



RSTP Project Profile – Candidate Project # 3

- A. Project Sponsor(s):** Roanoke County, co-sponsor: City of Salem
- B. Proposed Implementing Agency:** Roanoke County / Virginia Department of Transportation
- C. Project Description and Attached Aerial Showing Proposed Improvement Location:**

Roanoke County is submitting a request for pedestrian improvements and safety accommodations in the Glenvar area. RSTP funding was awarded for Phase One of the West Main Street Pedestrian Improvement Project in June 2013. That funding recently added sidewalks to a portion of the north side of West Main Street, Rt 11/460, connecting existing sidewalk at the City of Salem boundary and continuing west to Daugherty Road. However, the funding was insufficient to include planned sidewalk to Fort Lewis Church Road or the planned pedestrian signals.

This funding request to continue the existing sidewalk project, is broken into two phases. Phase 2 would continue sidewalk construction from Daugherty Road to Fort Lewis Church Road, on the north side of West Main Street. Also included in Phase 2, sidewalks would be constructed from the existing sidewalks in the City of Salem to Technology Drive, along the south side of West Main Street. Pedestrian signals and crosswalks would be installed at the existing signalized intersections at Alleghany Drive and at Daugherty Road. Phase 3 would continue construction from Fort Lewis Church Road to the intersection with Technology Drive, along the north side of West Main Street. Phase 3 is a portion of the sidewalk project that could be broken out of construction plans, and still provide a logical terminus to the northern sidewalks. Crosswalks would also be installed at the Fort Lewis Church Road intersection. All proposed crosswalks would be “Continental” design. All proposed sidewalk construction would take place in existing West Main Street right of way.

Please see the attached aerial map for locations of proposed improvements. Preliminary cost estimates for Phase 2 and 3 are also attached.

The project qualifies for the Regional Surface Transportation Program under the following eligibility categories:

Pedestrian and/or Bicycle Improvements

- Sidewalks with crosswalks, pedestrian signalization and ADA ramps

Highway Capacity, Accessibility, and Operational Improvements:

- Continue to add pedestrian accommodations to existing 11/460 Widening Project.



D. Detailed Scope of Work, proposed Schedule and Relation to Other Projects or Project Phases, Project Status and Other Funding Sources:

Detailed Scope of Work:

1. Detailed Design Phase
2. Final Design
3. Advertisement For Construction
4. Construction

Proposed Schedule:

Tentative Date	Activity
Spring 2016	Preliminary Engineering Complete
Summer 2017	Phase 2 & 3 Sidewalk Construction

Relation to Other Projects or Project Phases:

This sidewalk project would continue construction that was added to the 11/460 Widening Project. The 11/460 widening project began in the fall of 2010 and is currently nearing completion. No additional right of way is needed.

Project Status:

Phase 1 sidewalks were constructed in Summer 2014, using FY 2014 RSTP funds.

Other Funding Sources:

Funding Source	Amount
RSTP Funds, FY 2014	\$177,956

E. Functional Classification: Urban Collector

F. Existing Traffic Volume and Level of Service with Improvement:

The 11/460 Widening Project will significantly improve both the capacity and Level of Service for West Main Street.

G. Existing Volume/Capacity:

West Main Street Segment	Annual Average Daily Traffic Volume Estimates (2013 VDOT)
City of Salem (WCL) to Alleghany Drive	17,000
Alleghany Drive to Daugherty Road	13,000
Daugherty Road to Dow Hollow Road	10,000

H. Future Traffic Volume or Projected Ridership with Service Implementation: Daily traffic volume is expected to increase to 34,200 by 2031 (VDOT). Additional bicyclists and pedestrians will safely utilize planned bicycle and pedestrian accommodations along West Main Street.

I. Future Volume/Capacity and Level of Service: Additional bicyclists and pedestrians will safely utilize planned bicycle and pedestrian accommodations along West Main Street.



J. Estimated Project Cost by Phase: (see attached Project Budget for additional detail)

Activity Phase	Phase 2	Phase 3
Preliminary Engineering	\$65,144	\$7,946
Right-of-Way	\$0	\$0
Construction	\$651,441	\$79,464
Total Each Phase	\$716,585	\$87,410
Total RSTP Request		\$803,995

K. RSTP Candidate Project Rating Factors

A. Regional Project Consideration

West Main Street is an important urban collector in the Commonwealth of Virginia. Not only a primary truck route through the region, it also serves as an alternate route when Interstate 81 is congested due to traffic accidents. The 11/460 widening project includes access management structures to improve traffic flow, especially during periods of heavy traffic increases.

Pedestrian improvements to this regional corridor enhance a significant primary highway, and welcome travelers entering the western Roanoke Valley. New sidewalk would connect to existing sidewalk in the City of Salem, and provide a safe pedestrian system for a newly reconstructed highway. The City of Salem supports the project, and is a co-sponsor of this application.

B. Support the Economic Vitality of the Metropolitan Area

This project serves a growing corridor with three of the top 10 employers in the County located there, including Richfield Retirement Community (630 employees) and Medeco (400 employees); Kroger has 320 members of its total work force located on the corridor at distribution facilities (includes Atlas Logistics). Other large employers include New Millennium on the eastern end of the corridor (Diuguids Lane) with 180 employees, and on the western end Blue Ridge Beverage employs 150 people while Valley Tech Park employs 240 people among three companies (see attached aerial map). Together these companies employ almost 2,000 people.

Adopted by the Roanoke County Board of Supervisors in 2012 as an amendment to the Roanoke County Comprehensive Plan, the Glenvar Community Plan provides a new vision for the Glenvar area of western Roanoke County. Accomplished with significant public involvement, the Plan considers the effects of the reconstruction of West Main Street, and identifies the “Glenvar Village” as an area of focus for new economic development. This pedestrian improvement project would further enhance the new West Main Street, and begin implementing the Glenvar Community Plan.

C. Increase the Safety and Security of the Transportation System

Pedestrians would have a safe surface to use, rather than walking on the grass shoulder. Bicyclists will have a 12-foot-wide shoulder lane throughout the project. Conflicts with pedestrians, bicyclists and drivers will be reduced with the planned improvements. In addition, the widening of the road to a four-lane divided highway has increased the distance pedestrians must cross at intersections. This creates a need for marked crosswalks at Alleghany Drive / Garman Road, at Daugherty Road, and at



Fort Lewis Church Road. Pedestrian crossing signals will be needed at the signalized intersections of Alleghany Drive and at Daugherty Road.

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

The network of sidewalks and pedestrian crossings would be designed and constructed to ADA standards with accessibility ramps where the sidewalks and trails cross side streets and business entrances. Two signalized pedestrian crossings are also planned. Area employees, residents, students, customers and visitors of all abilities would utilize the new accommodations once they are constructed. The sidewalk would connect to existing sidewalk in the City of Salem. Bicyclists will utilize the wide shoulder lane throughout the project.

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

When the proposed sidewalks and crosswalks are complete, reduced vehicle trips and therefore reduced fuel consumption and vehicle emissions are anticipated due to the expected increase in pedestrian and bicycle trips. These proposed improvements would promote healthy habits by permitting employees, residents, visitors and others to walk and bike for recreation, exercise and commuting. The new sidewalk would connect to an elementary school, library, public safety center, church, offices, a large residential assisted living facility, retail and other businesses and services.

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

The sidewalk would connect to existing sidewalks in the City of Salem. As mentioned above, the new sidewalk would offer an alternative to vehicular transportation for a wide variety of public and private services and businesses. Bicyclists would benefit from a wide shoulder lane throughout the project.

G. Promote Efficient System Management and Operation

Pedestrian signals and crosswalks would provide managed pedestrian crossing at two major intersections, Alleghany Drive and Daugherty Road. Pedestrian crosswalks are also proposed at Fort Lewis Church Road.

H. Emphasize the Preservation of Existing Transportation System

Improvements mentioned above should extend the life of the transportation facility and will reduce the future need to widen West Main Street.

I. Cost/Benefit Considerations

Grading has been completed along the length of the widening project in the areas where sidewalk is proposed. Curb cuts and ramps at intersections are now in place. In essence, it is a matter of connecting the ramps and adding concrete on grade. If these measures were not in place there would be greater cost to have sidewalk improvements retrofitted in the future. As it stands, the area is ready for sidewalks, maximizing the community benefit in relation to the cost.



RSTP Request	\$803,995
Average Daily Traffic (ADT)	17,000
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Request/ADT	\$47.30 per trip

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

Roanoke County Comprehensive Plan (2005)

Glenvar Community Plan: Adopted by the Board of Supervisors in 2012 as a component of the Comprehensive Plan; the West Main Street project begins to implement the Glenvar Community Plan.

Constrained Long Range Transportation Plan (CLRTP) 2035: Primary System

Transportation Improvement Program (TIP) 09-12 and 12-15: Primary System

Bikeway Plan for the Roanoke Valley Area MPO – 2012 Update:

- Priority alignment: West Main Street from the City of Salem to Technology Drive
- Vision alignment: West Main Street from Technology Drive to Montgomery County

VDOT Policy for Integrating Bicycle and Pedestrian Accommodations: Endorses bicycling and walking as fundamental travel modes and integral components of an efficient transportation network.

Attachments:

1. West Main Street Pedestrian Improvements, Phases 2 and 3
2. Roanoke County Preliminary Cost Estimate
3. Roanoke County Board of Supervisors Resolution [092314-4.f](#) requesting the RVAMPO to fund a list of RSTP projects for fiscal year 2016-2021
4. City of Salem letter of support
5. Photographs of existing sidewalk and existing graded shoulder

West Main Street Pedestrian Improvements, Phases 2 and 3



West Main Street Pedestrian Project - Roanoke County

- 1/4 mile walking radius - 5 minutes
- 1/2 mile walking radius - 10 minutes
- Glenvar Library
- Ft Lewis Fire & EMS Station
- Signalized Intersection
- Unsignalized Intersection

Crash Data - 7/2009 - 6/2014

Number of Accidents

- 1 - 3
- 5
- 6 - Ft Lewis Church Rd
- 10 - Daugherty Rd
- 21 - Alleghany Dr

Sidewalks & Crosswalks

Phase

- 1 - North - Elementary School to Library - Daugherty
- 2 - North - Daugherty Rd to Ft Lewis Church Rd
- 2 - South - City of Salem to Technology Dr
- 2 - Intersection Improvements
- 3 - North - Ft Lewis Church Rd to Technology Dr

0 0.05 0.1 0.2 Miles

PRELIMINARY ENGINEERING PHASE		Unit	Cost Each	Phase 1	Phase 2	Phase 3	All Phases Cost		
Engineering/Design Fees (10%)					\$65,144	\$7,946	\$73,090		
PRELIMINARY ENGINEERING PHASE TOTAL COSTS					\$65,144	\$7,946	\$73,090		
CONSTRUCTION PHASE		Unit	Cost Each	Phase 1	Phase 2	Phase 3	All Phases Cost		
Sidewalk (5' width)	Concrete Sidewalk (5' width, 4" thick)	Sq Yard	\$28.50		13,712	\$390,801	2,316	\$66,006	\$456,807
Pedestrian Signal (Alleghany Dr)	Signalization (1 leg)		\$17,000		4	\$68,000			\$68,000
	Crosswalk Marking		\$10,600		1	\$10,600			\$10,600
Pedestrian Signal (Daugherty Rd)	Signalization (1 leg)		\$17,000		3	\$51,000			\$51,000
	Crosswalk Marking		\$10,600		1	\$10,600			\$10,600
Fort Lewis Church Road	Crosswalk Marking		\$10,600		1	\$10,600			\$10,600
Excavation		Cu Yard	\$9.50		160	\$1,520	27	\$257	\$1,777
Contingency		10% CN				\$54,160		\$6,601	\$60,761
Incidental Costs		10% CN				\$54,160		\$6,601	\$60,761
CONSTRUCTION PHASE TOTAL COSTS					\$651,441	\$79,464	\$730,904		
TOTAL COSTS (PE, CN) PER PHASE				\$177,956	\$716,585	\$87,410			
TOTAL PROJECT COSTS (PE, CN)							\$803,995		
RSTP REQUEST PER PHASE					\$716,585	\$87,410			
TOTAL RSTP REQUEST							\$803,995		

AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA, HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER, ON TUESDAY, SEPTEMBER 23, 2014

RESOLUTION 092314-4.f REQUESTING THE ROANOKE VALLEY AREA METROPOLITAN PLANNING ORGANIZATION FUND A LIST OF PROJECTS FOR THE FISCAL YEAR 2016-2021 REGIONAL SURFACE TRANSPORTATION PROGRAM

WHEREAS, the Roanoke Valley Area Metropolitan Planning Organization reviews applications for funding through the Regional Surface Transportation Program and makes recommendations for project funding to the Commonwealth Transportation Board; and

WHEREAS, the Roanoke County Board of Supervisors reviewed a list of six (6) projects for Regional Surface Transportation Program funding at a work session on September 9, 2014; and

WHEREAS, the Roanoke County Board of Supervisors supports the list of six (6) projects for Regional Surface Transportation Program funding.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Roanoke County, Virginia requests the Roanoke Valley Area Metropolitan Planning Organization fund the following list of projects for the fiscal year 2016-2021 Regional Surface Transportation Program:

1. Plantation Road Project – Lila Drive Intersection
2. Plantation Road Project – Friendship / Carvin's Creek Bridge Replacement
3. Plantation Road Project – Friendship Lane Reconstruction
4. Plantation Road Project – Phase 2
5. Exit 140 Park and Ride

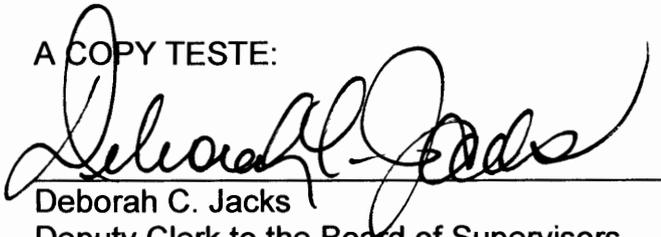
6. West Main Street Pedestrian Improvements – Phase 2

On motion of Supervisor McNamara to adopt the resolution, and carried by the following recorded vote:

AYES: Supervisors Moore, Bedrosian, Church, Peters, McNamara

NAYS: None

A COPY TESTE:



Deborah C. Jacks
Deputy Clerk to the Board of Supervisors

cc: David Holladay, Planning Administrator
Roanoke Valley Area Metropolitan Planning Organization



September 3, 2014

Megan G. Cronise, AICP
Principal Planner
Roanoke County Department of Community Development
5204 Bernard Drive
Roanoke VA 24018

RE: West Main Street Pedestrian Improvement Project RSTP Application

Dear Mrs. Cronise,

The City of Salem wishes to co-sponsor Roanoke County's Phase II application for Regional Surface Transportation Program (RSTP) funding for the West Main Street Pedestrian Improvement Project.

Sidewalk currently exists on both sides of West Main Street in Salem, and Phase I of the project has added sidewalks on the north side to Daugherty Road and the new Glenvar Library in Roanoke County. Phase II will greatly enhance the walkability of the corridor by completing sidewalk on both sides of West Main Street, from the border with Salem to Technology Drive.

The pedestrian improvements included in this project are of importance to the citizens of Salem, and will assist in the commercial development of West Main Street, a goal which both localities have an interest in.

If we can be of further assistance, please do not hesitate to ask.

Sincerely,

Kevin S. Boggess
City Manager

KSB:BWT



West Main Street Pedestrian Improvements



August, 2014 – Phase 1 Construction connecting to City of Salem sidewalks at Fort Lewis Elementary School



August, 2014 – Phase 1 Construction



August, 2014 – Phase 1 Construction



August, 2014 – Phase 1 Construction



August, 2014 – Phase 1 Construction



August, 2014 – Phase 1 Construction



August, 2014 – Phase 2 shoulder area



August, 2014 – Phase 2 shoulder area



August, 2014 – Phase 2 shoulder area



August, 2014 – Phase 2 shoulder area



August, 2014 – Phase 3 shoulder area

