



**TOWN OF VINTON,
VIRGINIA**

**Regional Surface Transportation Program
(RSTP) Funds Application**

**Comprehensive Traffic Intersection
Improvements**

Date: September 16, 2014

RSTP Project Profile – Candidate Project

Please limit overall application to a maximum of 5 pages (11 pt. font 1.5 spacing) – supporting materials such as a previous study or aerial photography may be submitted as an addendum and not subject to 5 pages maximum.

1. Project Sponsor(s): Town of Vinton, Virginia
2. Proposed Implementing Agency: Town of Vinton, Virginia
3. Project Description and Attached Aerial Showing Proposed Improvement Location: Comprehensive Traffic Intersection Improvements Project – See Attachment A.
4. Detailed Scope of Work, proposed Schedule and Relation to Other Projects or Project Phases, Project Status, and Other Funding Sources: (attach document if extra space is needed – please refer to overall application limit noted above)
This project will reevaluate 11 traffic signals along the Town of Vinton’s major corridors of Washington Avenue, Virginia Avenue, Hardy Road and South Pollard Street. The project will include traffic counts, before and after travel time studies, signal warrant and capacity analyses using computer software, implementation of revised signal timings to improve overall traffic flow and past-implementation performance measurements. The study will also likely include recommendations to upgrade existing traffic signal controllers and pedestrian signs.
Attachment A: Aerial Location Map, Project Description and Scope of Work
Attachment B: Schedule and Relation to Other Projects and Project Phases

Items 5-9 Pertain to Highway Projects:

5. Functional Classification: Washington Avenue and Virginia Avenue/Hardy Road -Urban Minor Arterials; and South Pollard Street is an Urban Collector.
6. Existing Traffic Volume and Level of Service with Improvement: 2013 AADT: Washington Avenue – 24,000; Virginia Avenue – 26,000; Hardy Road – 11,000; and South Pollard Street – 11,400.
7. Existing Volume/Capacity: Washington Avenue – 24,000; Virginia Avenue – 26,000; Hardy Road – 11,000; South Pollard Street – 11,400.
8. Future Traffic Volume or Projected Ridership with Service Implementation: Washington Avenue – 31,941; Virginia Avenue – 33,712; Hardy Road – 13,555; and South Pollard Street – n/a
9. Future Volume/Capacity and Level of Service: Washington Avenue – LOS F; Virginia Avenue – LOS F; Hardy Road – LOS C; South Pollard Street – LOS D
10. Estimated Project Cost by Phase (Preliminary Engineering, Right-of-Way (including utilities) and Construction (including administration): (attach a detailed cost estimate and/or budget to support your application)
PE: \$100,000.00
R/W: N/A
CN: \$2,650,000.00

Breakdown of Costs Continued on Next Page...

**Comprehensive Intersection Improvements Project
Cost Estimate**

Preliminary Engineering Phase	
Task by Project Development Phase	Project Cost
Phase I – Preliminary Engineering Design Study	\$100,000
PE Phase Total Costs: Subtotal	\$100,000
Right-of-way Phase	
ROW Phase Total Costs: Subtotal	N/A
Construction Phase	
Phase II – Year 1	\$650,000
Phase III – Year 2	\$500,000
Phase IV – Year 3	\$500,000
Phase V – Year 4	\$500,000
Phase VI – Year 5	\$500,000
TOTAL COSTS (PE, RW, & CN)	\$2,750,000

Walnut Avenue and 8th Street Intersection Improvements

RSTP Candidate Project Rating Factors

A. Regional Project Consideration

The Town of Vinton is a small, bustling community located in Eastern Roanoke County between the foothills of the Blue Ridge Mountains, the City of Roanoke, and the Roanoke River. With a population of just over 8,000 residents and a land mass of 3.2 square miles, this diversifying urban area strives to sustain its distinctive small-town charm within the greater Roanoke Valley. The major corridors serving the Town of Vinton function as vital links for access to neighboring jurisdictions of the City of Roanoke, Counties of Roanoke and Bedford, as well as amenities such as the Blue Ridge Parkway, Explore Park, and Smith Mountain Lake.

A safe and efficient transportation system is one of the major components in maintaining the vibrancy of the Town and the surrounding localities. These corridors are primarily used by residents of Vinton and adjacent localities to travel to work in the City of Roanoke and Counties of Roanoke and Bedford; and vacationers traveling to Smith Mountain Lake and the Blue Ridge Parkway. Local public transit buses operated by Valley Metro also have stops along these corridors. Improvements to the existing traffic intersection system will reduce travel time, improve pedestrian and bicycle safety, and enhance mobility and quality of life in this region.

B. Support the Economic Vitality of the Metropolitan Area

The proposed signal system improvement project will have a direct impact on local economic growth and productivity for this region. A good transportation system is an important selling point to communities that desire to attract development. Washington and Virginia Avenues/Hardy Road are the Town's major corridors through Vinton and Roanoke County. These roadways run parallel to one another through the town and serve as the primary links for commuters to the City of Roanoke from Vinton, neighboring Roanoke and Bedford Counties, and the Smith Mountain Lake Area. South Pollard Street serves as important connecting route between Washington/Virginia Avenues and Hardy Road.

C. Increase the Safety and Security of the Transportation System

Improved signal coordination reduces the number of vehicle stops with a corresponding reduction in rear-end accidents. Further, the study will consider pedestrian patterns and make recommendations for improvements in signal operations for the benefit of pedestrians as well.

D. Increase the Accessibility and Mobility Options Available to People and/or Freight

Coordinated signal systems improve mobility and accessibility for all users of the right-of-

ways including freight haulers. The benefits are achieved through reductions in travel time/delays, accidents, fuel consumption, and vehicle emissions.

E. Protect and Enhance the Environment, Promote Energy Conservation, and Improve Quality of Life

Improved signal coordination enhances the environment and air quality by reducing fuel consumption and vehicle emissions due to the reduction of the number of stops. Also, driver experience is improved through reductions in travel time/delays along the main corridors.

F. Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and/or Freight

Better coordination between intersections signals ensures efficient movement of traffic at the appropriate speed limit which in turn benefits all users of the right-of-ways.

G. Promote Efficient System Management and Operation

Improved traffic signal coordination optimizes traffic flow and operation by enhancing progression of vehicles through a corridor and by reducing congestion, accidents, fuel consumption, and travel time/delays.

H. Emphasize the Preservation of Existing Transportation System

Coordinating traffic intersection signals improves traffic flow and minimizes delays which can eliminate the need to seek geometric capacity improvements.

I. Cost/Benefit Consideration

According to the Institute of Transportation Engineers, “signal retiming is a beneficial method for maintaining efficient traffic operations” and “is the most cost-effective technique to reduce congestion, improve air quality, and potentially reduce accidents”. The effort involved is personnel time which is much less expensive than capital improvements that might otherwise be required to make geometric capacity improvements.

J. Projects included in previous plans that had a public input process associated with the plan.

- Town of Vinton 2004 – 2024 Comprehensive Plan; and Economic and Community Development Plan adopted by Vinton Town Council on September 7, 2004.
- 2010 Vinton Area Corridors Plan – A Component of the Roanoke County and Town of Vinton Comprehensive Plan – Adopted by Vinton Town Council on February 16, 2010.

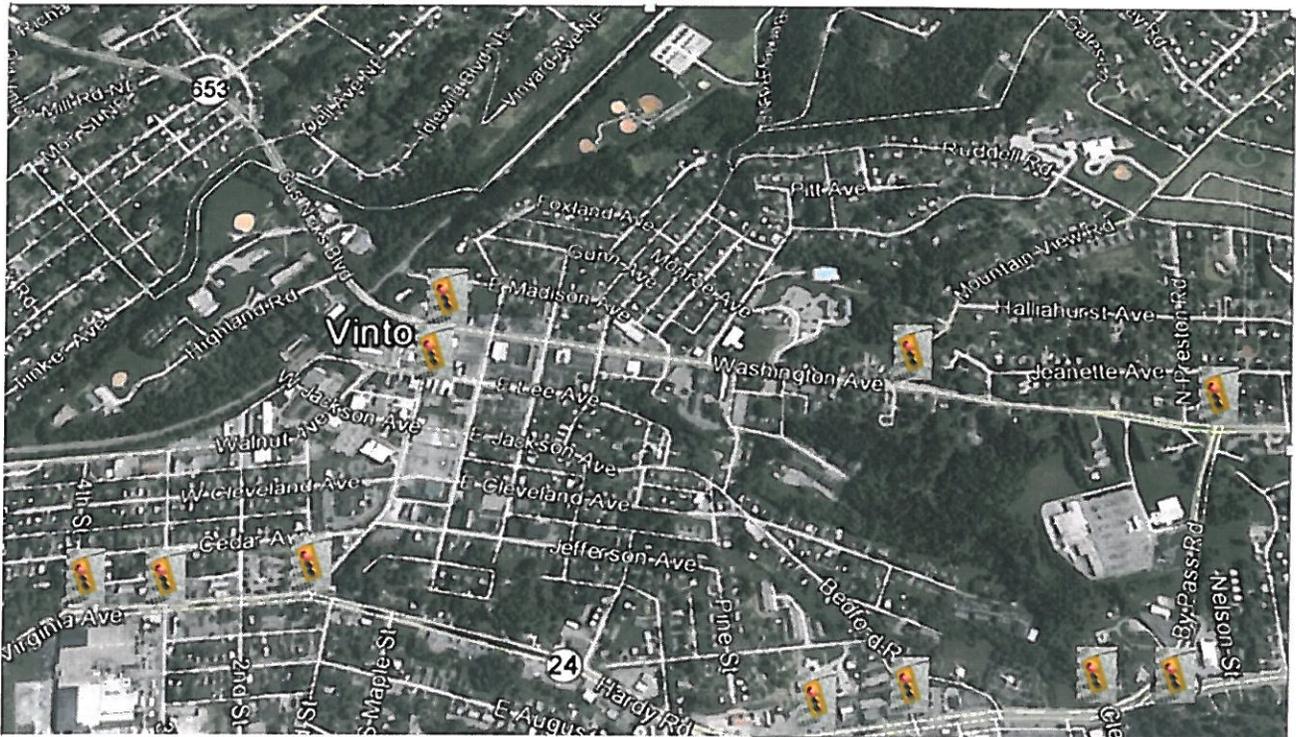
Attachment A – Location and Scope of Work

Comprehensive Traffic Intersection Improvements Project

Project Location: Please see attached aerial map showing the intersections to be improved along Washington Avenue, Virginia Avenue, Hardy Road, and South Pollard Street.

Project Description: The project is located along the Town of Vinton's major corridors of Washington Avenue, Virginia Avenue, Hardy Road, and South Pollard Street. It will reevaluate 11 traffic intersection signals. The outcome of the project will be to implement new signal timings for improving signal coordination and traffic flow along Washington Avenue, Virginia Avenue, Hardy Road, and South Pollard Street.

Scope of Work: The Project would consist of a preliminary engineering design study to reevaluate the traffic signal system and the implementation of the new signal timings for improving signal coordination and traffic flow. The following map indicates the traffic intersections to be included in this project:



Town of Vinton Comprehensive Traffic Intersection Improvements Project Aerial Map

Attachment B – Schedule and Other Project Phases

Project Request Location: Comprehensive Traffic Intersection Improvements Project – Washington Avenue, Virginia Avenue, Hardy Road, and South Pollard Street

Preliminary Design Engineering Study: July 2015 to January 2016

Project Advertisement: July 2016

Begin Construction: September 2016

End Construction: September 2021

Currently Under Review with Completion Fall 2015:

Walnut Avenue Phase I - \$100,000

Sidewalks/gutter - \$88,200

Striping of pavement for Share the Road Program - \$800

Crosswalks (7) – \$1,000

Landscaping (trees for traffic calming/shade) - \$10,000

Currently Under Review with Completion Spring 2016:

Glade Creek Greenway - \$162,000.00

RESOLUTION NO. 2077

AT A REGULAR MEETING OF THE VINTON TOWN COUNCIL HELD ON TUESDAY, SEPTEMBER 16, 2014, AT 7:00 P.M., IN THE COUNCIL CHAMBERS OF THE VINTON MUNICIPAL BUILDING LOCATED AT 311 SOUTH POLLARD STREET, VINTON, VIRGINIA

A RESOLUTION requesting that the Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) fund the following Regional Surface Transportation Program (RSTP) Projects:

- 1. City of Roanoke and Town of Vinton Joint Application for a Tinker Creek Pedestrian Bridge.***
- 2. Walnut Avenue and 8th Street Intersection Improvement.***
- 3. Comprehensive Traffic Intersections Improvements.***

WHEREAS, the Council of the Town of Vinton has been advised of the availability of the Regional Surface Transportation Program (RSTP) funds for the Fiscal Year 2014-15 Revenue Sharing Program; and

WHEREAS, the focus of the RSTP applications is to provide connections to the residents of the Town of Vinton to the Roanoke Valley Greenway System, and

WHEREAS, these connections can be provided by implementing bicycle and pedestrian accommodations through a pedestrian bridge and improvements to the Town's street intersections; and

WHEREAS, the connection between communities encourages economic vitality; and

WHEREAS, it is necessary to file an application to be considered for the allocation of the RSTP funds.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Vinton, Virginia, that:

1. The Town of Vinton wishes to apply for the RVAMPO Fiscal Year 2014-15 RSTP funds for the following:
 - a. City of Roanoke and Town of Vinton Joint Application for a Tinker Creek Pedestrian Bridge Project with an estimated cost of \$1,459,500.00.
 - b. Walnut Avenue and 8th Street Intersection Improvement Project with an estimated cost of \$2,334,931.00.
 - c. Comprehensive Traffic Intersections Improvements with an estimated cost of \$2,750,000.00.
2. The Town agrees to provide administrative services to manage the proposed Projects.

3. The proposed pedestrian bridge and improvements to street intersections will enable residents from the Town of Vinton and the Roanoke Valley, to travel safely from their neighborhoods to Downtown Vinton, Walnut Avenue, Virginia Avenue, and to the City of Roanoke's existing Tinker Creek Greenway.

This Resolution adopted on motion made by Council Member Nance, seconded by Vice Mayor Hare, with the following votes recorded:

AYES: Adams, Nance, Weeks, Hare, Grose

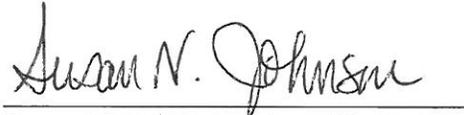
NAYS: None

APPROVED:



Bradley E. Grose, Mayor

ATTEST:



Susan N. Johnson, Town Clerk