
3. The extension of Route 56 to a new interchange at Route 29 will have the benefit of providing a more centrally located and enhanced primary access point to Lovington, as well as a more direct route between Route 56 to and from the south and Route 29, thereby minimizing cut through/truck traffic on Front Street.

The proposed design of the Route 56 extension/Route 29 interchange would be unique to Virginia: a 2-lane bridge over Route 29 connecting two single lane roundabouts providing access between the on/off ramps and Route 56 extension. The advantages of this design, versus traditional diamond interchanges with traffic signals at the ramps, include:

- Reduced construction cost, and additional savings, especially due to the need for only a 2-lane bridge versus a multi-lane bridge often required because of adjacent signalized intersections;
- Attractive gateways to Lovington, provided by landscaped medians;
- Substantial capacity comparable to, if not exceeding, that of multi-lane signalized interchange intersections; and



AREA B

ROUTE 56 EXTENSION

LOVINGSTON TRANSPORTATION SAFETY STUDY
NELSON COUNTY, VIRGINIA

FIGURE 4

- Most important, they operate at low levels of accident frequency. The state of Maryland has implemented successfully a number of these on limited access facilities, as have other states.

Area C—Historic Front Street (Figure 5)—Front Street serves multiple functions: the gateway to the historic area from the regional highway system, a collector road within the village area, and access to adjacent homes and businesses. The Historic Front Street plan, as presented in Figure 5, enforces these functions in a positive manner. Intersection bulbouts, located at each of the identified intersections, will enhance the pedestrian safety function, while still maintaining efficient 2-way vehicular traffic flow. Curb parking, for the most part, will remain intact, with perhaps a very limited loss of spaces near existing intersections. These traffic operation enhancements will be coordinated with the streetscape plan, which may include new and enhanced sidewalks, street furniture, and additional tree plantings.



Front Street



Intersection of Front Street and Main Street

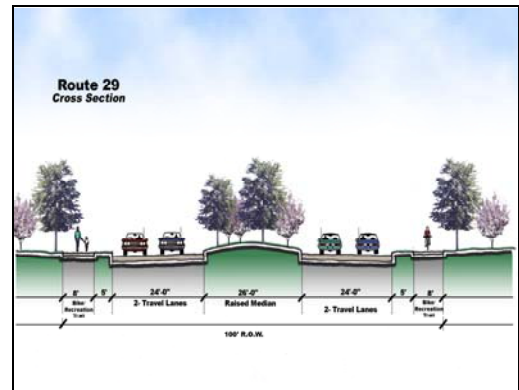


Photo simulations showing bulbouts, crosswalks, and streetscape enhancements on Front and Main Streets.



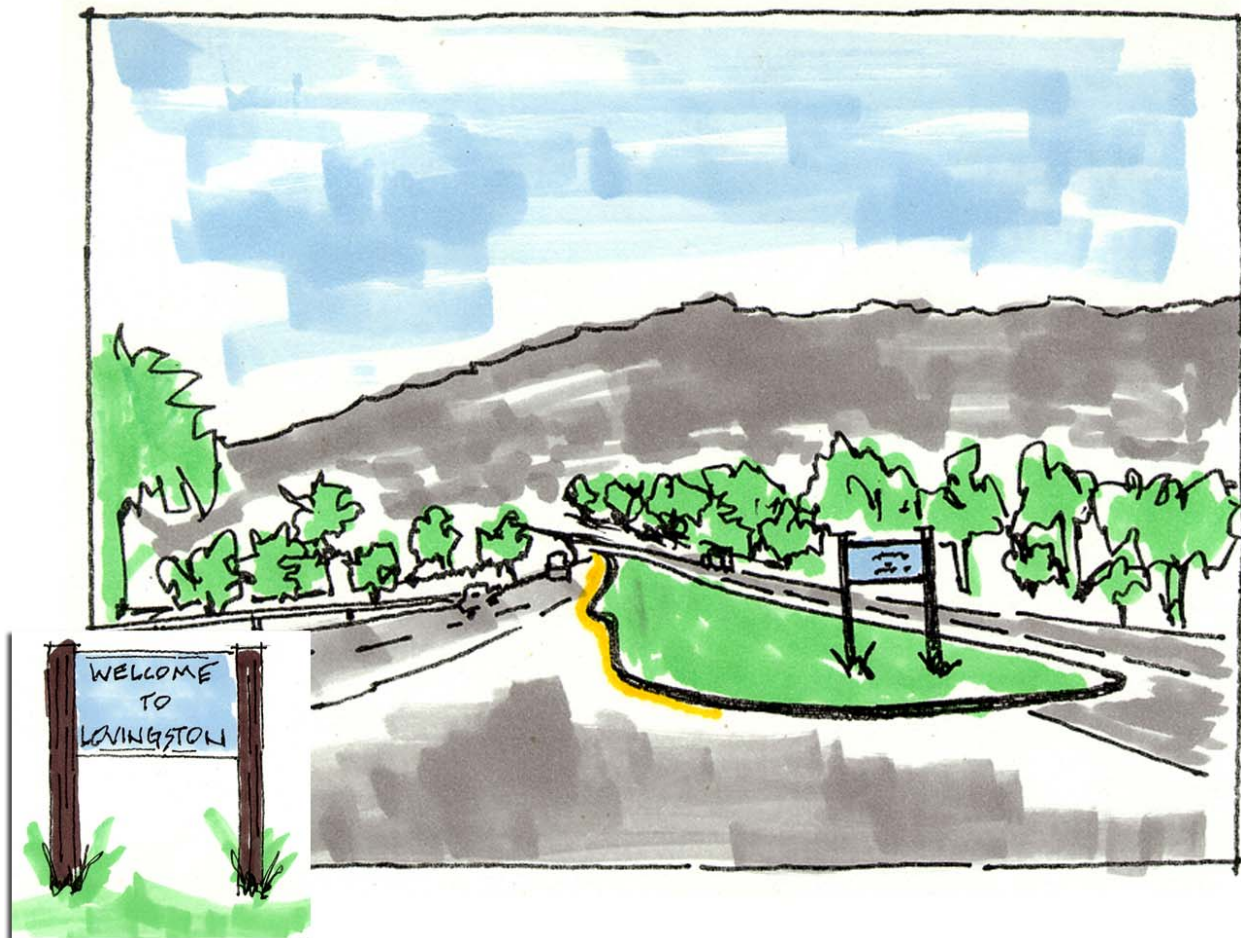
Area D—US Route 29/Lovingston Boulevard (Figure 6)—Significant changes are proposed for the Route 29 corridor and a parallel new local collector named Lovingston Boulevard [Figure 6]. As previously stated, the specific recommendations reinforce the ultimate goal of upgrading Route 29 to a more restricted access parkway as previously outlined by VDOT’s Route 29 Corridor Development Study.

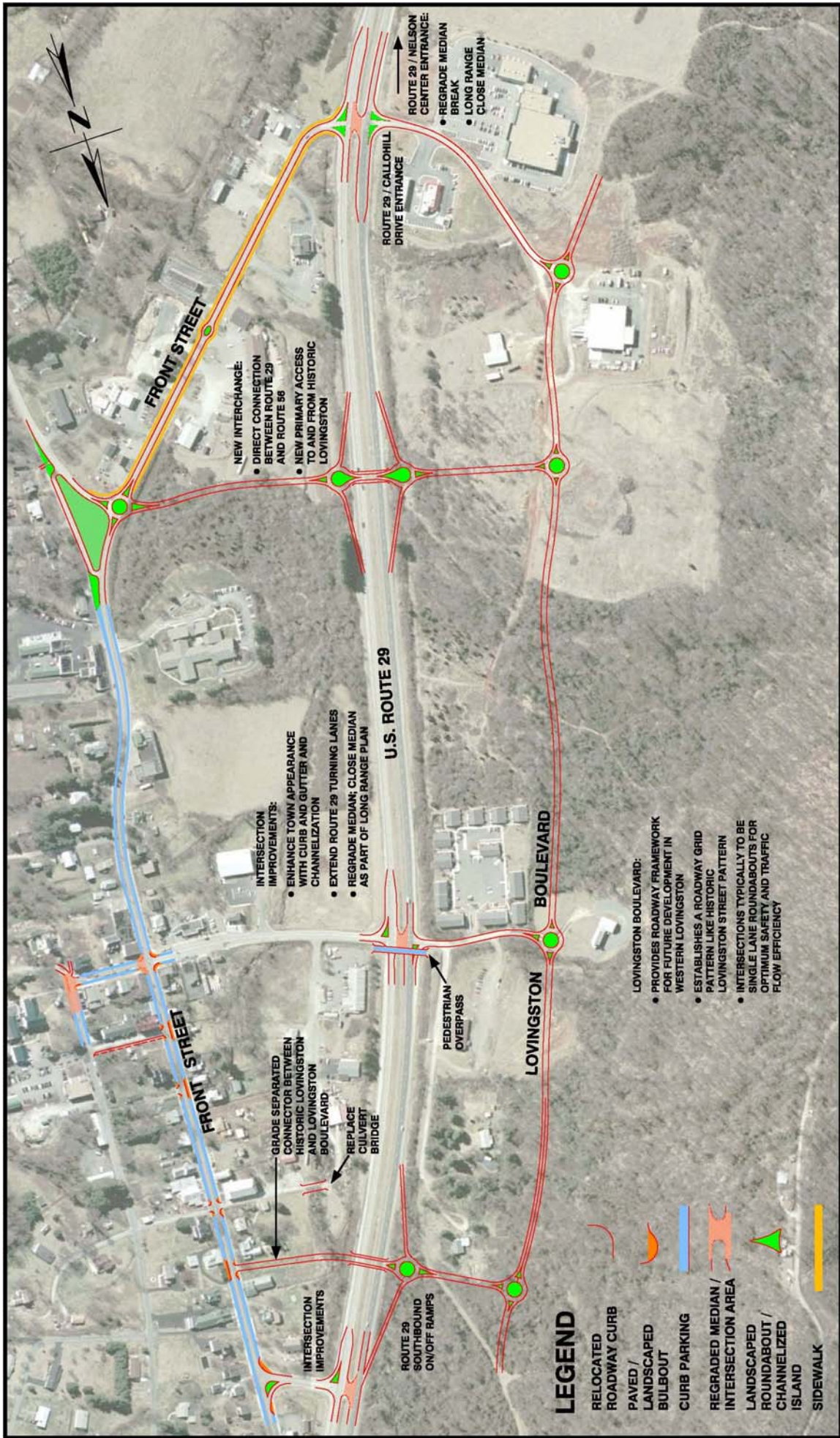
To address current corridor deficiencies, it is recommended that the three at-grade intersections within the Lovingston study area be upgraded in the near term. All of these improvements will enhance intersection capacity, but most of all improve traffic safety. At each intersection the following improvements are proposed:



VDOT Parkway Design

1. The left and right turn lanes, where provided, should be upgraded primarily by providing extended storage and transition lengths, as well as curb and gutter.
2. At each of these intersections, the landscaping should be enhanced to provide the driver a better sense of having arrived at a gateway to a more village-scaled setting.





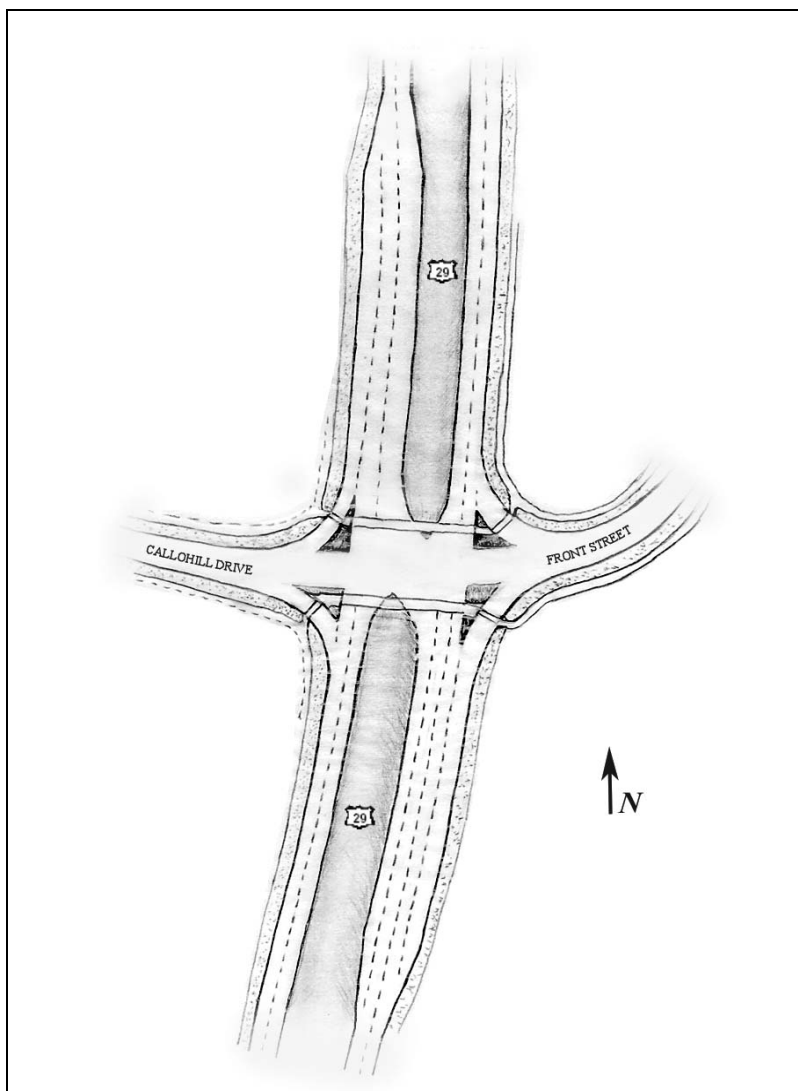
AREA D

0 155 310 775

U.S. ROUTE 29 / LOVINGSTON BOULEVARD
 LOVINGSTON TRANSPORTATION SAFETY STUDY
 NELSON COUNTY, VIRGINIA

FIGURE 6

3. The turning movements on and off Route 29, at each of the local street crossroads, should be channelized to provide a more positive control of traffic movements, as well as provide a visual perception that the driver has left the rural areas of Route 29 and is entering a busier area with more conflicts in movement.
4. Each of the median breaks has a varied degree of grade deficiency. In the short term, it is recommended that these grades be adjusted (primarily in the left-turning lane and median break) to provide a smoother, safer transition between cross-traffic and the Route 29 higher speed traffic slowing down to make turns onto the local streets. The long-range plan includes grade-separated interchanges with Route 29 and the subsequent closing of all at-grade median crossings, coupled with revised access management techniques to eliminate any redundant at-grade intersections.



Short-term improvements to the Route 29 and Callohill Drive intersection include regraded medians, channelized turn lanes, and improved pedestrian connections.

The proposed Lovington Boulevard will provide the framework for extending the established Lovington grid street pattern to the future development areas west of Route 29. Intersection locations along Lovington Boulevard should be pre-determined and designed as single lane roundabouts that will have the dual purposes of providing safe and efficient operation, and setting the tone for this new roadway as a slower speed local road consistent with the established Lovington streets. It is envisioned that the various sections of Lovington Boulevard would be constructed primarily by developers as development occurs in this corridor.

To enhance safe and efficient travel between both sides of Route 29, as well as access between Lovington and Route 29, several new grade-separated access points are proposed. The Route 56 Extension, previously

discussed, could evolve as the primary local, east-west gateway to and from Lovington. Its

central location and configuration should provide safe and efficient movement from Route 29 to new development areas to the west as well as either Route 56 or the historic village area.

A second connection is proposed farther north, immediately south of existing Route 1001, serving as the northern access point to historic Lovington. Figure 6 indicates that this new crossing of Route 29 would have southbound exit and entrance ramps. Although the provision of the southbound Route 29 exit ramp is assumed, further evaluation of the merits of either the southbound on ramp, or possibly northbound off and on ramps should be considered. Again, the advantage of this crossing is it provides safe and efficient access to and from Route 29 to the north as well as access to the future Lovington Boulevard and its associated development.



A well-designed roundabout provides safe and efficient operation and includes sidewalk and bicycle facilities

Other specific recommendations in this corridor include channelization and additional landscaping, plus bulbouts at the Front Street/Business Route 29 “T” intersection, and the replacement of the culvert bridge on Route 1003, which was washed out during Hurricane Isabel.

For additional safety for pedestrians—especially the residents of the Lovington Ridge Apartments on the western side of Route 29—it is recommended that a handicap accessible pedestrian/bicycle bridge crossing Route 29 and connecting the apartment facilities to the west with the retail facilities to the east, along Route 1001, be provided.

Area E—Front Street Corridor (Route 56 to Route 29) (Figure 7)—This section of Business Route 29 is configured somewhat as a high speed, rural secondary road, being relatively straight, wide, and with edge of pavement shoulders. The recommendations, as set forth in Figure 7 provide for integrating Front Street (from Route 56 to Route 29), functionally, as part of the historic Lovington environment. Specifically, the roadway should be upgraded to curb and gutter with sidewalks, and included in the area streetscape plan with appropriate streetscape improvements and tree plantings. Additionally, a centrally located oval median is proposed for the purpose of providing vehicle speed moderation (through engineered horizontal deflection), and serving as a gateway or landscaped amenity, which will tend to moderate driver speeds.

Oval Medians

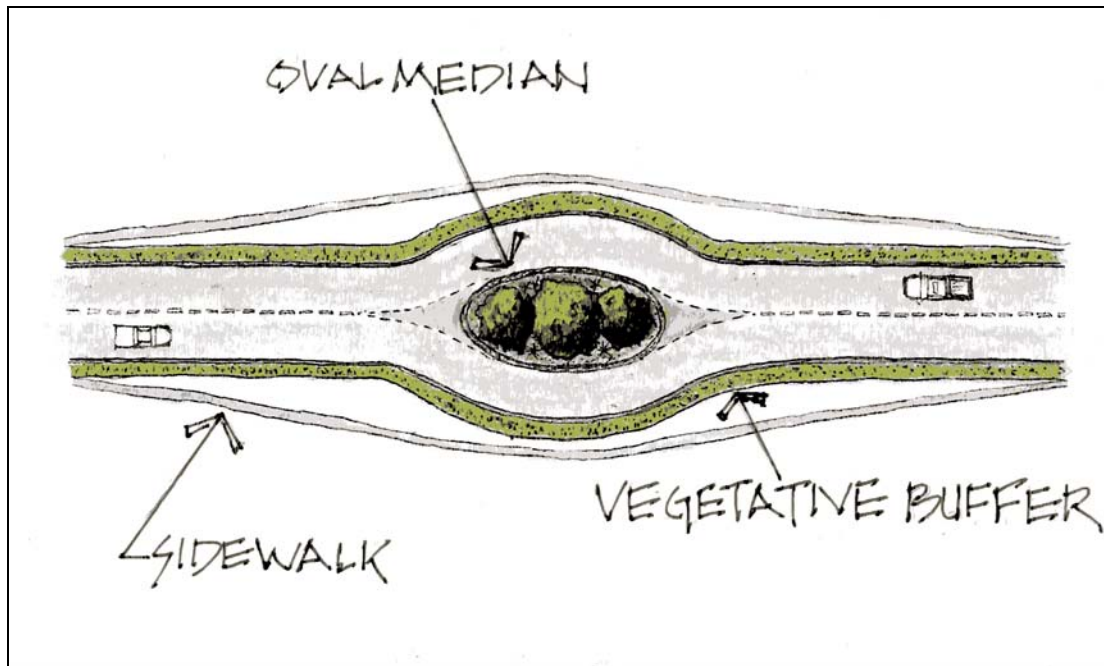
Oval medians are recommended to keep speeds at an acceptable level by creating vertical deflection for motor vehicles. In addition, oval medians:

- Improve aesthetics if well landscaped and maintained;
- Improve safety for pedestrian crossings; and
- Have minimal impact on emergency and other large vehicles.

The final placement of the oval median on Front Street should be carefully examined to accommodate driveways of existing commercial establishments.



A short median combines speed control with opportunities to improve the streetscape with quality landscaping.



An oval median in the center of the Front Street Corridor would help moderate traffic speeds as well as enhance the image of the existing commercial corridor.



AREA E

FRONT STREET CORRIDOR
 LOVINGSTON TRANSPORTATION SAFETY STUDY
 NELSON COUNTY, VIRGINIA

0 75 150 300 600

FIGURE 7

Sidewalk Inventory and Proposed Trails

The following table lists all street sections without sidewalks in the Lovington area.

<i>Street</i>	<i>Section</i>	<i>Priority</i>	<i>Length*</i>	<i>Cost+</i>
Main St	Front St to Tanbark Plz	High	350	\$35,000
Main St	Rt 29 to Tanbark Plz	High	200	\$20,000
Main St	Rt 29 to the Family Dollar	Medium	350	\$35,000
Main St	Family Dollar to Front St	High	100	\$10,000
Main St	Front St to Court St (south side)	High	50	\$5,000
Ridge Ln	Rt 29 to Lovington Ridge Apartments	High	185	\$18,500
Front St	Rt 29 Bypass to Lovington Café (west side)	High	700	\$70,000
Front St	Lovington Café to Rt 56 East (west side)	High	825	\$82,500
Front St	Rt 29 Bypass to Bank (east side)	Medium	600	\$60,000
Front St	Bank to Rt 56 East (east side)	Medium	600	\$60,000
Calohill Dr	Rt 29 Bypass to McDonald's walkway	High	125	\$12,500
Calohill Dr	McDonald's walkway to Food Lion	High	175	\$17,500
Court St	Pleasant St to Brookside St (west side)	Medium	600	\$60,000
Rt 56 East	Rt 29 Business to Sunset (north side)	Medium	325	\$32,500
Rt 56 East	Rt 29 to Poplar Tree Ln (south side)	Low	600	\$60,000
Brookside St	Court St to Front St	Low	250	\$25,000
Pleasant St	Front St and Court St (finish south side)	Low	120	\$12,000
Northside	Rt 29 to Front St (south side)	Low	235	\$23,500
Tanbark Plz	Main St to Theatre Dr	Medium	30	\$3,000
Total			6420	\$642,000

* Length in feet

+ Based on \$100 per foot



Buffered sidewalk on Court Street



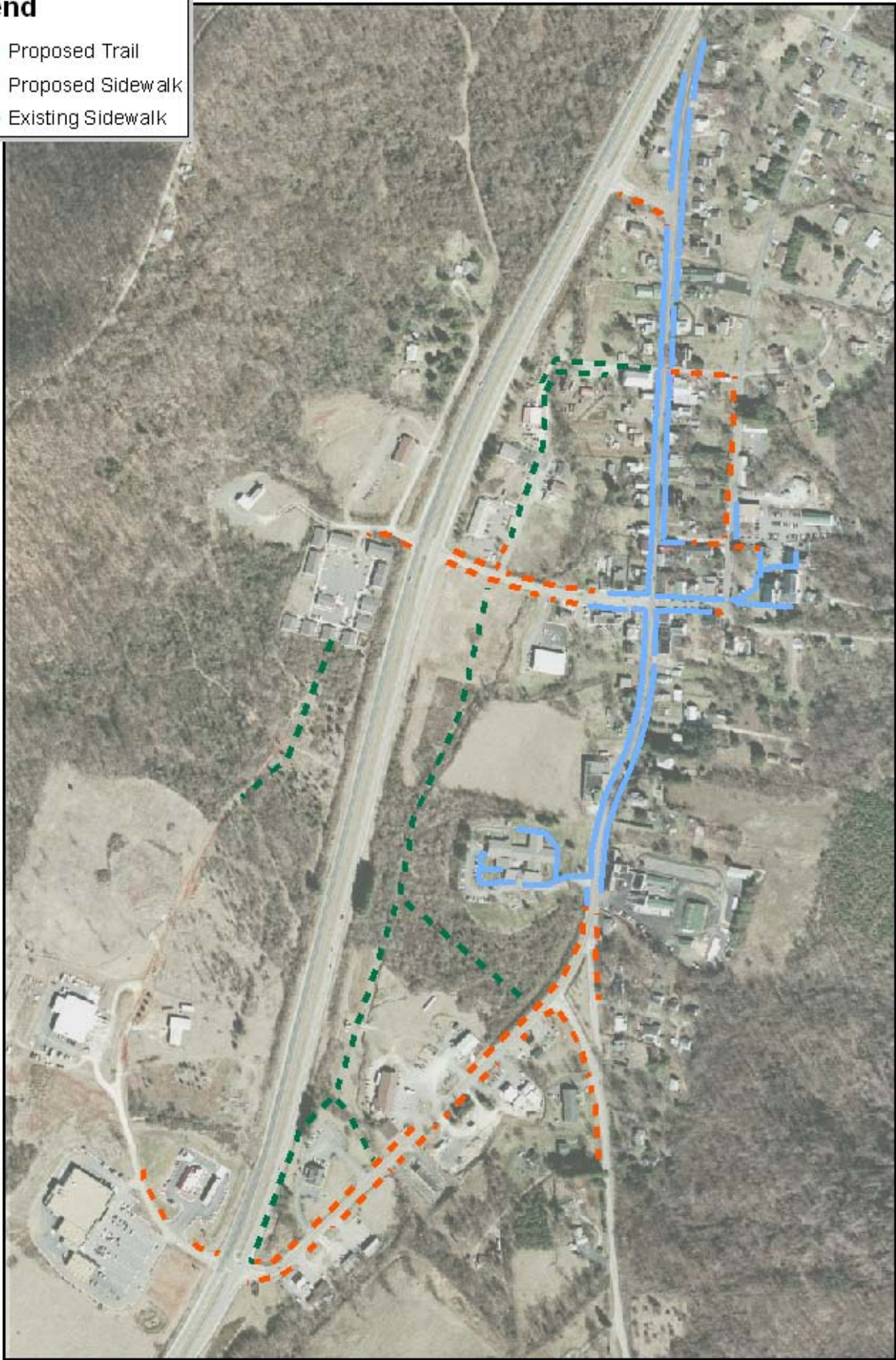
Sidewalk ends on Front Street just north of the Route 29 Business and Route 56 intersection

The continued development of Lovington as a walkable community is further reinforced with the establishment of a **pedestrian and bike trail**, winding along the east side of Route 29 within Lovington. The intent of this facility is to connect with a proposed Route 29 corridor trail, as well as to provide increased recreational facilities serving Lovington residents.

The map on the following page details existing and proposed sidewalks as well as the proposed trail.

Legend

- Proposed Trail
- Proposed Sidewalk
- Existing Sidewalk



Implementation Plan

The master plan and associated specific recommendations for each of the five Lovington areas, in total, include a substantial number of changes and improvements. Each of these recommendations has been categorized as either a Short-Term or Long-Range improvement with an immediate recommendation to extend left- and right-hand turning lanes on Route 29. This is a somewhat subjective calculation, based on extent of need or potential improvement provided, collective support, and cost. Likewise, priority short-term transportation projects will be refined to provide optimal coordination with the broader master plan projects as the master planning process continues. Immediate, Short-Term, and Long-Range improvements include:

IMMEDIATE

- A. Extend left- and right-hand turn lanes

SHORT-TERM (not in order of priority)

A. Route 29

- Regrade 3 median breaks
- Channelize intersection movements
- Add additional trees to median

B. Main/Front Streets Intersection

- Install bulbouts on all corners
- Regrade east leg of Main Street
- Add trees

C. Courthouse Area

- Widen Route 1002 to 18 or 24 feet
- Regrade, add bulbout(s) at Main, Court and Second Streets
- Pave Second Street (as driveway)

D. Front Street (Business Route 29)

- Install bulbouts
- Improve streetscape
- Replace culvert bridge washed out several years ago

E. Front Street Corridor (Business Route 29)

- Construct roundabout at Route 56 intersection
- Create passive neighborhood park at Route 56 and Front Street
- Construct oval median in roadway center
- Improve streetscape with curb/gutter, sidewalks and trees

F. Establish Park & Ride Facility

G. Establish bikeway/nature trail through and beyond Lovington, on east side of Route 29

H. Develop comprehensive gateway signage plan directing visitors to historic Lovington

LONG-RANGE

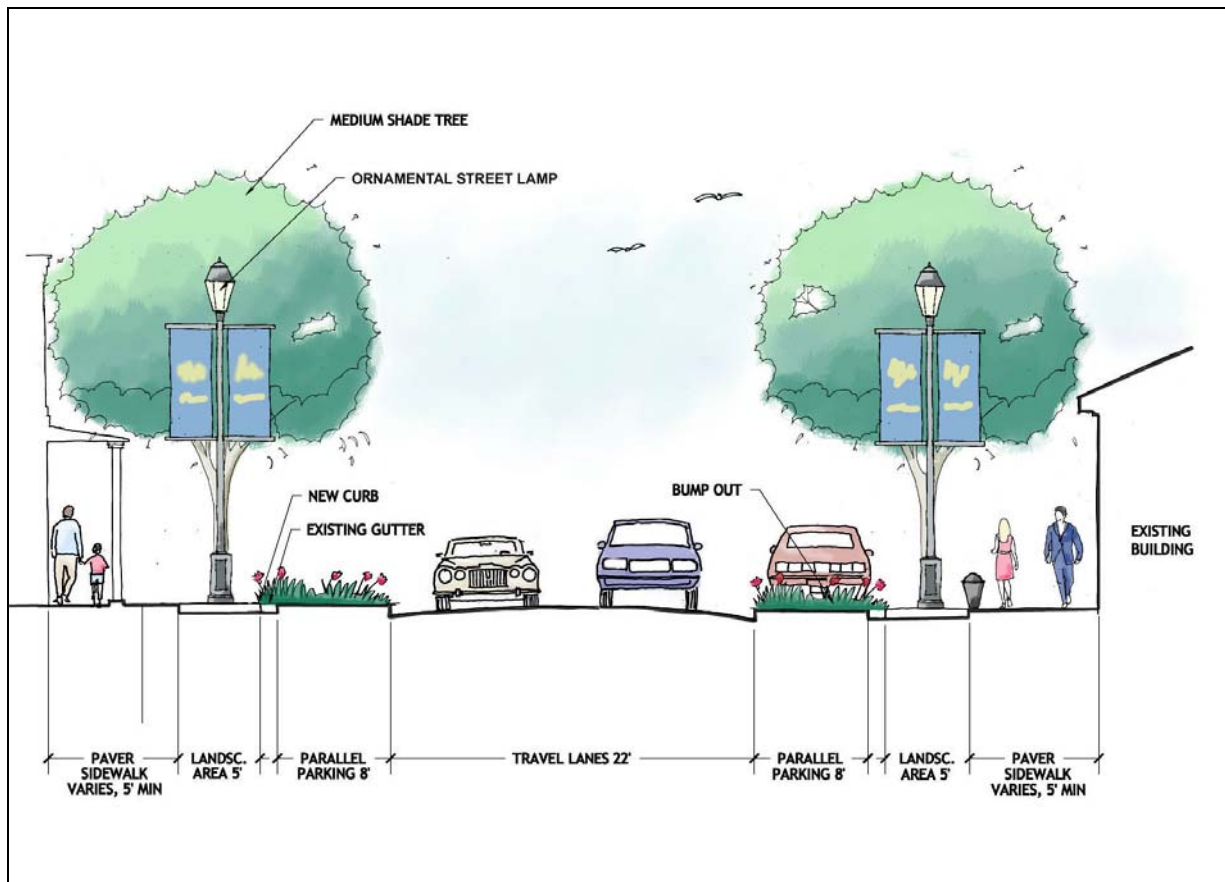
A. Lovington Boulevard (established as development occurs)

- Provide extension of traditional grid road network, as found in historic Lovington
- Serve new development with two-lane road characterized by speed controlled design, roundabouts at regular intervals, and aesthetic considerations

B. Route 29

- Implement VDOT goal of restricted access parkway, closing median breaks and unneeded at-grade intersections as interchanges are built and access provided from parallel roads
- Extend Route 56 over Route 29 to Lovington Boulevard with interchange at Route 29
- Provide pedestrian/bike bridge at Court Street
- Provide partial access interchange and access road over Route 29 at northern end of town

The implementation of all of the above recommendations will result in significant change in Lovington. However, all of these changes are intended to reinforce and enhance the unique assets of Lovington—a small town feel with a traditional street network lined with sidewalks and trees, older historic buildings, and a unique sense of home and place.



Short-term implementation plans include bulbouts, trees, and streetscape enhancements for Front, Main, and Court Streets.

Appendix A: List of Participants All Workshops

Richard Bulissa	George Krieger
Don Burland	Joe Lee McClellan
Jan Burland	Sonny Mincarelli
John Byrne	Ruth Powell
Anne Currie	Russell Reid
Coleman Currie	Kate Sipes
Marjorie Eggleston	Charlotte Smith
Barbara Fish	Sunny Taylor
Bill Gombos	Mike Tapagen
Ruth Gombos	Gail Troy
Allen Hale	Boyd Tucker
Barbara Hopkins	Patty Turpin
Ame Jones	Peggy Whitehead
Pat King	W.A. Wright
Gordon Koerner	

STAFF

Fred Boger
Maureen Corum
Tom Flynn
Mark Lieberth
Mike McCormack
Bill Mechnick
Harrison Rue
Michael Wallwork
Bill Wanner
Jonathan Whitehurst
Rick Youngblood

Appendix B: Results from Exercises

Lovington Safety Study/Lovington Revitalization Project November 18, 2004 Mapping Exercise

At the November 18, 2004 Workshop, participants used a large aerial photographic map to express safety concerns along Route 29 and throughout the village. Specific comments from the map included:

- No Double Stacking—ignored
- Reduce speeds—Flashing 45 mph sign
- Hash marks
- Signal not a good idea
- Bus turnaround just north of Livingston
- Woods Mill intersection not great
- Turn lane too short (trucks speeding)
- Food Lion intersection median not very big—buses, trucks, etc. hangout
- Tall cars block views
- Repaving needed on Brookside Ln and Ridge St
- Missing culvert/bridge (private) at Theatre Dr and Tanbark Plaza
- Slope at Food Lion icy/slippery
- Repaving needed on Tanbark Plaza
- Many pedestrian crossings at Main St and Route 29
- Flooding problem on Main St at Dollar General entrance
- Trail east of Route 29 along creek
- Narrow, hills in courthouse area
- Sidewalk improvements along Main St from Route 29 to Court St
- Sidewalk improvements on Ridge Ln west of Route 29
- Sidewalk improvements on Front St from Route 29 to Lovington Health Care Center entrance
- Repaving needed on Callohill Dr at Route 29 intersection
- Extend Callohill Dr north to Lovington Ridge Apartments
- Hard to cross Route 29 at Callohill Dr
- U-turn south of Route 29 at Callohill Dr

***Lovingston Safety Study/Lovingston Revitalization Project
May 31, 2005
Mapping Exercise***

The May 31, 2005 exercise involved five groups. Each group wrote comments and recommendations on separate aerial photographic maps and then summarized the main points. Listed below are the main comments for each group as well as the notations from the large maps. Additional public comments taken June 1, 2005 follow the group summaries.

Group 1

Main Comments

- Preserve town/village character
- Keep the courthouse complex
- Bike routes
- Restore/renovate key historic buildings
- Side road access on east and west sides of Route 29

Map

- Lovingston is charming and historical
- Atmosphere
- Bicycling paths
- Town sign
- Important greenway and bike trail east of Route 29
- Extend new road west of Route 29 to high school
- Do not destroy any part of courthouse
- Route 29/1001 intersection is avoided

Group 2

Main Comments

- Shuttle loop
- Intersection fix
- Affordable housing infill
- Park/Recreation and bike trail
- Livable streets and parking

Map

- Affordable housing—medium income and minimum wage rentals
- Better parking at post office
- 45mph speed limit beginning at Bed & Breakfast north of Lovingston
- Neighborhood park northeast of Brookside Ln and Court St
- Bike and pedestrian facilities near neighborhood park

- Infill housing/mixed use near Front St near Theatre Dr
- No place to sit on street—need more livable street with amenities
- No road through wetlands
- Local businesses draw from a 5 to 15 mile market
- Lovington Café area serves as the “defacto” social center
- JAUNT to Wintergreen
- Not enough housing
- No attraction for high tech
- Affordable medical and access to it
- Stoplights are okay
- Shuttle include library
- Parkland in floodplain surrounding creek just east of Route 29

Group 3

Main Comments

- Concern—overall signage
- Improve Callohill/Route 29 intersection
- Extend 1001 and Callohill Dr southbound right turn lanes
- Eclectic sidewalks
- Facade improvements

Map

- Recycling and trash area near courthouse needs better accessibility
- Sidewalk irregularity adds to character
- No Wal-Mart
- Need flashing light to add visibility for upcoming intersections
- Lower density (single-family residential) west of Route 29 north of the apartments
- Higher density residential west of Route 29 immediately south of the apartments (Food Lion area)
- Commercial uses west of Route 29
- Pedestrian overpass at Main St and Route 29
- Extend turn lanes southbound Route 29
- Improve signage for safety and aesthetics
- Plan for implementing VDOT Parkway plan (access roads?)
- Increase setbacks to allow for service roads

Group 4

Main Comments

- Remove or improve 29/Callohill
- Crosswalk at 29/1001 with path to library

- Keep Lovington historic (reuse old buildings)
- Keep wooded area east of Lovington (no new development in area)

Map

- Would be nice to walk from village to library and Nelson Center
- Deceleration lane at Route 29 and Front St
- Acceleration lane southbound Route 29 from Route 1001
- Sidewalks on all new roads
- New road connecting Food Lion with Lovington Ridge Apartments
- Enforce 25 mph speed limit on Front St
- Pedestrian bridge at Main St and Route 29
- Not enough parking at post office
- Pot holes on Brookside Ln between Front St and Court St
- Connect Tanbark Plaza to Main St (not enough right-of-way but old informal road)
- Wooded area east of Lovington will be vulnerable later to development
- Reuse old buildings

Group 5

Main Comments

- Defined town core
- Complete walk system
- 29 safety and speed (all crossovers)
- Activities/Businesses/Attractions
- Parks and recreation opportunities (kids and seniors)

Map

- Town theatre
- Truck-specific exit for Food Lion area
- Brick sidewalks
- Existing basketball court at funeral home
- Night sky
- Uniform streetlights; fill gaps
- Force trucks out of town
- Ball park between Dollar General and Lovington Health Care Center
- Park in northeast quadrant of Route 29 and Main St intersection
 - Some people question this as a park location—no man’s land, floodplain, next to Route 29
- Kid zone in residential neighborhood
- Park between Ridge St and Court St
- Park southeast of Orchard Rd

- Slow down trucks through bypass
- Parking lot in northeast quadrant of Main St and Tanbark Plaza intersection
- Pave Brookside Ln

Additional Comments from Public

- The Arc of the Piedmont expressed concern about a lack of parking reserved handicap parking. Specifically, Lois Giles stated that the abandoned section of Second St north of Main St needs to be claimed and maintained to gain access to parking on their property. Ms. Giles noted a state-created drain washes away gravel applied to the road due to its steep grade. The Arc of the Piedmont asks that any plans for improvement to Court Square include a thorough assessment of water run off, and plans to correct any deficiencies found. They recommend that the County make the necessary re-engineering, repairs and maintenance to Second Street.
- Comments from other citizens include:
 - Preservation is great but can be ostentatious
 - Lovington needs a central focus/gathering area/meeting place
 - Amphitheatre in grassy area between the Dollar General and Lovington Health Care Center
 - Working with VDOT to include all Lovington streets in the VDOT road system
 - Improving the Callohill access road (it does not meet VDOT standards)

SUMMARY

Key Topics

- Improve safety of Route 29
- Foster livable streets (including sidewalk improvements)
- Enhance town/village character and activity
- Create bike routes
- Preserve historical significance
- Develop park and recreational amenities

Other Topics

- Keep the courthouse complex
- Create side road access on east and west sides of Route 29
- Encourage affordable housing infill
- Improve facades
- Preserve wooded area behind Lovington
- Signage style, location and visibility

Appendix C: Roundabouts

Properly engineered modern roundabouts can support high volumes of traffic moving through an intersection, provide improved pedestrian movements, and can reduce the number of vehicle and pedestrian accidents. Signalized intersections typically require wider roads than roundabouts, to allow for added lanes to stack vehicles waiting to turn. They can also have less capacity, safety, and more delay than roundabouts.

Since modern roundabouts are a relatively new tool for the area, the following section describes how and why they work in more extensive detail.



This Florida roundabout replaced a signal at a four-lane state highway, creating a community focal point, while still moving traffic.

Modern Roundabouts are not traffic circles. The older traffic circles that many drivers are familiar with tend to be larger, operate at higher speeds, provide little protection for pedestrians or bicyclists, and are less safe for all users. Many have even been modified to add signals. Modern Roundabouts are carefully designed to provide a tightly controlled environment that balances the flow of all vehicles and turning movements, while greatly improving safety, capacity, and pedestrian access. This is accomplished by very specific geometric design details that channel all vehicle and pedestrian movements to the best location, while reducing conflict points.

Roundabouts have greater capacity and less delay than signalized intersections. The aaSIDRA analysis software – approved by Federal Highways Administration and 49 out of 50 state DOT's – is a very precise tool for measuring levels of service, capacity, length of delays, and lane requirements. SIDRA typically shows that a two-lane road with roundabouts will provide higher capacity, smoother traffic flow, higher level of service (LOS) and less delay than a four-lane road with signals. This is partly due to a more constant flow, with no need to stop all movement to allow left turns in one direction. The same is true of two-lane roundabouts; a two-lane roundabout with four-lane approach roads (with medians) would require a six-lane signalized road for equal capacity.

Roundabouts are safer than signalized intersections or stop signs. A recent study by Virginia's own Insurance Institute for Highway Safety reviewed before-and-after crash data for 24 roundabouts in 8 states that had replaced either signals or 3 and 4-way stop signs. The study found highly significant reductions in crashes, injuries, and fatalities:

- 39 % reduction for all crash severities combined;
- 76 % reduction for all injury crashes;
- 90 % reduction for fatal and incapacitating injury crashes.

“Overall, results are consistent with numerous international studies and suggest that roundabout installation should be strongly promoted as an effective safety treatment for intersections.” (IIHS, Richard Retting et.al., 2000).

Roundabouts improve pedestrian access and safety over typical signalized intersections, if properly designed. Required details include:

- ❑ Median splitter islands at each approach, allowing pedestrians to cross only one direction of traffic at a time.
- ❑ Crosswalks set back one car length (18') from the edge of roundabout, so drivers are looking directly at pedestrians, rather than looking left at approaching vehicles. Even in busy traffic, the second approaching vehicle will yield to pedestrians while the first is entering the roundabout.



Median splitter islands and set-back crosswalks create safe pedestrian crossings



Signage and lane markings help drivers and pedestrians navigate a two-lane roundabout

- ❑ Clear signs and lane markings so drivers and pedestrians know where to go and what to expect.
- ❑ Landscaped center islands and lane deflection (no straight shot through) so that approaching vehicles see the changed intersection and have to slow down on approach. A typical design speed is 18 to 23 mph.

Roundabouts accommodate trucks and buses. Good designers use templates to define the required travel path of larger vehicles. A truck apron is usually provided to allow larger vehicles like moving vans to get around, while still maintaining the appropriate geometry to reduce speeds of normal vehicle. This truck apron is usually around the outside edge of the landscaped center island, made of bricks or concrete, with a mountable curb 2 ½ inches above the pavement.



Well-designed roundabouts meet the needs of truck and bus traffic

Roundabouts are good for business. Many communities have discovered that a well-designed traffic control device can spark revitalization of a declining business district, by reducing speeding traffic, providing a beautiful focal point, and improving customer access.

Roundabouts require education. This is relatively easy, since the actual movements are simple. After approaching and yielding to any pedestrian or vehicle already in the roundabout, all any vehicle can do is make a right turn to get in, and another right turn to get out. Clear signage for these movements has already been developed and approved by FHWA. Educational campaigns, videos, and other creative educational tools can be used to help introduce the first roundabouts in an area.



Bike lanes approaching roundabouts can have their own ramp onto the sidewalk, though most experienced riders will prefer to merge with the slow-moving traffic. (Dan Burden)

Appendix D: Existing and Planned Conditions

The following data and analysis were used to inform community workshop participants and to assist in the preparation of the Study's recommendations. Broad categories of Transportation and Land Use are subdivided into Existing and Planned conditions, followed by excerpts from a resident survey by the Nelson County Department of Economic Development. The information is presented in the following outline:

- **Transportation: Existing**
 - Traffic Volumes
 - Traffic Patterns
 - Segment Descriptions
 - Accident Data
 - Speed Samples
- Transportation: Planned
 - Nelson County Six-Year Transportation Priorities
 - Route 29 Phases II & III Corridor Study
 - Projected Traffic Volumes
 - Bicycle and Pedestrian Plans
- Land Use, Demographics and Economy: Existing
 - Land Use—County Maps and Data
 - Demographics
 - Economy
- Land Use, Demographics and Economy: Planned
 - Land Use
 - Nelson County Comprehensive Plan
 - Rural Small Town Development Model
 - Demographics
 - Population Projections
 - Economy
 - Resident Survey
 - Business Survey

Transportation: Existing

Traffic Volumes

The following table presents daily traffic volumes for both 1995 and 2004 for the roadway segments in the study area. Clearly the segments of Route 29 are the fastest growing. The core segment of Route 29 within the study area—Business Route 29 north of Lovington to Business Route 29 south of Lovington—while not the fastest growth segment, has grown by 59%.

2004 Average Annual Daily Traffic Volumes

<u>Route</u>	<u>Segment</u>	<u>1995 AADT</u>	<u>2004 AADT</u>	<u>Percent Change</u>
Route 29	State Rd 6 (River Rd) to Bus US 29 North of Lovington	10,000	13,000	30%
Route 29	Bus US 29 North of Lovington to Bus 29 South of Lovington	8,200	13,000	59%
Route 29	Bus US 29 South of Lovington to State Rd 56 near Colleen	8,200	14,000	71%
Route 56	Bus US 29 Lovington to US 29 South of Lovington	3,200	3.2	0%
Route 56	62-639 Shipman to Bus US 29 Lovington	2,500	2,100	-16%
Main St (29)	US 29 North of Lovington to State Road 56	1,900	2,200	16%
Main St (29)	State Rd 56 to Bus US 29 South of Lovington	2,500	3,200	28%

Source: Virginia Department of Transportation

Six percent of vehicles on State Road 6 (River Road) and State Road 56 near Colleen are trucks with three or more axles. Two percent of the vehicles on Route 56 between US 29 South of Lovington and 62-639 Shipman are trucks with 3 or more axles.

Traffic Patterns

The significant traffic patterns in the study area, as reported in the following table, focus on the intersection of Callohill Road (Shopping Center), Route 29 and Route 56 East. Because of the large volume of the concern for safety at this intersection expressed by community members and to assist in the formulation of engineering concepts, the Thomas Jefferson Planning District observed traffic flow at peak hours—the morning and afternoon rush hours.

Generally, the largest traffic volumes include visits to the shopping center. From the shopping center on Callohill Drive to Route 29 northbound requires a left hand turn across Route 29 South. The median between Routes 29 North and South allows for only one vehicle and, as a result, a no stacking sign has been erected there. The reverse, Route 29 northbound to Callohill Drive requires negotiating the median, using the left lane of Route 29 and then crossing Route 29 southbound. Similarly, Route 29 southbound to Route 56 East requires negotiating this intersection and the median and then crossing Route 29 northbound. Finally, travel from Route 56 East to Callohill Drive and from Callohill Drive to Route 56 East requires the vehicle to cross both Route 29 North and South, and using the median, as do all the turns described. Thus, there are six turns requiring a crossing of at least one direction of Route 29 and the use of the median between, Route 29 North and Route 29 South.

Traffic Patterns	October 18		October 19		
	<i>4:15-5:15 pm</i>		<i>8:10-9:10 am*</i>		
<i>Origination</i>	<i>Destination</i>	<i>Count</i>	<i>Count</i>	<i>Count</i>	<i>Count</i>
From 29 South to	56 East	26		16	
	Shopping	130		60	
From 29 North to	56 East	72		76	
	Shopping	54		64	
From shopping to	29 North	46		30	
	29 South	86		52	
	56 East	58		22	
From 56 east to	29 South	57		38	
	29 North	18		18	
	Shopping	37		14	

Red indicates vehicles turning left or crossing traffic.

*October 19 data projected for one hour based on a 30 minute (8:10am to 8:40am) sampling.

Source: Thomas Jefferson Planning District Commission

Segment Descriptions

<i>Segment</i>	<i>PM Peak Hour Traffic</i>		<i>Daily Traffic</i>		<i>Field Travel Speed</i>	
	North-bound	South-bound	North-bound	South-bound	North-bound	South-bound
Rt. 651 to 29Bus/56	501	575	6350	6350	60.0	57.4
29Bus/56 to 1001	438	547				

Accident Data

The Virginia State Police report approximately 10 accidents on mainline Route 29 between Business Route 29 North and the Visitors Center from 1997-2001. An additional eight accidents occurred south of the intersection of Routes 29 and 56. The following table summarizes the circumstances of these accidents.

Accidents from 1997 to 2001

	<u>Type</u>	<u>Injury</u>	<u>Weather</u>	<u>Description</u>	<u>Date</u>
North	Car/Pas. Truck	Yes	Clear daylight	Head on, wrong side of road	3/28/2001
	Car/Car	Yes	Clear daylight	Left turn failed yield	9/13/2001
	Bicycle/Car	No	Clear daylight	Driver inattention	9/11/2001
	Single Car	No	Darkness, clear visibility	Ran off left side of road	11/11/2000
	Pas. Truck/Car	No	Clear daylight	Sideswipe	7/8/2000
	Car/Pas. Truck	Yes	Clear daylight, wet	Fail to yield from stop	1/10/1997
	Pas. Truck/Car	No	Clear daylight	Rear end (within speed limit)	5/22/1997
	Car/Car	Yes	Clear daylight, hillcrest	Rear end	3/5/2000
	Single Pas. Truck	No	Dark, cloudy, dry	DUI ran off road	4/28/2000
	Car/Car	No	Daylight, wet	Rear end	10/20/1999
	Pas. Truck	No	Clear daylight	Ran off road, exceeding safe speed	10/16/2000
	Car/Pas. Truck	No	Clear daylight	Failed right of way	3/17/2000
	Pas Truck/Semi	No	Cloudy daylight	Rear-end (tires)	5/25/2000
	Car/Pas. Truck	Yes	Clear daylight	Ran off road (steering)	2/5/1999
South	Single Car/Guardrail	Yes	Cloudy daylight	Exceeding speed limit	7/25/1997
	Car/Car/Guardrail	Yes	Clear daylight	Left turn failed right of way	9/21/2000
	Single Car/Guardrail	Yes	Clear daylight	Speeding	5/2/1997
	Single Car	Yes	Cloudy daylight, hillcrest	Ran off road - asleep	6/28/1998

Source: Virginia State Police

Additional Accident and Safety Concerns

In conversations with staff of the Nelson County Emergency Services and State Police, the following anecdotal information was expressed.

Nelson County Emergency Services

- Route 29 At Food Lion is bad intersection
- Route 29 At Colleen BRMS/Dairy is bad (NOTE: Not in Study area)

State Police Division III

Route 29 at Callohill Drive

- Busy intersection (Food Lion/McDonalds only grocery/fast food for miles)
- Southbound is fine
- Too busy of an intersection for elderly/inexperienced drivers (high school nearby complicates this concern)
- Since completion of Food Lion – 2 or 3 fatalities (all elderly women)
- Numerous other accidents – bad ones here
- Straight across from Food Lion to town – lots of other cross-traffic
- Have added flashing 45 mph safety lights

- Marked crossover with hash marks and “no-double stacking” signs
- Fireman hit by car while working scene of prior accident

Route 29 Business/Route 1001

- Not bad accidents – speeding 35/25
- North entry pretty quiet
- Police run tickets in that area

VDOT data

From 1997 to 2001, the Virginia Department of Transportation reports approximately 20 crashes on Route 29 between the north end of the Bypass and the Visitors Center. These crashes include:

- Car/Pas. Truck – injury – clear daylight – head on, wrong side of road - March 28, 2001
- Car/Car – injury – clear daylight – left turn failed yield - Sept 13, 2001
- Bicycle/car – no injury - clear daylight - driver inattention- Sept 11, 2001
- Single car – no injury - darkness, clear visibility - ran off left side of road- Nov 11, 2000
- Pas. truck/car – no injury - clear daylight –sideswipe - July 8 2000
- Car/Pas. Truck – injury - clear daylight, wet – fail to yield from stop - Jan 10, 1997
- Pas. Truck/Car – no injury – clear daylight – rear end (within speed limit)- May 22, 1997
- Car/car – injury - clear daylight, hillcrest – rear end - March 5, 2000
- Single pas. Truck – no injury – dark, cloudy, dry – DUI ran off road - April 28, 2000
- Car/car – no injury - daylight, wet – rear end – Oct 20 1999
- Pas. Truck – no injury - clear daylight – ran off road, exceeding safe speed - Oct 16 2000
- Car/pas. Truck – no injury – clear daylight - failed right of way – Mar 17, 2000
- Pas truck/Semi – no injury - cloudy daylight – rear-end - May 25, 2000 (tires)
- Car/Pas. Truck – injury - clear daylight – ran off road - Feb 5, 1999 (steering)
- Single Car/guardrail – injury – cloudy daylight - Exceeding speed limit - July 25, 1997
- Car/car/guardrail – injury - clear daylight – left turn failed right of way - Sept 21, 2000
- Single car/guardrail - injury - clear daylight – speeding - May 2, 1997
- Single car – injury - Cloudy daylight, hillcrest – ran off road - June 28, 1998

Speed Samples

Operating **Speed Samples** were secured by VDOT at the intersection of Route 29 and Business Route 29 and the Shopping Center Entrance in Nelson County near the Town of Lovingston on August 20, 2004. These speed samples were free flow through the intersection with no hindrance from turning or slowing traffic. The speed samples included 337 observed vehicles in approximately 2 hours. The range of speeds was 43 mph to 68 mph. Other data includes:

- 85th percentile speed: **62 mph**
- 50th percentile speed: **58 mph**
- Average speed: **57.3 mph**
- 10 mph pace speed: **54 mph through 63 mph**
 - Percent in pace speed: **76%**
 - Percent over pace speed: **5%**
 - Percent under pace speed: **19%**

Transportation: Planned

Nelson County Six-Year Transportation Priorities

Within the Study Area, Nelson County has one priority project for primary roads to be included in the State's Six Year Transportation Plan:

- Intersection Safety Improvements at the Route 29 intersection with Calohill Drive and Front Street (Route 29 Business)

This primary road priority is affirmed in a statement to VDOT:

The Nelson County Board of Supervisors lists the Route 29 and Calohill Drive intersection as its #1 priority project to consider, using the language below:

There are approximately 11,000 vehicle trips through this intersection each day making it one of the busiest intersections in Nelson County. Entering onto Route 29 requires a motorist to look for oncoming traffic in three to six directions depending on the direction he/she is going. What frequently happens is that a motorist entering onto Route 29 will forget to look to the left after a certain amount of time resulting in an accident or near miss.

Another everyday occurrence is when large commercial trucks cross Route 29 to go straight across or change direction creating a major safety problem. Commercial trucks, some of which carry gasoline or propane, stop at the cross over in the center of the highway blocking both lanes of traffic in either the north or southbound lanes. It is only a matter of time before a major disaster happens when one of these truck is involved in an accident.

Although the design of this intersection meets minimum VDOT standards, we feel it is inadequate for the volume of traffic using it. Therefore the Nelson County Boar of Supervisors requests that this intersection be redesigned to accommodate safe travel movements along this section of Route 29.

Additional priority improvements include:

- Increase number of Park and Ride lots and amenities on Route 29;
- Provide fixed-route transit service from all Park and Ride lots; and
- Lovingson Sidewalks and Trails: Complete walkway system and crossings of Route 29.

Route 29 Phases II & III Corridor Study

The overall recommendation of this Study as it affects Nelson County is development of a parkway concept with at-grade intersections for Route 29 with multi-use trail on either side and an overpass connecting the east and west sides of Route 29.

Specific to the Lovingston study area recommendations include:

- Upgrade intersection [at Calohill Drive and Route 29] and add traffic signal;
- At Route 1001 add bridge with pedestrian and bicycle access.

Just south of the study area, the Corridor Study recommends upgrading the intersection at Route 651 [and Route 29].

Projected Traffic Volumes (from VDOT SPS)

The following table details the expected Vehicles Per Day (VPD) for roadways within the Study area as compared to 2004 data. All segments of Route 29 are expected to grow by 67% from 2004 to 2030.

<u>Roadway</u>	<u>Section</u>	<u>2004 VPD</u>	<u>2025 VPD</u>	<u>2030 VPD</u>
Route 29	South of Calohill Dr	12,273	17,331	18,535
	Calohill Dr to Front St	11,195	15,758	16,845
	North of Front St	12,590	17,605	18,799
Business Route 29	Rt 29 Bypass to Rt 56 (South)	3,351	4,313	4,542
	Rt 56 to Rt 29 Bypass (North)	2,215	2,215	2,215
Route 56	East of Rt 29	2,417	3,204	3,391
1001	29 Bypass to 29 Business	2,455	3,492	3,739

Source: Virginia Department of Transportation

Bicycle and Pedestrian Plans

The 2002 Nelson County Comprehensive Plan includes a bicycle, pedestrian, and greenways element. For the Lovingston area, this includes bicycle facilities for Routes 29 and 56, new sidewalks on Court, Main and Front Streets, walkways on Routes 29 and 56 in the southern area, and removal of utility poles and signs that clutter walkways. The plan notes the need for a safe crossing of Route 29, including the potential for an overpass as shown in the 29 Corridor Development Study. Street trees are also recommended for Lovingston.

A trail is proposed to go south of town to connect with Rucker Run and possibly down to Oak Ridge and up to Woods Mill via Fortune's Cove. The plan also notes that "Commercial centers and public facilities should have internal pedestrian circulation systems that provide safe travel from the street to the entryway, especially where vehicular parking areas are large or busy."

Land Use, Demographics and Economy: Existing

Land Use—County Maps & Data

Land use data for this Study were compiled using County tax parcel data, aerial photographs, visual observation, and discussions with County staff. County staff included the County Administrator, Director of Planning, and the Director of Economic Development. The study area includes the village of Lovington, the Route 29 corridor from its intersection with Business Route 29 north, and its intersection with Business Route 29 south, extending southward to the Library/Nelson Center complex and the development occurring on the western side of Route 29.

Demographics

In order to provide demographics for the Lovington area, two methods have been used—first, narrowing the focus to the Lovington zip code (22949), and second, narrowing the focus to the Census Tract containing Lovington (9501). For the 22949 zip code, the projected number of households in 2008 is 766, a gain of nearly nine percent from the estimated number of households in 2003. Additional demographic information for the Lovington zip code is included in the following tables.

Census 2000 Demographic Profile Highlights for Zip Code 22949

General Characteristics	Number	Percent	U.S.
Total population	1,245	100	100%
Male	585	47	49.10%
Female	660	53	50.90%
Median age (years)	45.3	(X)	35.3
Under 5 years	69	5.5	6.80%
	998	80.2	74.30%
		21.1	12.40%
One race	1,235	99.2	97.60%
White	1,018	81.8	75.10%
Black or African American	182	14.6	12.30%
American Indian and Alaska Native	1	0.1	0.90%
Asian	8	0.6	3.60%
Native Hawaiian and Other Pacific Islander	1	0.1	0.10%
Some other race	25	2	5.50%
Two or more races	10	0.8	2.40%
Hispanic or Latino (of any race)	62	5	12.50%
		94.2	97.20%
	72	5.8	2.80%
Average household size	2.21	(X)	2.59
	2.77	(X)	3.14
Total housing units	579	100	100.00%
Occupied housing units	531	91.7	91.00%
Owner-occupied housing units	348	65.5	66.20%
Renter-occupied housing units	183	34.5	33.80%
Vacant housing units	48	8.3	9.00%

Social Characteristics	Number	Percent	U.S.
Population 25 years and over	962	100	
High school graduate or higher	712	74	80.40%
Bachelor's degree or higher	246	25.6	24.40%
Civilian veterans (civilian population 18 years and over)	133	12	12.70%
Disability status (population 21 to 64 years)	95	12	19.20%
Foreign born	83	5.8	11.10%
Male, Now married (population 15 years and over)	265	48.6	56.70%
Female, Now married (population 15 years and over)	303	49.2	52.10%
Speak a language other than English at home (population 5 years and over)	151	11.4	17.90%

Economic Characteristics	Number	Percent	U.S.
In labor force (population 16 years and over)	786	67.7	63.90%
Mean travel time to work in minutes (population 16 years and older)	29.9	(X)	25.5
Median household income (dollars)	\$33,221	(X)	\$41,994
Median family income (dollars)	\$40,125	(X)	\$50,046
Per capita income (dollars)	\$17,813	(X)	\$21,587
Families below poverty level	38	10.5	9.20%
Individuals below poverty level	199	14.4	12.40%

Housing Characteristics	Number	Percent	U.S.
Single-family owner-occupied homes	232	100	
Median value (dollars)	\$97,100	(X)	\$119,600
Median of selected monthly owner costs	(X)	(X)	
With a mortgage	\$965	(X)	\$1,088
Not mortgaged	\$253	(X)	\$295

Source: U.S. Census

Economy

Specific Census data are not available for a region smaller than the full County:

Nelson County, VA

Statistics by Economic Sector 1997 Population: 13,780

<u>Industry Description</u>	<u>Number of Establishments</u>	<u>Number of Employees</u>	<u>Annual Payroll*</u>	<u>Shipments/ Sales/ Receipts*</u>
NAICS INDUSTRIES				
Manufacturing	14	621	8,725	41,164
Wholesale trade	7	13	254	6,052
Retail trade	51	225	2,611	27,584
Real estate & rental & leasing	11	76	2,218	5,854
Professional, scientific, & technical services	25	81	2,177	5,034
Administrative/support/waste management/remediation services	4	12	177	459
Educational services	1	a	D	D
Health care & social assistance	13	131	2,503	7,114
Arts, entertainment, & recreation	6	573	2,252	7,749
Accommodation & food services	21	708	8,300	23,565
Other services (except public administration)	13	30	560	2,262
MERCHANT WHOLESALERS				
Wholesale trade	5	a	D	D
AGENTS, BROKERS, AND COMMISSION MERCHANTS				
Wholesale trade	2	a	D	D

* Figures shown in \$1,000

Resident Survey

The Nelson County Department of Economic Development conducted both a resident and business survey as part of the Lovingston Revitalization project. These studies have the benefit of focusing more specifically on the needs and interests of citizens in and near Lovingston, as well as those frequenting the businesses and amenities of Lovingston. The survey asked the following questions:

1. How often do you come to Lovingston for the following?

Shopping – 3 times a week

Doing errands – 3 times a week

Eating out – 2 times a week

Professional services – 2 times a week

2. Where does your household usually shop for the following items?

	Lovingston	Charlottesville	Lynchburg	Other Location
Clothes	1	20	23	5
Shoes		18	23	5
Restaurants	15	17	15	7
Groceries	31	7	4	4
Hardware	25	7	5	6
Building supplies	5	15	10	6
Banking	28	7	3	6
Office supplies	3	17	8	3
Florist	30	2		
Farm supplies	140	1	1	7
Gifts	3	17	13	7
Jewelry	1	12	8	8
Automobiles		14	9	10
Auto Service	5	14	11	13
Insurance	20	7	2	11
Auto body	2		1	
Gasoline	26	10	5	11
Furniture		11	10	9
Appliances		17	14	5
Pet Care	16	3	2	7
Prescriptions	22	2	1	10
Physicians	7	18		9
Dentist	20	10	4	1
Antiques	4	7	2	11
Post Office	29	3		
Movies		12	10	8
Sporting goods	1	7	10	5
Beauty/Barber shop	11	5	4	11

3. What would keep you shopping in Lovington rather than traveling elsewhere?

Better variety of businesses	24
Businesses staying later on weekdays	5
Businesses staying later on weekends	6
More parking	9
Better prices and sales events	13
Better quality of merchandise	17
Better knowledge of what businesses offer	9
Better marketing of the businesses' products and services	5

4. Where do you work?

- Lovington - 6
- Nelson County - 7
- Charlottesville/Albemarle County - 7
- Lynchburg - 2
- Retired - 17

The survey also asked, "What would be an attraction or business to bring others to shop or live in Lovington?" Respondents mentioned the importance of sidewalks.

Land Use, Demographics and Economy: Planned

Land Use

Nelson County Comprehensive Plan

The 2002 Nelson County Comprehensive Plan's future land use for Lovington follows the Rural Small Town Development Model. The following is an excerpt from the Plan describing this development model:

Rural Small Town Development Model

A well-defined center of activity following Nelson's historic small town pattern of grided streets creating blocks with sidewalks, and includes residential and small scale commercial uses as well as places for civic and public use. It is the highest density model except for large-scale commercial and industrial uses and water and sewer services are required.

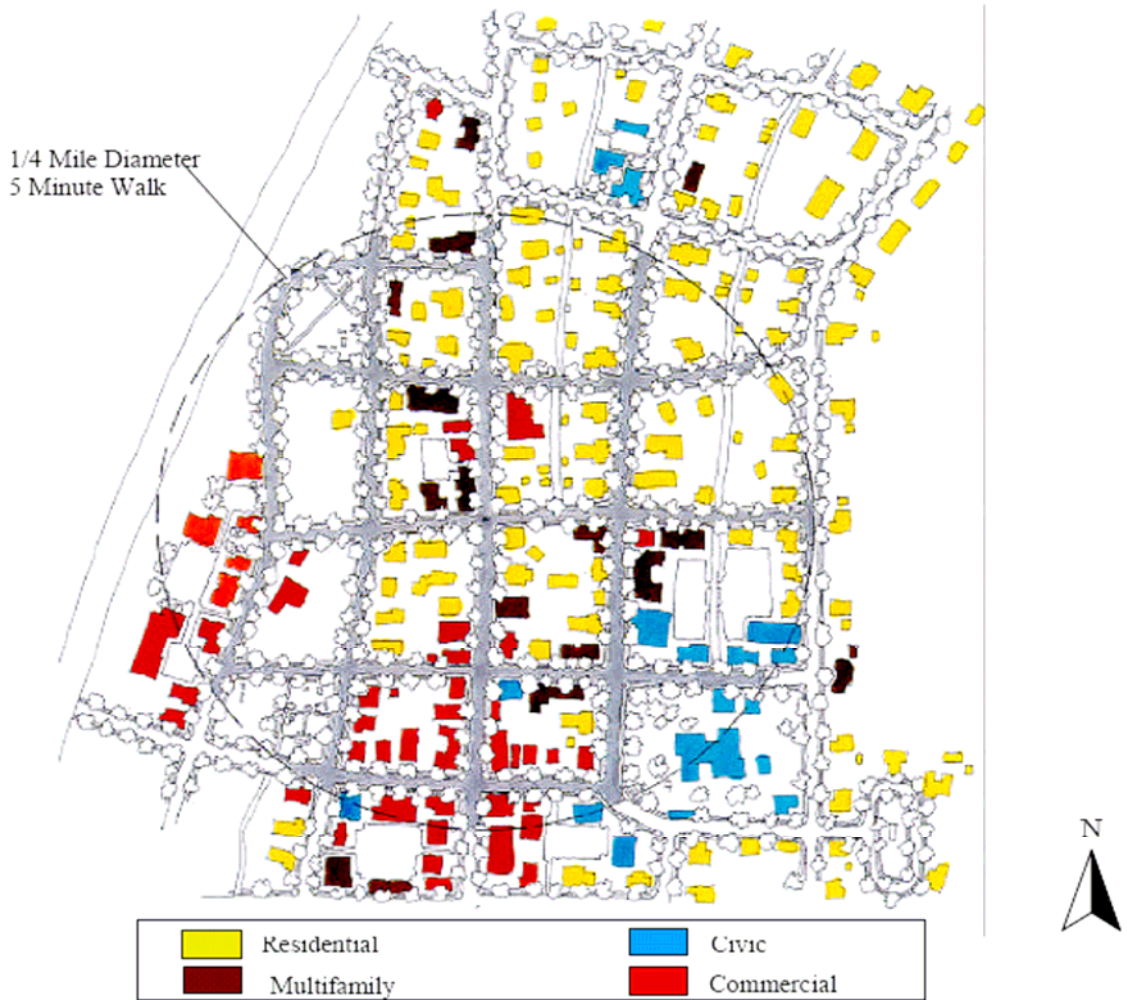


The Rural Small Town Development Model is the highest density development allowed in the county, except for large scale uses such as regional-scale commercial and industrial. Water and sewer service is required. The rural small town model includes interconnected streets for good internal mobility and allows for growth by using parallel collector roads added to the town. However, additional growth is allowed only within the defined boundaries of the town or expanded based on increased water and sewer service. The types of uses allowed include single family and multifamily residential, retail, offices, civic or public uses, parks/recreation, and limited, small-scale industrial. New buildings should reflect the scale of, and be compatible with, existing buildings. Preferred examples of commercial uses are shoe and clothing stores, dry cleaner, dentist and doctor's offices, antique and craft stores. A public gathering spot, such as a park or playing fields is a vital part of a vibrant small town. The town includes sidewalks or pedestrian paths, safe bicycling, and transit options such as JAUNT service and park and ride lots. On-street parking, off street parking, and parking lots are included within the town. As the county-wide land use map shows, rural small towns must be located near major highways or other means of good transportation.

The only existing rural small town in Nelson County, Lovington, is the prototypical rural small town. Future growth, or infill development, is desired in Lovington, but must follow the design model described in the following diagram and be in keeping with the historic character that is so evident in Lovington.

Nelson County Comprehensive Plan

Rural Small Town Development Model



Small Town

A well-defined center of rural activity that is surrounded by sparsely developed, or sparsely populated rural or agricultural land. The area contains at least several of the following land uses: residential, retail, office, civic, institutional, limited industrial, and park/recreation.

Building Sizes - Building scale should be compatible with existing buildings.

Proximity of Activities and Methods of Transportation - High proximity, balanced travel among automobile, rural transit, bicycling, and walking.

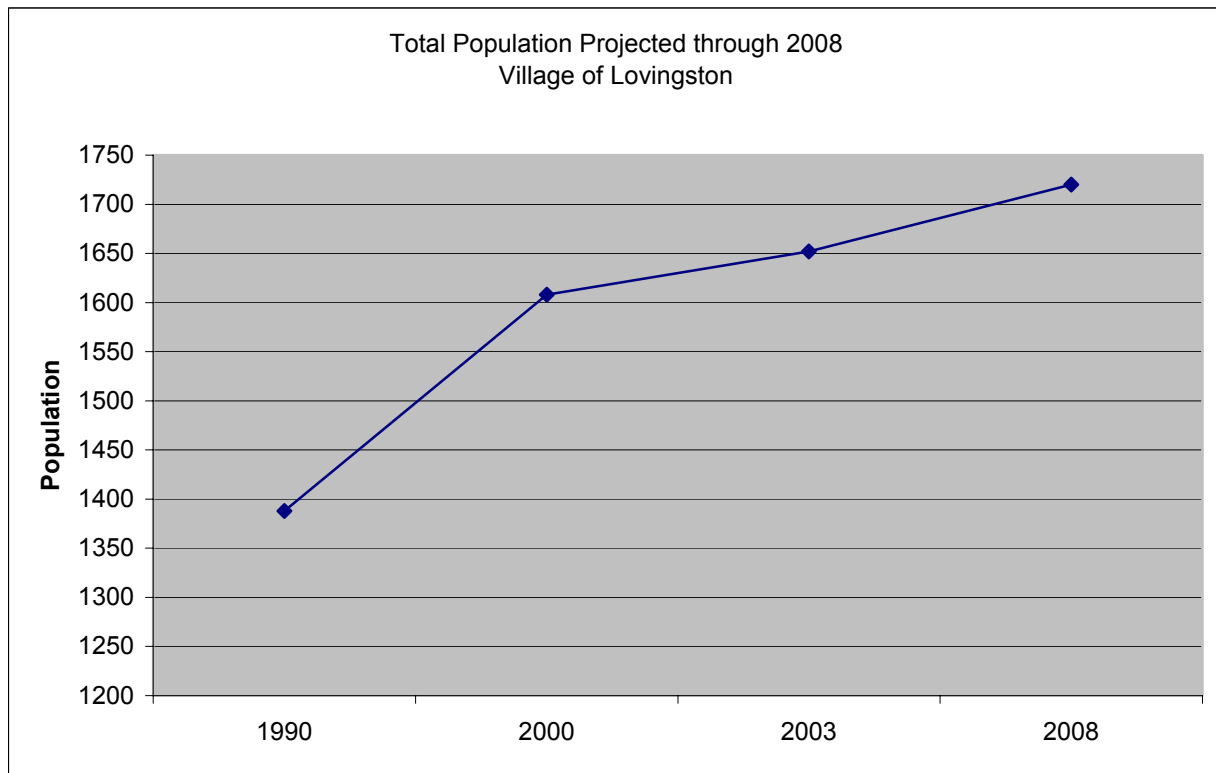
Locational Requirements - Usually at or near a crossroads; sometimes major highways.

Parking Characteristics - A mixture of on-street parking, parking lots, and driveways.

Growth/Change Potential - Relatively stable. However, some areas are facing growth pressures and suburbanization, while others are losing residents. Infill development is encouraged.

Demographics

Population Projections



Nelson County

Year	Period	Population
2030		16,600
2020		15,900
2010		15,100

Economy

In order to best identify the future economic needs of the Lovington study area (as opposed to the entire County), the following analyses are based on both the resident and business surveys conducted as part of the overall master planning process.

Resident Survey

The resident survey asked a number of questions indicating the future needs and desires of the Lovington residents to support a stronger economy:

What type of businesses would you like to see more of in downtown Lovington?

- Restaurants
- Lodging
- Antiques
- Gifts
- Dentists
- Pharmacy
- Clothing
- Appliances
- Farmers market
- Cafes
- Office Supplies
- Music
- Building supplies

What would keep you shopping in Lovington rather than traveling elsewhere? (In order of frequency of response?)

- Better variety of businesses
- Better quality of merchandise
- Better prices and sales events
- More parking
- Better knowledge of what businesses offer
- Businesses staying open later on weekends
- Businesses staying open later on weekdays
- Better marketing of the businesses' products and services

What would be an attraction or business to bring others to shop or live in Lovington?

- Historic designation
- Sidewalks
- Pharmacy
- Services
- Grocery
- Theater
- Clothing
- Restaurant
- Big box retailer
- Large national corporation
- Swimming pool
- Children's activities
- Department store

Comments or suggestions you may have to make Lovington a more special and exciting place.

- Street lighting
- Sidewalks
- Signage
- Planters
- Clean up lots
- Traffic calming along Routes 56 and 29
- Develop historic features
- Leave it alone
- Pedestrian friendly
- Bike and hiking trails
- Enlarge post office
- Theater
- Better newspaper
- Weekend events
- Restaurants

Business Survey

As with the resident survey, the business survey reveals a number of desirable services and amenities to make the future of Lovington a more successful and vibrant community.

What types of businesses would you like to see in Lovington?

- Retail
- Fitness
- Service
- Restaurant
- Big box retailer
- Bakery
- Office supplies
- Art galleries/supplies
- Dry cleaner

Comments or suggestions you may have to make Lovington a more vibrant business community.

- Additional children's activities
- Improve education
- Public meeting notices
- Parking
- Clean streets
- Develop the village
- Add small manufacturing jobs

In summary, many of the transportation safety recommendations made in this study reinforce and address the issues presented by Lovington residents and business owners. In particular, more parking, sidewalks, street lighting, signage, traffic calming along Routes 56 and 29, pedestrian friendly, and bike and hiking trails are all addressed in this study.