VINTON AREA CORRIDORS PLAN
NOTICE OF PUBLIC HEARING

November 20, 2009

Dear Property Owner, Resident or Tenant,

On December, 7, 2009, the Roanoke County Planning Commission and the Town of Vinton Planning Commission will hold a joint public hearing to receive comments on the draft Vinton Area Corridors Plan. The Vinton Area Corridors Plan is a long-range plan intended to enhance aesthetics, improve safety and guide future development and redevelopment along the following corridors in your community: **Bypass Road, Hardy Road, South Pollard Street, Virginia Avenue, Walnut Avenue and Washington Avenue**.

During the past year, staff from Roanoke County, the Town of Vinton and the Roanoke Valley-Alleghany Regional Commission has developed this plan through a series of community meetings, a community survey, business owner interviews and stakeholder meetings. The first set of community meetings were held on January 29, 2009 as an introduction to the community planning process which included an overview of the Vinton Area Corridors Plan and possible plan components. At the second community meeting held on June 18, 2009, staff presented survey and interview results, draft goals and recommendations, and several future land use scenarios for parcels along the Vinton study corridors and in the surrounding area.

Monday, December 7, 2009
7:00 p.m.
South Ballroom - Vinton War Memorial
814 Washington Avenue

Since the community meetings, County and Town staff has worked with the Roanoke County Planning Commission and the Town of Vinton Planning Commission to develop the draft Vinton Area Corridors Plan, update the goals and recommendations, and refine the future land use amendments. A draft of the Vinton Area Corridors Plan has been prepared for consideration by the Planning Commissions and is available at the Roanoke County Department of Community Development and the Vinton Planning and Zoning Department, or online at www.roanokecountyva.gov/vacp.

Following review by the Planning Commissions, the Vinton Area Corridors Plan will be forwarded to the Roanoke County Board of Supervisors and the Vinton Town Council for their consideration. Ultimately, this plan will be adopted into the Roanoke County Comprehensive Plan and the Town of Vinton Comprehensive Plan.

For more information regarding this notice, please contact **Lindsay Blankenship,** Roanoke County Department of Community Development at (540) 772-2068 extension 283 or email lblankenship@roanokecountyva.gov, or **Anita McMillan,** Vinton Planning Department at (540) 983-0601 or email at amcmillan@vintonva.gov.

Thank you for your interest and assistance with this process! Your input will help guide the future development of the Vinton community.

VINTON AREA CORRIDORS PLAN

JOINT PLANNING COMMISSION WORK SESSION AND PUBLIC HEARING

MONDAY, DECEMBER 7, 2009 – 6:00 P.M.
SOUTH BALLROOM - VINTON WAR MEMORIAL
814 EAST WASHINGTON AVENUE

I. Dinner – Main Floor Meeting Room, 5:30 p.m. – 6:00 p.m.

II. Work Session – Main Floor Meeting Room, 6:00 p.m. – 7:00 p.m.

A. Call to Order
- Mr. David R. Jones, Chairman, Town of Vinton
- Ms. Martha Hooker, Chairman, Roanoke County

B. Discussion of Draft Document
- Ms. Anita J. McMillan, Director of Planning and Zoning, Town of Vinton
- Ms. Lindsay Blankenship, Planner II, Roanoke County

III. Evening Session – South Ballroom, 7:00 p.m.

A. Invocation/Pledge of Allegiance
- Mayor Bradley E. Grose, Town of Vinton

B. Public Hearing
- The Roanoke County Planning Commission and Town of Vinton Planning Commission will hold a joint public hearing on a proposed amendment to the Roanoke County Comprehensive Plan and the Town of Vinton Comprehensive Plan. The proposed amendment would incorporate the Vinton Area Corridors Plan into the Roanoke County Comprehensive Plan and the Town of Vinton Comprehensive Plan.

C. Citizens' Comments

D. Comments of Planning Commissioners and Staff

E. Adjournment

In collaboration with VDOT

VINTON AREA CORRIDORS PLAN - ROANOKE COUNTY/TOWN OF VINTON
JOINT PLANNING COMMISSION WORK SESSION
MONDAY, DECEMBER 7, 2009, 6:00 P.M.
MAIN MEETING ROOM ~ VINTON WAR MEMORIAL

#	NAME	ADDRESS	PHONE #	EMAIL ADDRESS
1	Kara Turman	TOV Planning	983-0605	Kturman@vintonva.gov
2	ANITA MCMILLAN	TOV PLANNING	983-0601	amcmillan@vintonva.gov
3	Julie Tucci	TOV Planning	983-0601	jtucci@vintonva.gov
4	Matt Miller	Roanoke Valley-Alleghany Reg. Commission	343 4417	mmiller@rvarc.org
5	C.W. PACE	TOV PLANNING Commission	342-2997	cwpace@bbsandt.com
6	Bob Patterson	TOV Planning Commission	3421066	
7	Dave Jones	TOV Planning Commission	343-3621	Dave.jones@sseoop.com
8	DAWN MICHELSEN	TOV Planning Com	981-0356	deltab26dawn@aol.com
9	Wes Nance	TOV Council	982-2016	W.nance@vintonva.gov
10	Brad Grose	TOV Council	983-0607	bgrose@vintonva.gov
11	STEVE AZAR	ROANOKE COUNTY Planning - VINTON	890-6573	SAZAR@ROANOKECOUNTYVA.GOV
12	Martha Hooker	Roanoke County Planning - Catawba	380-5939	mhooker@rcs.k12.va.us
13	DAVID RADFORD	ROA COUNTY PC	312-4122	draffords3@cox.net
14	Gary Jarrell	6654 Stonelyn College Ct. Roanoke 24019	265-8876	garyj@valleyboiler.net
15	RODNEY MCNEIL	5540 ARTHUR ST. ROANOKE, VA. 24018	774-7214	RWMHARLEY@AOL.COM
16	TAMMI WOOD	RCOUNTY COMM DEVEL	772-2068	TWOOD@ROANOKECOUNTYVA.GOV
17	JOE A PATTISALL	" "	" "	TPATTISALL@ROANOKECOUNTYVA.GOV
18	Rebecca Mahoney	" "	" "	RMAHONEY@ROANOKECOUNTYVA.GOV
19	MELINDA J. COX	" "	772-2185	MCOX@ROANOKECOUNTYVA.GOV
20	Joe Obenshain	Roanoke Co. Attorneys Office	772-2071	jobenshain@roanokecountyva.gov
21	Susan Carter	Roanoke Co Comm Dev.	772-20168	Scarter@roanokecountyva.gov
22	Philip Thompson	Roanoke County Comm. Dev	772-2068	pthompson@roanokecountyva.gov
23	Lindsay Blankenship	" " " "	772-2068	lblankenship@roanokecountyva.gov
24				
25				

VINTON AREA CORRIDORS PLAN - ROANOKE COUNTY/TOWN OF VINTON
JOINT PLANNING COMMISSION PUBLIC HEARING
MONDAY, DECEMBER 7, 2009, 7:00 P.M.
NORTH BALLROOM ~ VINTON WAR MEMORIAL

#	NAME	ADDRESS	PHONE #	EMAIL ADDRESS
1	CHRIS CRAFT	P.O. BOX 12904 RKE VA		
2	Aaron Lyles	836 Mansard Square Drive	540-793-1869	aaron@aaronlyles2010.com
3	Robert Altice	616 Maple St Vinton VA	344-3139	
4	Janet Scheid	1453 Wolf Creek Dr.	890-5813	
5	Joey Hiner		983-0646	JHiner@VintonVa.gov
6	Wayne Dunman	304 S. Pollard ST	982 5685	
7	Esther Adcox	209 Lynnhaven Cir.	355-7203	—
8	Carolyn Fidler	P.O Box 43, Vinton	343-7868	cdfidler@verizon.net
9	[illegible] Fidler	4387 Toddsbury Dr Vinton	309-4735	
10	Tiffany Rawling	1112 E. Washington Ave. Vinton	815-6773	TRAWLING@ROANOKE.EDU
11	Consuela Caudill		983 0607	
12	Harold Harless	4045 Falling Creek Dr. Vinton	890-5445	
13	Judy L Harless	619 Olney Rd. Vinton	344-0722	
14	WC Butler	3998 Horseshoe Mtn Rd Vinton	815 5353	wcbutlerheatair@gmail.com
15	Tim Greenway	PO Box 24 Vinton VA 24179	815-4161	TGREENWAY@verizon.com
16	Keith Lafferty	225 Walnut Ave	345-2674	
17	James Privitera	223 S. Pollard St	344-2591	jmpriv@cox.net
18	Susan G Terry	300 Virginia Ave W	540 982 2920	Goodtimes35@earthlink.net
19	[illegible]	4741 April Lane, Roanoke	540-343-5718	
20	Jeanette Epperley	414 E. Augusta Ave	540-982-2001	
21	Ann H Huddleston	PO Box 504, Vinton	540-342-0390	annhud504@verizon.net
22	Tommy A Wood	2020 Mtn View Rd Vinton	580-4675	twoodtown@aol.com
23	Marie & Rody Flippen	1006 Alison Ln Vinton	345 1836	bigflip@cox.net
24	Mary Beth Layman	1025 Almond Dr. Vinton	343-4013	laymanmb@aol.com
25	Doug Forbes	558 Deer Ridge Ln Vinton	890-2331	

Vinton Area Corridors Plan

Roanoke County and Town of Vinton

Joint Planning Commission Public Hearing

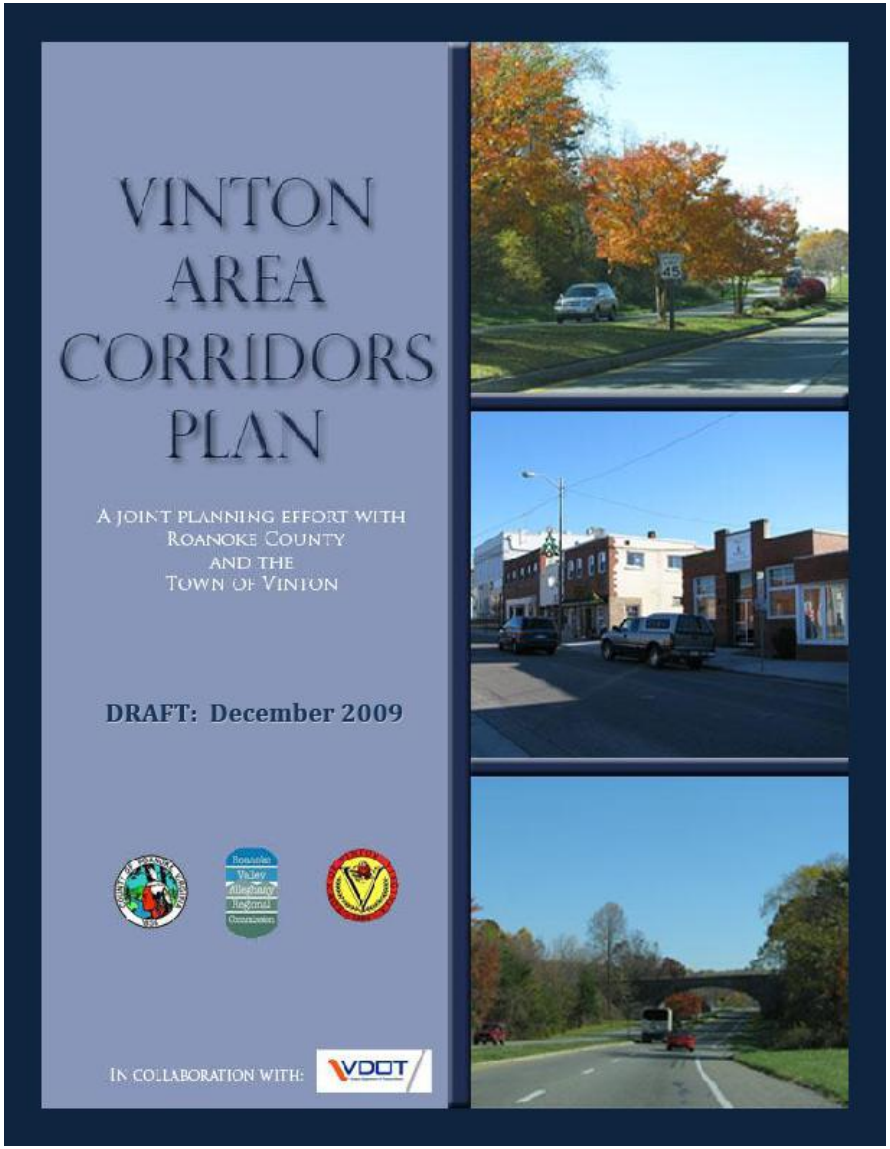
December 7, 2009 ~ Vinton War Memorial

In collaboration with VDOT

Presentation Overview

Draft Document Components

- Chapter 1 – Introduction
- Chapter 2 – Transportation
- Chapter 3 –Bicycle and Pedestrian Accommodations
- Chapter 4 – Community Facilities
- Chapter 5 – Resource Preservation
- Chapter 6 – Land Use and Development
- Chapter 7 – Community Involvement
- Chapter 8 – Goals, Recommendations and Implementation Strategies
- Appendix A - Maps
- Appendix B - Documents



Chapter 1 – Introduction

- Purpose and Intent of Study
- Entities Involved
  - Roanoke County, Town of Vinton, Roanoke Valley-Alleghany Regional Commission and VDOT
- Relationship to Roanoke County and Town of Vinton Comprehensive Plans
- Study Corridors
  - Bypass Road, Hardy Road, South Pollard Street, Virginia Avenue, Walnut Avenue and Washington Avenue
- The Planning Process

Aerial View of the Town of Vinton

Chapter 2 – Transportation

- Roadway Classifications
- Roadway Characteristics
- Traffic Volumes and Level of Service
- Traffic Operations and Safety
- Bridge and Culvert Conditions
- Long Range Transportation
- Six-Year Improvement Program
- Revenue Sharing Program
- Accident Data
- Public Transportation

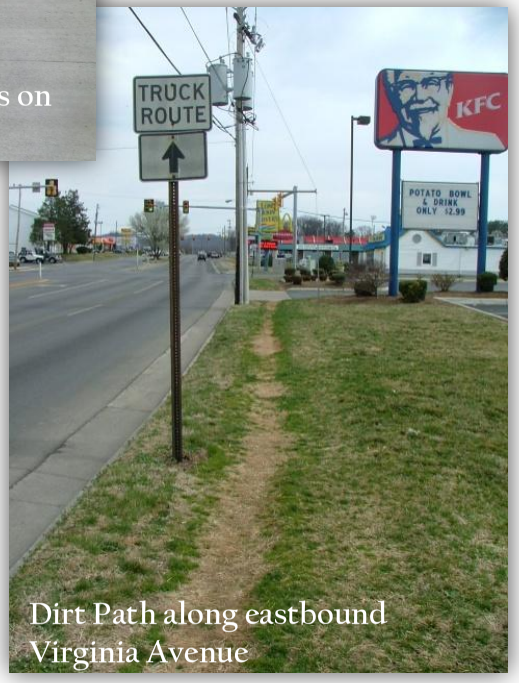
Hardy Road Eastbound in Roanoke County

Walnut Avenue/8th Street Intersection

Chapter 3 – Bicycle & Pedestrian Accommodations

- Previous Studies and Plans
  - *1995 Roanoke Valley Conceptual Greenway Plan (2007 update)*
  - *2003 Regional Bicycle Suitability Study*
  - *2005 Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization*
  - *2006 Pedestrian Access to Commercial Centers*
  - *2008 William Byrd Middle School Safe Routes to School Travel Plan*
- Existing Bicycle Conditions
- Existing Pedestrian Conditions
  - Crosswalks & Sidewalks

Bikes Lanes and Sidewalks on Hardy Road



Dirt Path along eastbound Virginia Avenue

Chapter 4 – Community Facilities

- The Vinton Library
- The Vinton War Memorial
- The Vinton Municipal Building
- The Vinton Museum
- The Vinton Farmers' Market
- The Vinton Swimming Pool
- Schools
- Public Safety
- Law Enforcement
- Parks and Recreation
- Utilities

Chapter 5 – Resource Preservation

- Cultural Resources
  - Blue Ridge Parkway
  - Viewsheds
  - Explore Park
  - Vinton Dogwood Festival
- Environmental Resources
  - Watercourse and Floodway
  - Topography, Slope and Soils
- Historical Resources
  - Area History
  - Structures & Cemeteries

Chapter 6 – Land Use and Development

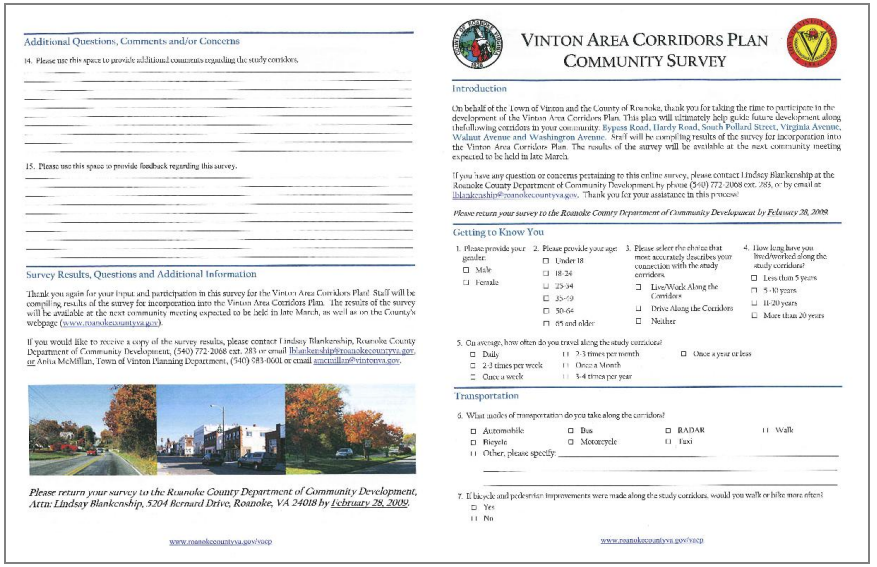
- Existing Land Use
- Property Ownership
- Future Land Use
- Zoning
- Economic Development
  - Gainsharing Agreement
  - Downtown Revitalization
  - Vinton Business Center
  - Commercial Matching Grant & Downtown Façade Programs
- Redevelopment and Development Opportunities


Vacant Parcel in Downtown Vinton


Development Opportunities

Chapter 7 – Community Involvement

- Community Survey
- Business Owner Interviews
- Vinton Chamber of Commerce
- Community Meetings
  - January 29th & June 18th, 2009
- Stakeholder Interviews
  - VDOT & Vinton Public Works Dept
  - Fire and Rescue Staff
  - Blue Ridge Parkway
  - Economic Development



Additional Questions, Comments and/or Concerns

14. Please use this space to provide additional comments regarding the study corridors.

15. Please use this space to provide feedback regarding this survey.

Survey Results, Questions and Additional Information

Thank you again for your input and participation in this survey for the Vinton Area Corridors Plan! Staff will be compiling results of the survey for incorporation into the Vinton Area Corridors Plan. The results of the survey will be available at the next community meeting expected to be held in late March, as well as on the County's webpage (www.roanokecountyva.gov).

If you would like to receive a copy of the survey results, please contact Lindsay Blankenship, Roanoke County Department of Community Development, (540) 772-2068 ext. 283 or email lblankenship@roanokecountyva.gov, or Anita McMillan, Town of Vinton Planning Department, (540) 983-0601 or email amcmillan@vintonva.gov.

Please return your survey to the Roanoke County Department of Community Development, Attn: Lindsay Blankenship, 5204 Bernard Drive, Roanoke, VA 24018 by February 28, 2009.

www.roanokecountyva.gov/vacp

VINTON AREA CORRIDORS PLAN
COMMUNITY SURVEY

Introduction

On behalf of the Town of Vinton and the County of Roanoke, thank you for taking the time to participate in the development of the Vinton Area Corridors Plan. This plan will ultimately help guide future development along the following corridors in your community: Bypass Road, Hardy Road, South Pollard Street, Virginia Avenue, Walnut Avenue and Washington Avenue. Staff will be compiling results of the survey for incorporation into the Vinton Area Corridors Plan. The results of the survey will be available at the next community meeting expected to be held in late March.

If you have any question or concerns pertaining to this online survey, please contact Lindsey Blankenship at the Roanoke County Department of Community Development by phone (540) 772-2068 ext. 283, or by email at lblankenship@roanokecountyva.gov. Thank you for your assistance in this process!

Please return your survey to the Roanoke County Department of Community Development by February 28, 2009

Getting to Know You

1. Please provide your gender:
   - ☐ Male
   - ☐ Female
2. Please provide your age:
   - ☐ Under 18
   - ☐ 18-24
   - ☐ 25-34
   - ☐ 35-50
   - ☐ 50-64
   - ☐ 65 and older
3. Please select the choice that most accurately describes your connection with the study corridors:
   - ☐ Live/Work Along the Corridors
   - ☐ Drive Along the Corridors
   - ☐ Neither
4. How long have you lived/worked along the study corridors?
   - ☐ Less than 5 years
   - ☐ 5 -10 years
   - ☐ 11-20 years
   - ☐ More than 20 years

5. On average, how often do you travel along the study corridors?
   - ☐ Daily
   - ☐ 2-3 times per week
   - ☐ Once a week
   - ☐ 2-3 times per month
   - ☐ Once a Month
   - ☐ 3-4 times per year
   - ☐ Once a year or less

Transportation

6. What modes of transportation do you take along the corridors?
   - ☐ Automobile
   - ☐ Bicycle
   - ☐ Other, please specify: _____
   - ☐ Bus
   - ☐ Motorcycle
   - ☐ RADAR
   - ☐ Taxi
   - ☐ Walk

7. If bicycle and pedestrian improvements were made along the study corridors, would you walk or bike more often?
   - ☐ Yes
   - ☐ No

www.roanokecountyva.gov/vacp

Chapter 8 – Goals, Recommendations and Implementation Strategies

Aesthetics and Community Character Goal

1. Improve the visual appearance of the corridors while protecting the community's character and identity.

Virginia Avenue Eastbound


Walnut Avenue Gateway

Chapter 8 – Goals, Recommendations and Implementation Strategies

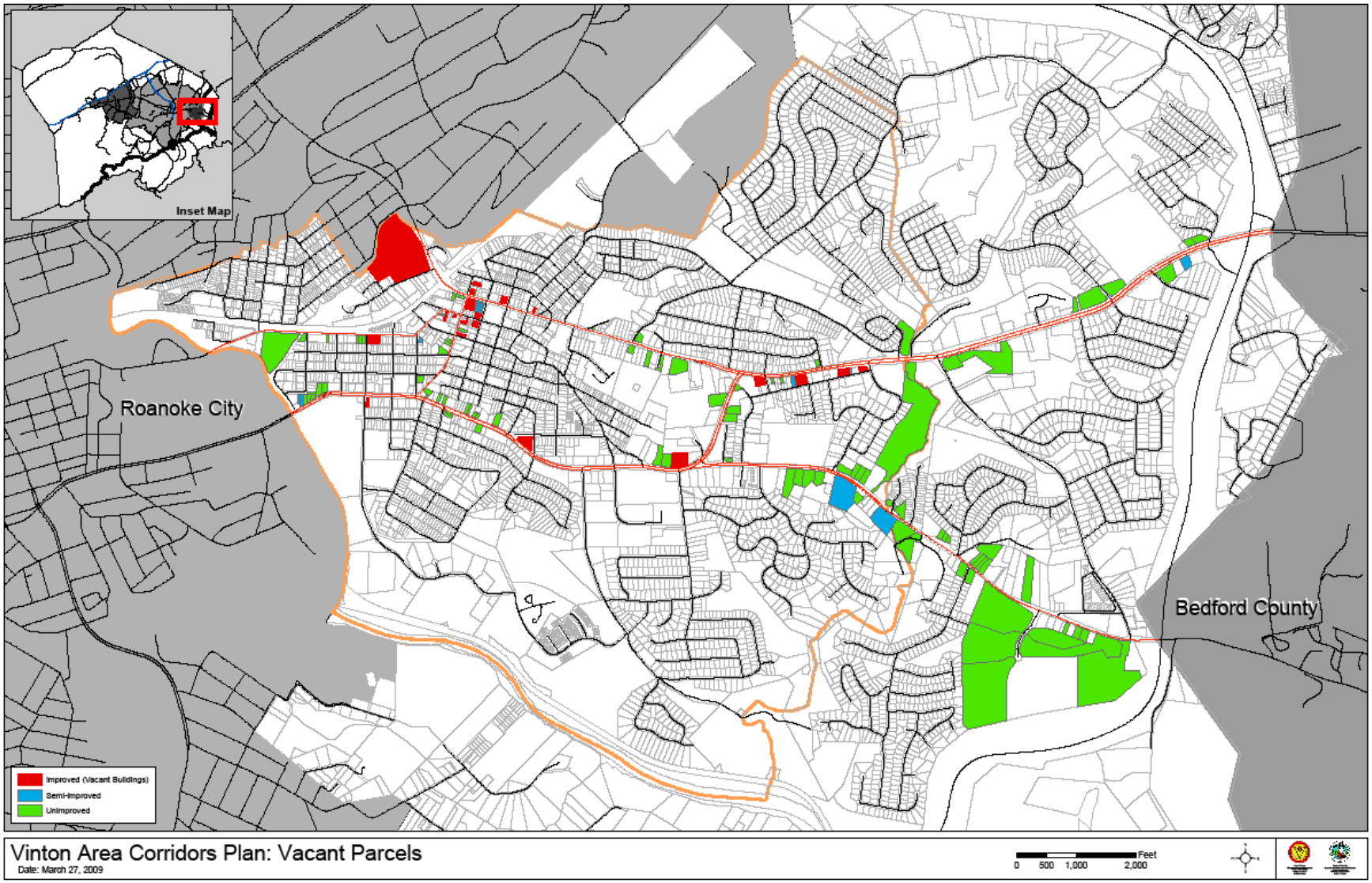
Land Use Goal

2. Encourage quality development and redevelopment along the study corridors and the revitalization of Downtown Vinton.

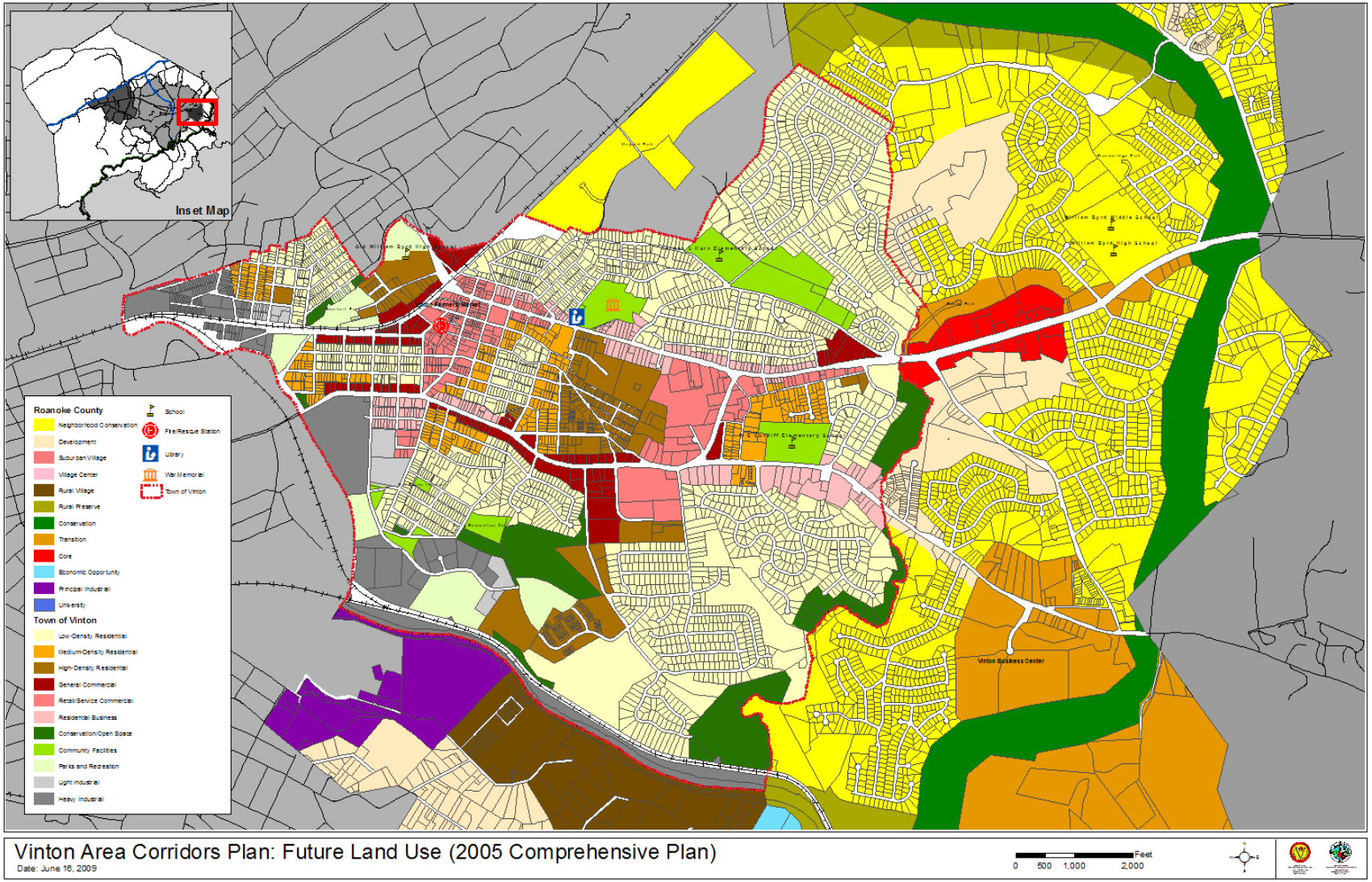
Development along Virginia Avenue

Vacant Vinton Motors Properties

Redevelopment and Development Opportunities



Chapter 8 – Goals, Recommendations and Implementation Strategies



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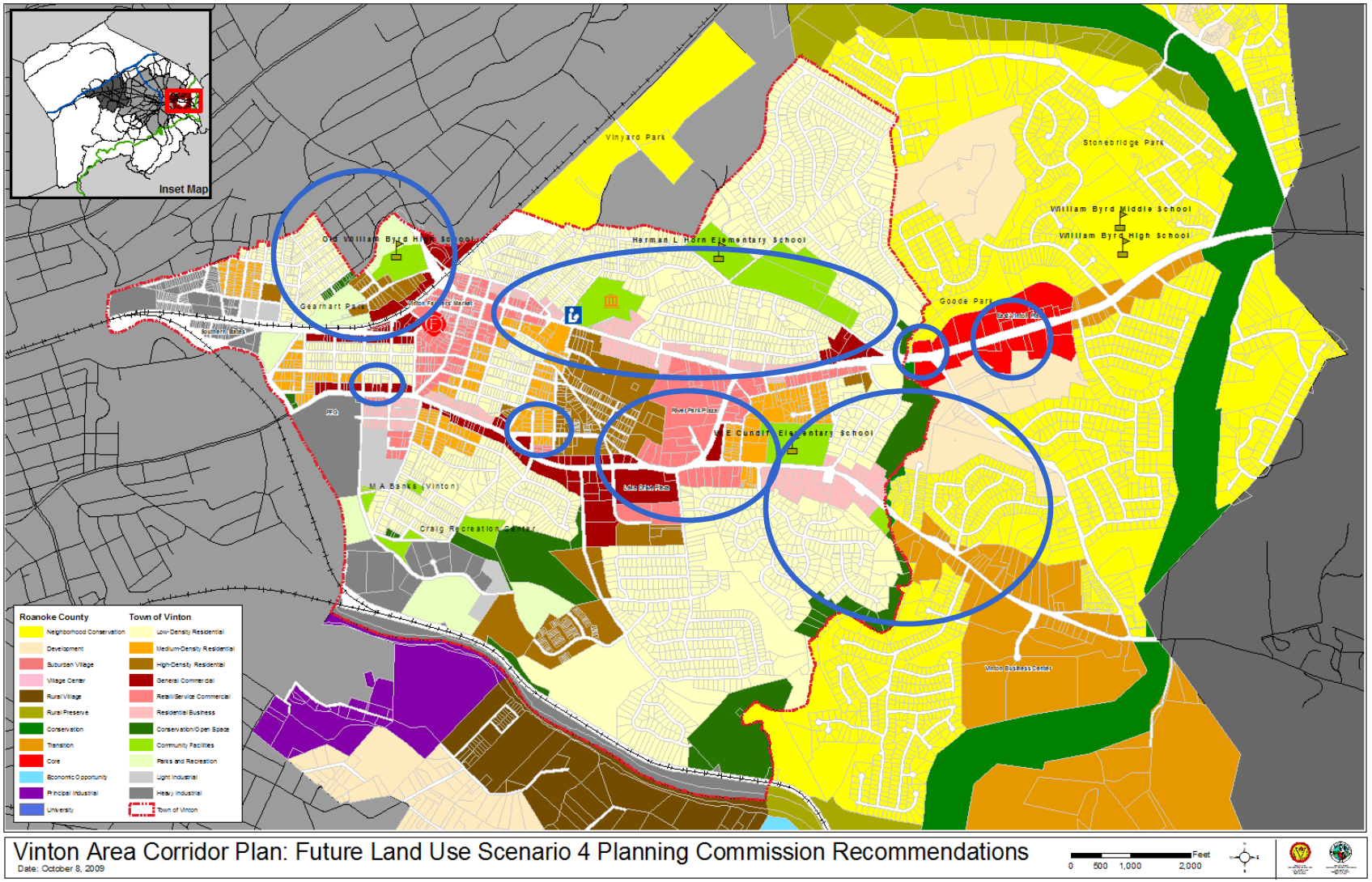


Vinton Area Corridor Plan: Future Land Use Scenario 4 Planning Commission Recommendations

Date: October 8, 2009

0 500 1,000 2,000 Feet

Chapter 8 – Goals, Recommendations and Implementation Strategies

Transportation Goal

3. Increase the capacity and safety of transportation facilities along the corridors.


Closed Crossover on Washington Avenue


Intersection with Highest Accident Rates

Chapter 8 – Goals, Recommendations and Implementation Strategies

Access Management

- Preserve safety and operation of existing highway system
- Manage the location, number, spacing, and design of commercial entrances, intersections, median openings and traffic signals
- Encourage consolidated entrances and shared parking
- Consider replacing unnecessary center turn lanes with landscaped medians, where appropriate

Chapter 8 – Goals, Recommendations and Implementation Strategies

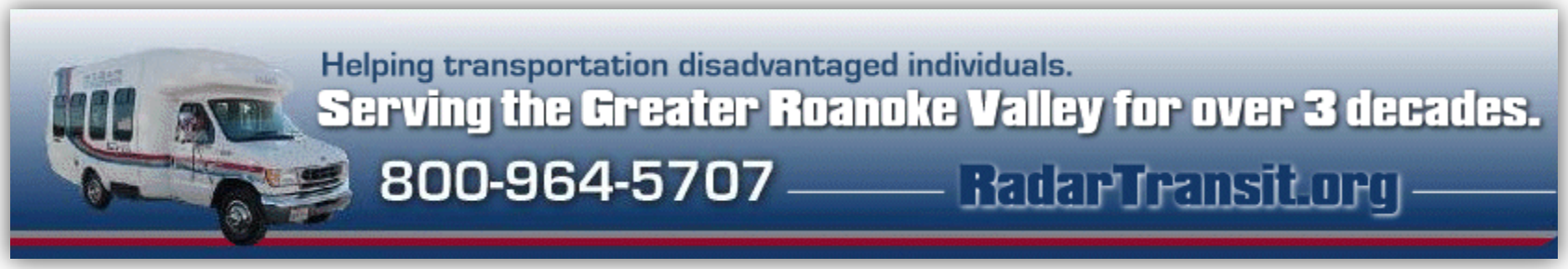
Bicycle and Pedestrian Accommodations

- Provide appropriate bicycle and pedestrian accommodations
- Reduce intermittent sidewalk sections
- Add and improve crosswalks
- Refuge islands with crosswalks in center turn lanes or landscaped medians
- Upgrade or install push-buttons at signalized intersections
- Make study corridors more bicycling and pedestrian friendly
  - Add bicycle racks; remove "no bicycling" signs from Downtown Vinton
- Provide access to greenways and parks
- Shared-use paths

Chapter 8 – Goals, Recommendations and Implementation Strategies

Public Transportation

- Aging population in Roanoke County/Town of Vinton
- Consider expansion of public transportation into Eastern Roanoke County
- Unexpected Roanoke County budget expenditures due to increase usage in CORTAN/STAR program
- Developing more efficient means of monitoring usage



Chapter 8 – Goals, Recommendations and Implementation Strategies

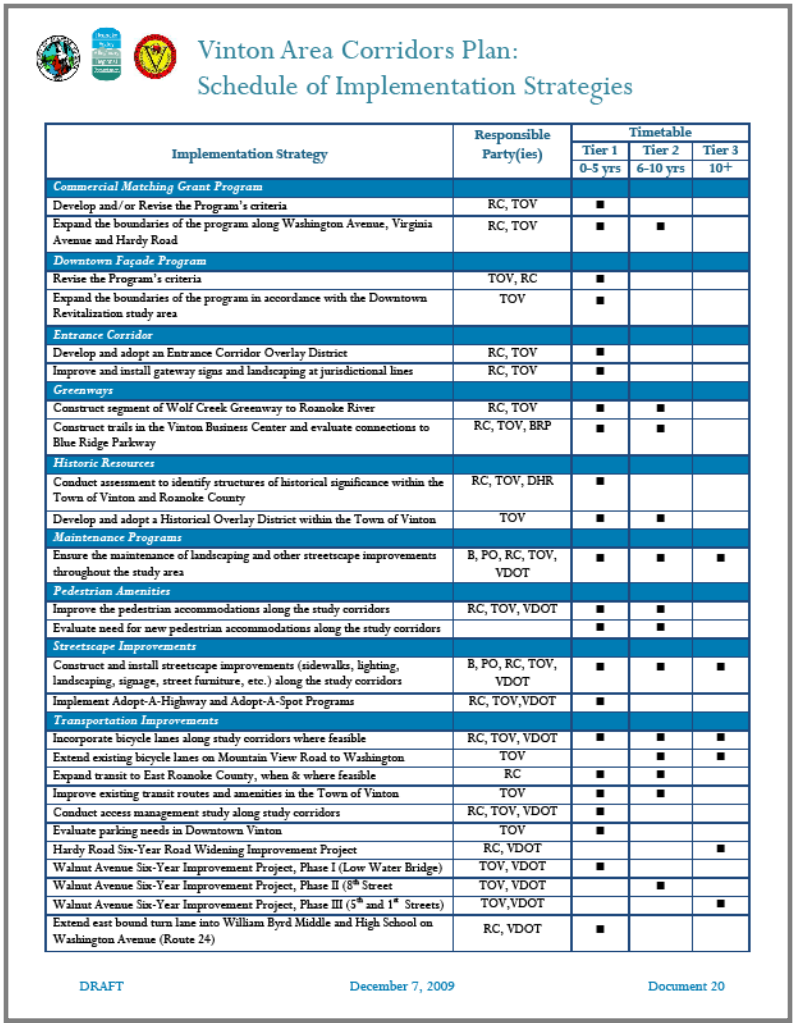
Community Involvement and Participation Goal

4. Provide a variety of opportunities for the community to actively participate and be involved in the implementation of this Plan and in the development of future planning studies.

Gateway Median into Town of Vinton

Chapter 8 – Goals, Recommendations and Implementation Strategies

- Entrance Corridor Overlay District
- Gateway Entrance
- Wayfinding Signage
- Streetscape Improvements
- Pedestrian Amenities
- Amendments to Commercial Matching Grant and Downtown Façade Programs
- Six-Year Improvement Projects
  - Walnut Avenue & Hardy Road
- Revenue Sharing
- Community Facilities



Vinton Area Corridors Plan:
Schedule of Implementation Strategies

Implementation Strategy	Responsible Party(ies)	Timetable		
		Tier 1 0-5 yrs	Tier 2 6-10 yrs	Tier 3 10+
Commercial Matching Grant Program				
Develop and/or Revise the Program's criteria	RC, TOV	■		
Expand the boundaries of the program along Washington Avenue, Virginia Avenue and Hardy Road	RC, TOV	■	■	
Downtown Façade Program				
Revise the Program's criteria	TOV, RC	■		
Expand the boundaries of the program in accordance with the Downtown Revitalization study area	TOV	■		
Entrance Corridor				
Develop and adopt an Entrance Corridor Overlay District	RC, TOV	■		
Improve and install gateway signs and landscaping at jurisdictional lines	RC, TOV	■		
Greenways				
Construct segment of Wolf Creek Greenway to Roanoke River	RC, TOV	■	■	
Construct trails in the Vinton Business Center and evaluate connections to Blue Ridge Parkway	RC, TOV, BRP	■	■	
Historic Resources				
Conduct assessment to identify structures of historical significance within the Town of Vinton and Roanoke County	RC, TOV, DHR	■		
Develop and adopt a Historical Overlay District within the Town of Vinton	TOV	■	■	
Maintenance Programs				
Ensure the maintenance of landscaping and other streetscape improvements throughout the study area	B, PO, RC, TOV, VDOT	■	■	■
Pedestrian Amenities				
Improve the pedestrian accommodations along the study corridors	RC, TOV, VDOT	■	■	
Evaluate need for new pedestrian accommodations along the study corridors		■	■	
Streetscape Improvements				
Construct and install streetscape improvements (sidewalks, lighting, landscaping, signage, street furniture, etc.) along the study corridors	B, PO, RC, TOV, VDOT	■	■	■
Implement Adopt-A-Highway and Adopt-A-Spot Programs	RC, TOV,VDOT	■		
Transportation Improvements				
Incorporate bicycle lanes along study corridors where feasible	RC, TOV, VDOT	■	■	■
Extend existing bicycle lanes on Mountain View Road to Washington	TOV		■	■
Expand transit to East Roanoke County, when & where feasible	RC	■	■	
Improve existing transit routes and amenities in the Town of Vinton	TOV	■	■	
Conduct access management study along study corridors	RC, TOV, VDOT	■		
Evaluate parking needs in Downtown Vinton	TOV	■		
Hardy Road Six-Year Road Widening Improvement Project	RC, VDOT			■
Walnut Avenue Six-Year Improvement Project, Phase I (Low Water Bridge)	TOV, VDOT	■		
Walnut Avenue Six-Year Improvement Project, Phase II (8th Street	TOV, VDOT		■	
Walnut Avenue Six-Year Improvement Project, Phase III (5th and 1st Streets)	TOV,VDOT			■
Extend east bound turn lane into William Byrd Middle and High School on Washington Avenue (Route 24)	RC, VDOT	■		

DRAFT December 7, 2009 Document 20

Proposed Funding Sources

- VDOT Revenue Sharing Program
- VDOT Six-Year Improvement Program
- Roanoke County and Town of Vinton Capital Improvement Programs
- Roanoke County Economic Development Authority
- Roanoke County Commercial Façade Program
- Town of Vinton Downtown Façade Program
- Transportation Enhancement
- Safe Routes to Schools (SRTS)
- In-kind Roanoke County, Town of Vinton and Roanoke Valley-Alleghany Regional Commission Contributions (engineering, design services, grant administration, construction management, titles work, deeds, plats, etc.)

Chapter 8 – Goals, Recommendations and Implementation Strategies

- **Blue Ridge Parkway Plan**
  - Focus on Viewshed Preservation
  - Encroachment Issues
  - Future improvements planned for BRP
  - Utility Expansion to adjoining jurisdictions
  - Future Land Use Amendments
  - Greenway connections
  - Future of Explore Park
  - Tentatively Scheduled to begin 2010

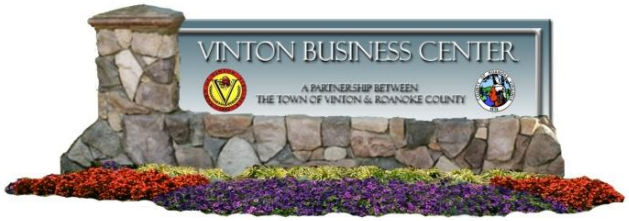
VIRGINIA'S EXPLORE PARK

Chapter 8 – Goals, Recommendations and Implementation Strategies

- **Revitalization of Downtown Vinton**
  - Virginia Department of Housing and Community Development approved a Community Development Block Grant (CDBG)
  - Downtown Management Team composed of residents, business owners, elected officials, Town Manager, County Administrator, planning staff, Vinton Chamber of Commerce, etc.

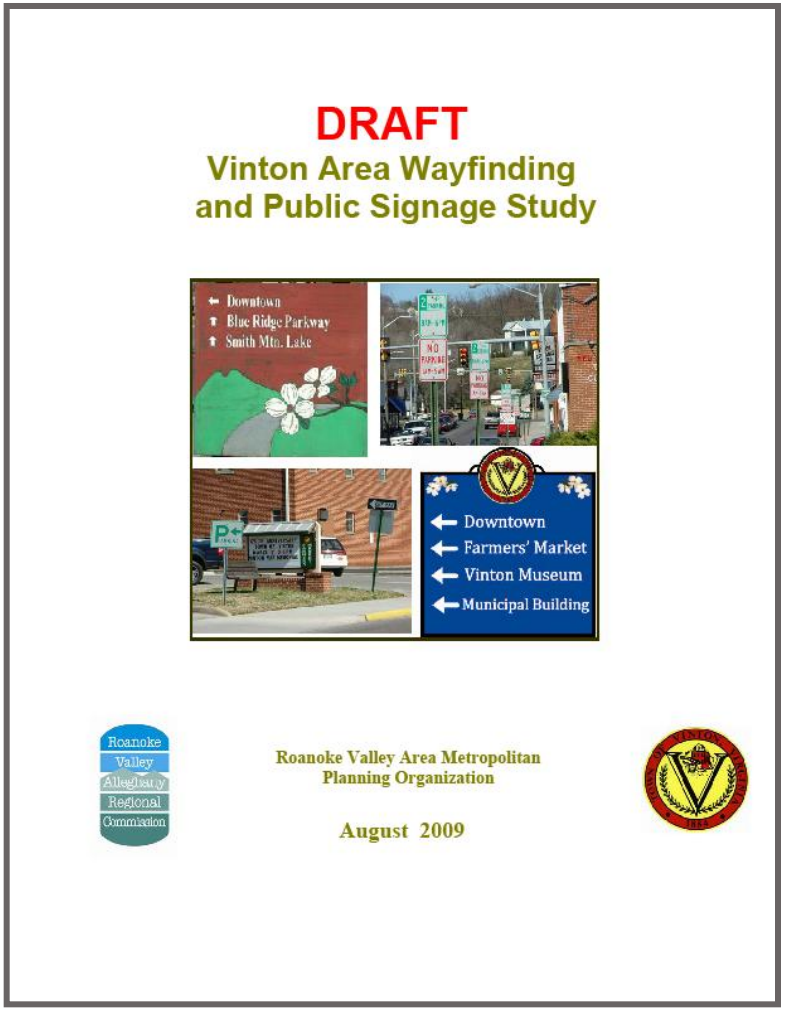
Chapter 8 – Goals, Recommendations and Implementation Strategies

- **Vinton Business Center**
  - Review of Allowable Land Uses in Master Plan Amendments
  - Monument Sign Design and Construction

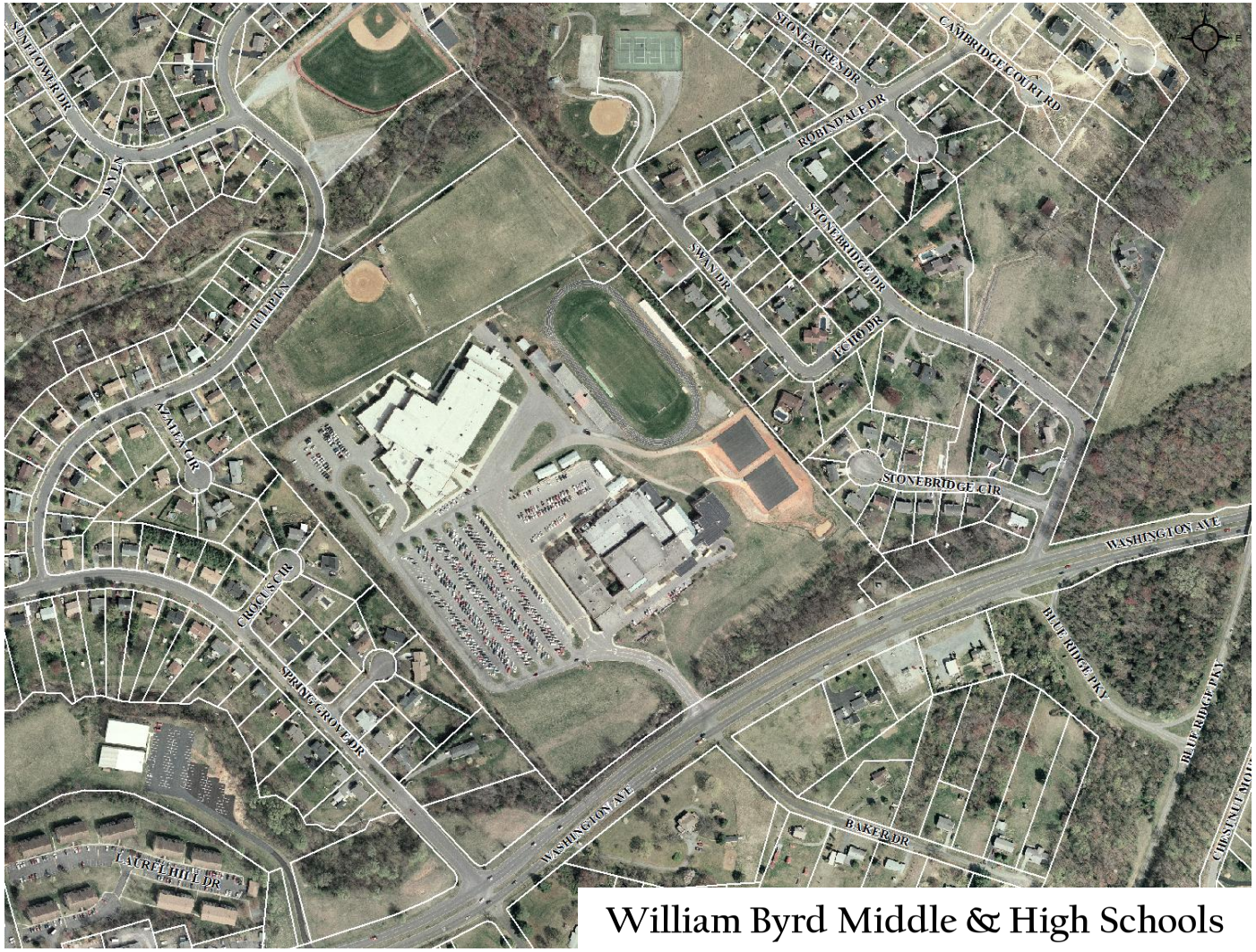


Chapter 8 – Goals, Recommendations and Implementation Strategies

- **Wayfinding Signage Study**
  - Examine existing inventory of signs to points of interest in Vinton area
  - Evaluate public sign issues for effectiveness and proper placement
  - Recommendations for reducing sign clutter, following FHWA MUTCD standards and developing a local wayfinding system for key attractions and destinations



Chapter 8 – Goals, Recommendations and Implementation Strategies



William Byrd Middle & High Schools

Adoption Process

- Town Council/Board of Supervisors Work Sessions
  - Tentatively Scheduled for January 2010
- Town Council/Board of Supervisors Public Hearings & Plan Adoption
  - Tentatively scheduled for February 2010
- Implementation to Follow Plan Adoption

For more information regarding the **Vinton Area Corridors Plan**, please contact:

Lindsay Blankenship, Roanoke County Community Development
(540) 772-2068 ext. 283 or lblankenship@roanokecountyva.gov

OR

Anita McMillan, Town of Vinton Planning & Zoning Department
(540) 983-0601 or amcmillan@vintonva.gov

www.roanokecountyva.gov/vacp

The Bicycle Compatibility Index:
A Level of Service Concept,
Implementation Manual

FHWA-RD-98-095

Table of Contents

Foreword

The vision of the 1998 Federal Highway Administration National Strategic Plan is to create the best transportation system in the world, a transportation system that is safe, efficient, and intermodal, allowing all Americans to have access within and beyond their communities. This transportation system will have significantly reduced crashes, delays, and congestion; roads that protect ecosystems and air quality; and will accommodate pedestrians and bicyclists.

One method of accommodating bicycle travel is to develop or improve roadways for shared use by both motor vehicles and bicycles. This document demonstrates the application of the Bicycle Compatibility Index (BCI) to evaluate the capability of urban and suburban roadway sections to accommodate both motorists and bicyclists. The BCI methodology will allow practitioners to evaluate existing facilities and determine and possible improvements and to determine operational and geometric requirements for new facilities.

This report should be of interest to State and local bicycle coordinators, transportation engineers, and planners involved in the design of bicycle

facilities within highway system.

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Introduction

The goals of the United States Department of Transportation (USDOT) as stated in the *National Bicycling and Walking Study* are: 1) to double the number of trips made by bicycling and walking, and 2) to simultaneously reduce by 10 percent the number of pedestrians and bicyclists killed or injured in traffic crashes.[1] Meeting the first of these goals will require a substantial increase in the number of trips made by bicyclists using on-road or shared facilities. This increased exposure could, in turn, jeopardize the second goal of improved safety unless careful consideration is given to the needs of both bicyclists and motor vehicle operators in the enhancement of existing roadways or development of new roadways. To develop or improve roadways for shared use by these two modes of transportation, one must begin by evaluating existing roadways and determining what is considered user-friendly from the perspective of the bicyclist.

Currently, no methodology is widely accepted by engineers, planners, or bicycle coordinators that will allow them to determine how compatible a roadway is for allowing efficient operation of both bicycles and motor vehicles. Determining how existing traffic operations and geometric conditions impact a bicyclist's decision to use or not use a specific roadway is the first step in determining the bicycle compatibility of the roadway.

The primary objective of the current study was to develop a methodology for deriving a ***bicycle compatibility index (BCI)*** that could be used by bicycle coordinators, transportation planners, traffic engineers, and others to evaluate the capability of specific roadways to accommodate both motorists and bicyclists (see figure 1). This research effort expanded upon the stress level work of Sorton and Walsh[2] and the Geelong Bikeplan Team[3] to produce a practical instrument that can be used by practitioners to predict bicyclists' perceptions of a specific roadway environment and ultimately determine the level of bicycle compatibility that exists on roadways within their jurisdictions. *(For a more complete discussion of these and other efforts that have been undertaken in recent years to develop a systematic means of measuring the suitability of roadways for bicycling, refer to the final report for this study.[4])*

Streets with marked bicycle lanes

Streets with Standard or Wide-Curb Lanes

Streets with Parking

Figure 1. The bicycle compatibility index (BCI) allows practitioners to evaluate the capability of a variety of roadways to accommodate both motorists and bicyclists using geometric and operational characteristics such as lane widths, speed, and volume.

The BCI methodology was developed for urban and suburban roadway segments (i.e., midblock locations that are exclusive of major intersections) and incorporated those variables that bicyclists typically use to assess the "bicycle friendliness" of a roadway (e.g., curb lane width, traffic volume, and vehicle speeds). The BCI model developed and the subsequent level of service (LOS) designations provide practitioners the capability to assess their roadways with respect to compatibility for shared-use operations by motorists and bicyclists and to plan for and design roadways that are bicycle compatible. Specifically, the BCI model can be used for the following applications:

· Operational Evaluation - Existing roadways can be evaluated using the BCI model to determine the bicycle LOS present on all segments. This type of evaluation may be useful in several ways. First, a bicycle compatibility map can be produced for the bicycling public to indicate the LOS they can expect on each roadway segment. Second, roadway segments or "links" being considered for inclusion in the bicycle network system can be evaluated to determine which segments are the most compatible for bicyclists. In addition, "weak links" in the bicycle network system can be determined, and prioritization of sites needing improvements can be established on the basis of the index values. Finally, alternative treatments (e.g., addition of a bicycle lane vs. removal of parking) for improving the bicycle compatibility of a roadway can be evaluated using the BCI model.

· Design - New roadways or roadways that are being re-designed or retrofitted can be assessed to determine if they are bicycle compatible. The planned geometric parameters and predicted or known operational parameters can be used as inputs to the model to produce the BCI value and determine the bicycle LOS and compatibility level that can be expected on the roadway. If the roadway does not meet the desired LOS, the model can be used to evaluate changes in the design necessary to improve the bicycle LOS.

· Planning - Data from long-range planning forecasts can be used to assess the bicycle compatibility of roadways in the future using projected volumes and planned roadway improvements. The model provides the user with a mechanism to quantitatively define and assess long-range bicycle transportation plans.

This report provides practical information on using the BCI model in real-world applications. Included in the report is a brief summary of the model development, data requirements for using the model, a description of the workbook or spreadsheet developed to facilitate its use, and practical examples illustrating a variety of applications. For more details regarding the research and development of the model, refer to the companion document *Development of the Bicycle Compatibility Index: A Level of Service Concept, Final Report.*[4]

Model development

The approach used in developing the BCI was to obtain the perspectives of bicyclists by having them view numerous roadway segments captured on videotape and rate these segments with respect to how comfortable they would be riding there under the geometric and operational conditions shown. The reliability of the results obtained using this video technique of data collection with respect to reflecting on-street comfort levels was validated in a pilot study. The procedure offered several advantages over other forms of data collection, including minimizing the risk to bicyclists, maximizing the range of roadway conditions to which the bicyclists could be exposed, and controlling the variables evaluated by the bicyclists.

It is important to note again that the BCI model developed is for midblock street segments only and is primarily intended for use on "through" streets. In other words, the ratings do not account for major intersections along the route where the bicyclist may encounter a stop sign or traffic signal. Within the research study, the video technique described above was piloted for a limited number of intersection sites. The results proved that this technique can be used in developing an intersection BCI, but further research is needed to fully develop such an index and incorporate that index with the segment BCI discussed in this manual. *(See the Final Report for a more complete discussion of the intersection index results.*[4]*)*

Table 1. Bicycle Compatibility Index (BCI) model, variable definitions, and adjustent factors

BCI = 3.67 - 0.966**BL** - 0.410**BLW** - 0.498**CLW** + 0.002**CLV** + 0.0004**OLV** + 0.022**SPD** + 0.506**PKG** - 0.264**AREA** + **AF**

where:

BL = presence of a bicycle lane or paved shoulder ≥ 0.9 m
no = 0
yes = 1

BLW = bicycle lane (or paved shoulder) width
m (to the nearest tenth)

CLW = curb lane width
m (to the nearest tenth)

CLV = curb lane volume
vph in one direction

OLV = other lane(s) volume - same direction
vph

SPD = 85th percentile speed of traffic
km/h

PKG = presence of a parking lane with more than 30 percent occupancy
no = 0
yes = 1

AREA = type of roadside development
residential = 1
other type = 0

AF = $f_t + f_p + f_{rt}$

where:

f_t = adjustment factor for truck volumes *(see below)*

f_p = adjustment factor for parking turnover *(see below)*

f_{rt} = adjustment factor for right-turn volumes *(see below)*

Adjustment Factors			
Hourly Curb Lane Large Truck Volume[1]	f_t	Parking Time Limit (min)	f_p
≥ 120	0.5	≤ 15	0.6
60 - 119	0.4	16 - 30	0.5
30 - 59	0.3	31 - 60	0.4
20 - 29	0.2	61 - 120	0.3
10 - 19	0.1	121 - 240	0.2
< 10	0.0	241 - 480	0.1
		> 480	0.0
Hourly Right-Turn Volume[2]	f_{rt}		
≥ 270	0.1		
< 270	0.0		

[1] Large trucks are defined as all vehicles with six or more tires.
[2] Includes total number of right turns into driveways or minor intersections along a roadway segment.

Using the perspectives of more than 200 study participants in three locations (Olympia, WA; Austin, TX; and Chapel Hill, NC), the BCI model was developed for all bicyclists as shown in table 1 (see appendix A for the English units version). The participants rated each of 67 sites included on a videotape with respect to how comfortable they would be riding there under the conditions shown. The ratings were made using a six-point scale where a ***one*** indicated that the individual would be "extremely comfortable" riding there while a ***six*** indicated that the individual would be "extremely uncomfortable" riding in those conditions. This model predicts the overall comfort level rating of a bicyclist using the eight significant (at p £ 0.01) variables shown and an adjustment factor (AF) to account for three additional operational characteristics. The basic model (excluding the adjustment factor) has an R^2-value of 0.89, indicating that 89 percent of the variance in the index or comfort level of the bicyclist is explained by the eight variables included in the model. In other words, the model is a reliable predictor of the expected comfort level of bicyclists on the basis of these eight variables describing the geometric and operational conditions of the roadway. The variable with the largest effect on the index is the presence or absence of a bicycle lane or paved shoulder (**BL**); the presence of a bicycle lane (paved shoulder) that is at least 0.9 m wide reduces the index by almost a full point, indicating an increased level of comfort for the bicyclist. Increasing the width of the bicycle lane or paved shoulder (**BLW**) or the curb lane (**CLW**) also reduces the index as does the presence of residential development along the roadside (**AREA**). On the other hand, an increase in traffic volume (**CLV** and **OLV**) or motor vehicle speeds (**SPD**) increases the index, indicating a lower level of comfort for the bicyclist. The presence of on-street parking (**PKG**) also increases the index.

In addition to the primary variables included in the BCI model, three additional variables defining specific operating conditions were also examined. These supplemental variables were identified during the pilot phase of the study as having a potential impact on the comfort level of bicyclists and included the presence of: 1) large trucks or buses, 2) vehicles turning right into driveways, and 3) vehicles pulling into or out of on-street parking spaces. An analysis of the overall comfort level ratings made when viewing video clips illustrating these conditions showed all three of these variables to significantly increase the index, thus indicating a lower level of comfort when these conditions were present. For all bicyclists, the overall mean rating increased by 0.50 when large trucks or buses were present. When there were vehicles pulling into or out of parking spaces, the average rating increased by 0.60. And finally, the presence of right-turning vehicles resulted in an increase in the mean rating of 0.10.

While the presence of these three specific operating conditions was not evaluated across all possible combinations of geometrics and operations, the results of the limited sample do indicate a need for adjustment to the BCI model when large trucks or buses are present, when there is a high number of vehicles pulling into or out of on-street parking spaces, or when there is a high volume of right-turning vehicles. Thus, a series of adjustment factors that can be added to the model have been developed for each of these scenarios (*see table 1*). These factors were developed based on the theory that the conditions shown to the survey participants represented worst-case scenarios and, subsequently, the increase in the overall mean comfort level rating represented the maximum adjustment that would be required.

It should be noted that one variable not included in the development of the BCI model was the grade of the roadway. Results from a preliminary effort showed that changes in grade of 2 percent or less were not distinguishable on the video. The advantages of using video, including not exposing bicyclists to high-risk conditions, incorporating a much larger sample of sites, and controlling specific variables to ensure all subjects were exposed to identical conditions, were believed to outweigh the absence of this one variable. It is also believed that the variables having the most significant effect on the bicycle compatibility of a roadway have been included in the BCI model. Specifically, the variables of width, speed, volume, and on-street parking were shown to have the greatest impact on the index. At this time, the impact of grade relative to these and the other significant variables included in the model is unknown but may be determined in future research efforts.

Once the BCI model was developed, bicycle level of service (LOS) criteria were established based on the results of applying the model to the sites included in this study. Currently, there are no bicycle LOS criteria provided in the *Highway Capacity Manual*.[5] However, the definition of LOS according to the manual is founded on the concept of users' perceptions of qualitative measures that characterize the operational conditions of the roadway. Two of the terms used in the manual to describe LOS are comfort/convenience and freedom to maneuver. Both of these terms are applicable to bicyclists and are directly reflected in the BCI since the rating scale used by the study participants was an indication of comfort level.

Table 2. Bicycle Compatibility Index (BCI) ranges associated with level of service (LOS) designations and compatibility level qualifiers.

LOS	BCI Range	Compatibility Level[1]
A	≤ 1.50	Extremely High
B	1.51 - 2.30	Very High
C	2.31 - 3.40	Moderately High
D	3.41 - 4.40	Moderately Low
E	4.41 - 5.30	Very Low
F	> 5.30	Extremely Low

[1] Qualifiers for compatibility level pertain to the average adult bicyclist.

Thus, using the distribution of BCI values produced from the representative set of locations included in this study, LOS designations were established for LOS A through LOS F as shown in table 2. LOS A (represented by an index £ 1.50) indicates that a roadway is extremely compatible (or comfortable) for the average adult bicyclist while LOS F (represented by an index > 5.30) is an indicator that the roadway is extremely incompatible (or uncomfortable) for the average adult bicyclist.

In developing the BCI model, several other issues were addressed, including the effect of bicycling experience level on perceived comfort levels. Using the results from a questionnaire completed by the participants, the bicyclists were stratified into three groups based on their riding habits, such as number of bicycle trips per week and types of facilities used (e.g., major roadways vs. bicycle paths). A comparison of the comfort level ratings of these three groups showed that **casual recreational** bicyclists were generally less comfortable across all sites than **experienced recreational** or **experienced commuter** bicyclists. As a result of these differences, separate BCI models were produced for each of the three groups in addition to the model for **all** bicyclists. However, in real-world applications, it is most likely that bicyclists of all experience levels will have the opportunity to ride on any given segment of roadway. Thus, it is recommended that the BCI model developed for all bicyclists and shown in table 1 be used without modification for most applications**. It is important to note that the LOS designations shown in table 2 were developed on the basis of this model, and thus are only applicable to results produced with the "all bicyclists" model.**

Notwithstanding, when the practitioner knows that the large majority of riders are indeed casual bicyclists, the approach that should be used to ensure that facilities meet the desired comfort levels of this group is to simply design for a higher level of service. The results of the research showed that the model developed for the **casual** bicyclist, on average, produced BCI values that were 0.14 to 0.38 greater than those produced by **all** bicyclists. The differences in BCI values between LOS designations are, on average, 1.0 (*see table 2*). By designing for a higher LOS (e.g., LOS B rather than LOS C) on a facility known to attract a high number of casual bicyclists, the necessary comfort level for this group of bicyclists can be achieved with the BCI model as it is currently developed. **Note that where casual bicyclists are expected, the facility should always be designed at LOS C or better.**

Table 3. Ranges of variables included in the regression model.

Variable	Description	Minimum	Maximum
CLW	Curb Lane Width	3.0 m	5.6 m
BLW	Bicycle Lane/Paved Shoulder Width	0.9 m	2.4 m
CLV	Curb Lane Volume	90 vph	900 vph
SPD	85th Percentile Speed	40km/h	89 km/h

Another issue addressed was that of possible regional differences in the perceptions of bicyclists. If bicyclists in different geographic regions of the country perceive comfort levels differently, then separate models would need to be developed to reflect these differences. An analysis of the comfort level ratings across subjects in the three survey cities showed no differences in the mean overall comfort levels for the four variables rated (speed, volume, width, and overall). This lack of differences indicates that the perceptions of individuals with respect to bicycle compatibility are the same in the three regions where the survey was conducted, and that the BCI model should be applicable across all regions of the country.

The range of conditions included in the development of the model should be representative of most urban and suburban roadway conditions. However, since the sites included in the development contained a limited range of widths, volumes, and speeds, the model should not be extrapolated beyond the values shown in table 3. For example, the model may only be appropriate for bicycle lane or paved shoulder widths between 0.9 and 2.4 m and curb lane widths between 3.0 and 5.6 m.

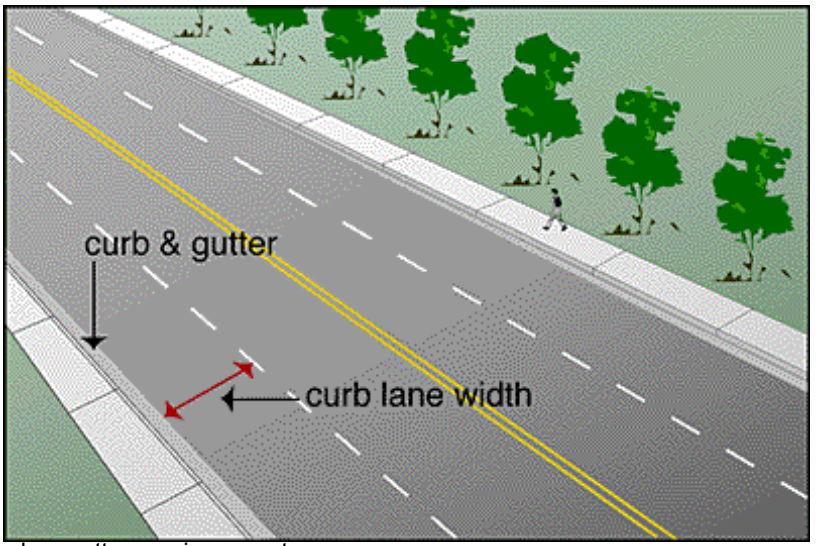
Data Requirements & Assumptions

The data needs for the BCI model are limited and, for the most part, include data that are traditionally collected by states and municipalities for other purposes. However, there will always be locations for which some of the data will not be available. In these cases, the practitioner must make judgments about appropriate values to use within the BCI model. It will also be the case that the available data are not in a form that can be directly input into the model. In that case, specific computations must be made to convert the data into the appropriate format. Described below are the variables required for the model and, where appropriate, computations and assumptions that can be used should the data be either not available or in the incorrect format. It should also be noted that the Microsoft Excel workbook on the enclosed diskette and described in the next section makes many of these computations for the user and incorporates some of the assumptions as default values.

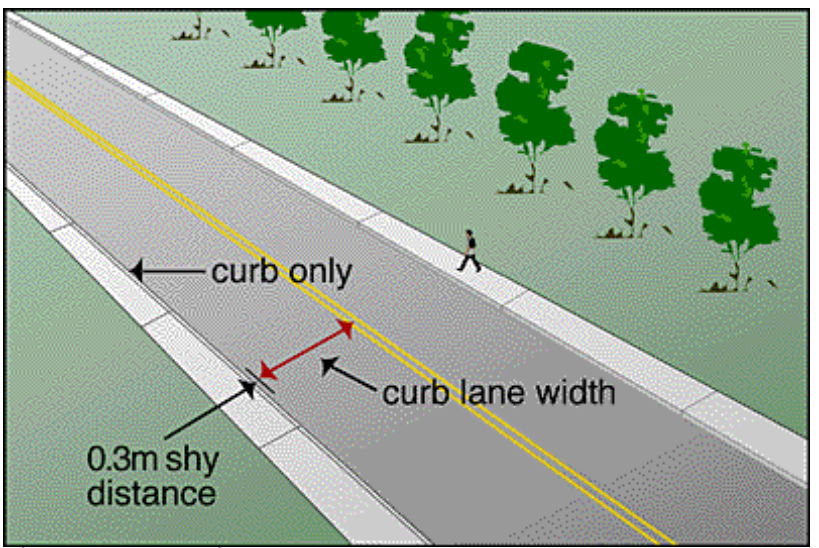
As with any applied model, the output is only as good as the input. Therefore, it is very important that the user of the BCI model understand the variable definitions and assumptions provided below, and that there will always be specific situations requiring their best judgment as to what would be most appropriate for the model. For example, one of the decisions that must be made by the user of the BCI model is which hour of the day to use for evaluating bicycling conditions. It has been assumed throughout this document that the peak hour will be the hour of choice. However, depending on the route being examined, the operational conditions may change with time of day. For example, while traffic volumes may be significantly greater during the peak hour compared with the rest of the day, travel speeds may be significantly lower due to the volumes. On other streets, on-street parking may be prohibited during the peak hour. Thus, the off-peak parking lane becomes the peak-hour curb lane for motor vehicle and bicycle travel. While in most cases the peak-hour analysis will be the "worst-case" scenario and will serve as a good measure of bicycle compatibility for a given roadway irrespective of time of day, the user of the model should be aware that differences in operating conditions such as those described here can significantly change the outcome and can result in different levels of compatibility on the same route. It is recommended that, for those routes or segments where dramatic changes in operating conditions are expected at different times of the day, the analysis be conducted for all scenarios that apply.

Defined below are the variables required for the BCI model:

· Lane Configuration - ***number of through motor vehicle lanes in one direction and the presence or absence of a bicycle lane or paved shoulder***. The number of lanes is used in the workbook to determine lane volumes from the average annual daily traffic (AADT).



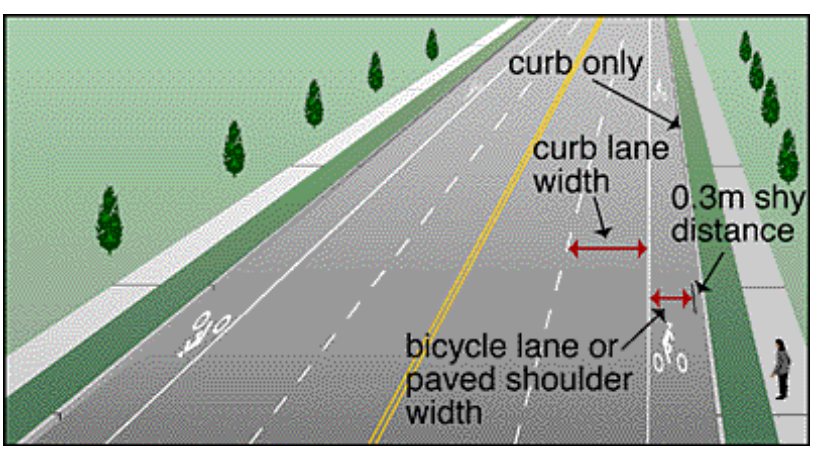
when gutter pan is present



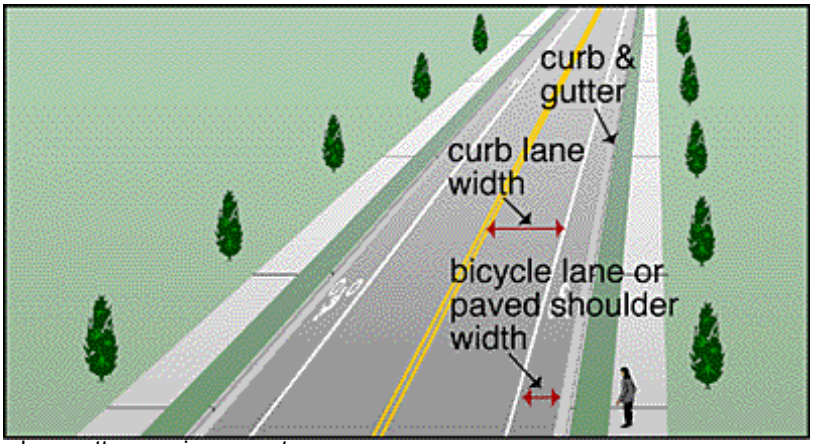
when no gutter pan is present

Figure 2. Curb lane width measurement when there is no bicycle lane, paved shoulder, or on-street parking lane.

· Curb lane width - ***width of the motor vehicle travel lane closest to the curb***, measured to the nearest tenth of a meter. If there is no bicycle lane, paved shoulder, or parking lane present, this distance is measured from the center of the lane line or center line to the joint or seam between the pavement edge and the gutter pan as shown in figure 2. If no gutter pan is present, the curb lane width is determined by measuring the distance from the center of the lane line or center line to the curb face and then subtracting 0.3 m from that distance. The 0.3-m value accounts for the space bicyclists will typically leave between themselves and a curb (i.e., the "shy" distance). This value also reflects the difference in bicycle lane design widths recommended by the American Association of State Highway and Transportation Officials (AASHTO), i.e., 1.5 m when no gutter pan is present versus 1.2 m when a gutter pan exists.6 This scenario is also illustrated in figure 2.



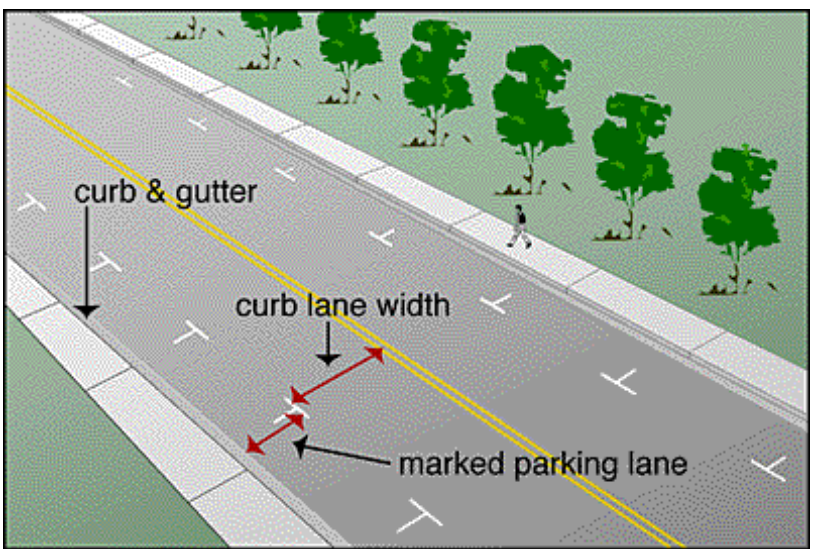
when no gutter pan is present



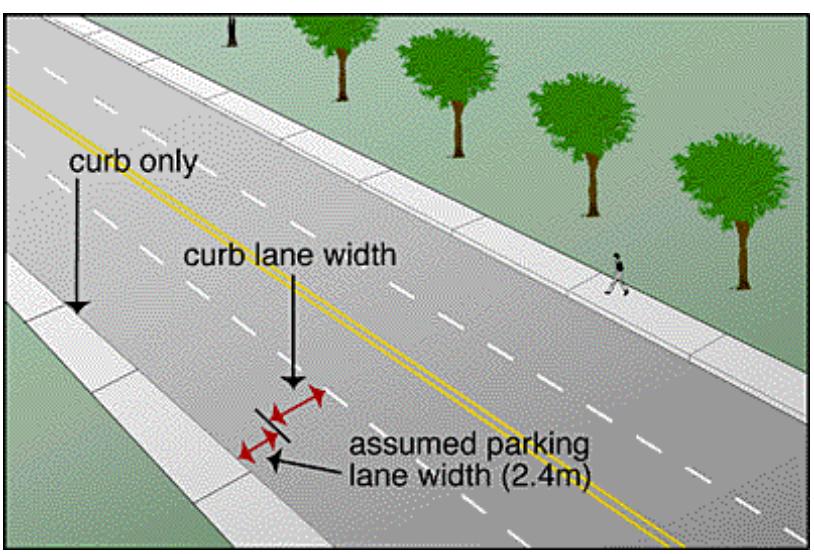
when gutter pan is present

Figure 3. Curb lane and bicycle lane (paved shoulder) width measurements when there is no on-street parking

When there is a bicycle lane or paved shoulder, the curb lane width is measured from the center of the lane line or center line to the center of the edge line as shown in figure 3. If there is a marked parking lane present, the curb lane width is measured in a similar manner as shown in figure 4. If the parking lane is unmarked, the curb lane width can be determined by measuring from the center of the lane line or center line to the curb face (including the gutter pan if present), and then subtracting 2.4 m from this distance (*see figure 4*). The 2.4-m value accounts for the fact that vehicles occupy, on average, approximately 2.1 m of space when parallel parking and typically park within 0.15 to 0.3 m of the curb.7



when parking lane is marked



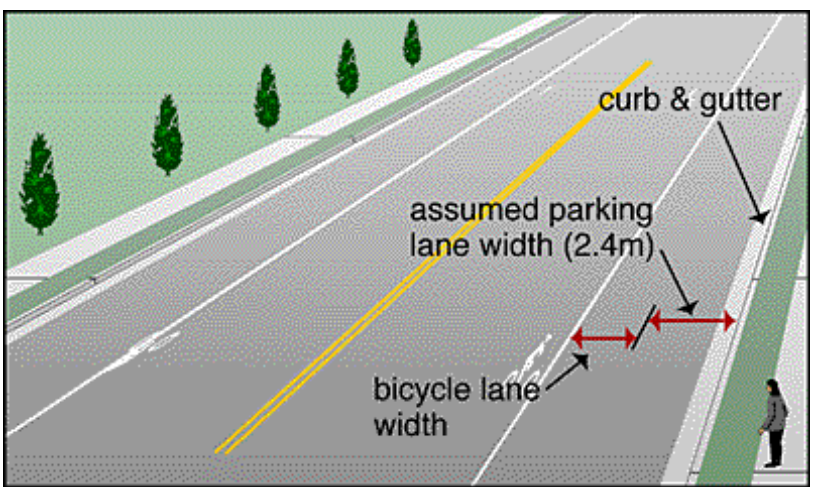
when parking lane is not marked

Figure 4. Curb lane width measurement when there is a parking lane present

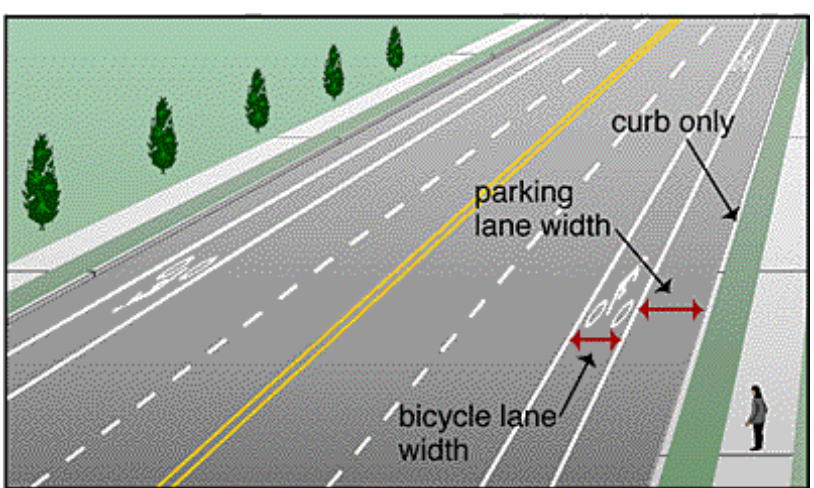
The other scenario common on residential streets is to have no lane markings at all. In this case, the total cross section width can be measured from curb to curb (or gutter pan seam to gutter pan seam) and divided by the number of lanes (typically two) to determine the curb lane width. If parking is also present on this type of unmarked street, the parking lane widths (usually 2.4 m) should be subtracted from the total cross-section width prior to dividing by the number of lanes.

· Bicycle lane (paved shoulder) width - ***width of the bicycle lane or paved shoulder (if present)***, measured to the nearest tenth of a meter. Note that a paved shoulder is treated the same as a bicycle lane in the BCI model since recent research has shown that these two types of facilities result in virtually identical operational behaviors by motorists and bicyclists.8 If there is no parking lane present, the bicycle lane (paved shoulder) width is measured from the center of the edge line separating the bicycle lane from the motor vehicle travel lane to the joint or seam between the pavement edge and the gutter pan as shown in figure 3. If no gutter pan is present, the distance is measured from the edge line to the curb face, and then 0.3 m is subtracted from that distance to account for the space bicyclists will typically leave between themselves and a curb (i.e., the "shy" distance). This scenario is also illustrated in figure 3.

If a marked parking lane is adjacent to the bicycle lane, the bicycle lane width is measured from the center of the edge line (separating the motor vehicle travel lane and bicycle lane) to the center of the parking lane line separating the bicycle lane and the parking lane as shown in figure 5. If the parking lane is not marked, as would be the case in a shared parking/bicycle lane, the bicycle lane width can be determined by measuring the distance from the center of the edge line to the curb face (including the gutter pan if present) and then subtracting 2.4 m from that distance to account for the width of the parking lane. This scenario is also illustrated in figure 5.



when parking lane is marked



when parking lane is not marked

Figure 5. Bicycle lane width measurements when there is a parking lane present

As noted in all of the possible configurations described above and shown in the figures, the curb lane width and bicycle lane (paved shoulder) width measurements either did not include gutter pan widths or included them but subtracted a value to account for the "shy distance" of the bicyclist. The BCI model was developed using sites that either had no gutter pan or had gutter pans ranging from 0.3 to 0.6 m in width. Many communities have gutter pans that are wider than 0.6 m and provide space that can be utilized by a bicyclist. In fact, some communities designate this space as a bicycle lane. In those cases, it is recommended that the practitioner determine if the extra wide gutter pan does indeed provide adequate space for

the bicyclist to ride. If so, this space should be added to the curb lane width or bicycle lane width as appropriate.

· Motor vehicle speed - ***85th percentile speed of traffic***, in km/h. This value can be obtained from manual or automated speed data collection efforts; for more information on collecting speed data, refer to the Manual of Transportation Engineering Studies.9 However, if the data are unavailable or the resources to collect speed data do not exist, it is recommended that 15 km/h be added to the posted speed limit as a surrogate measure for the 85th percentile speed. Prior research has shown that 85th percentile speeds for vehicles traveling on many urban and suburban streets (including arterial, collector, and local classifications) generally exceed the speed limit by 10 to 23 km/h.10

· Traffic volume - ***hourly traffic volume by lane in one direction of travel.*** While hourly counts may be available in some locations, it is more likely that AADT counts (collected for continuous 24-hour periods) will be the source of traffic volume information. Converting these data into hourly counts requires knowing the percentage of daily traffic traveling on the roadway during the hour of interest. In most cases, the hour of interest will be the peak hour. This volume can be determined using the following equation:

PHV = AADT x K x D

where:

PHV = peak-hour directional volume,

AADT = average annual daily traffic (vehicles per day)

K = peak-hour factor (the proportion of vehicles traveling during the peak hour, expressed as a decimal), and

D = directional split factor (the proportion of vehicles traveling in the peak direction during the peak hour, expressed as a decimal).

The K- and D-factors are usually determined on the basis of regional or route-specific characteristics. Generally, the K-factor ranges from 0.07 to 0.15 while the D-factor ranges from 0.50 to 0.65 in urban and suburban areas.11 If these factors are unknown or cannot be easily determined, a default K-factor of 10 percent may be assumed (expressed as 0.10), and a default D-factor of 55 percent may be used (expressed as 0.55). Note also that for one-way streets, the D-factor becomes 1.0 since 100 percent of the traffic is traveling in the same direction.

Once the directional hourly volume of traffic is determined using the above formula, it is necessary to assign traffic volumes to the curb lane and other travel lanes if it is a multilane facility. The lane distribution on non-freeway facilities depends on a variety of factors, including number and location of access points, the type of development, traffic composition, speed, volume, and local driving habits. These factors result in very little uniformity from site to site with respect to how volumes are distributed across lanes.5,11 If counts are available by lane, the percentage of vehicles traveling in each lane can be easily determined. If such counts are not available and considering the lack of consistency in this variable across sites, it is recommended that the hourly volume be distributed equally across all through lanes using the following equations:

CLV = PHV/N OLV = PHV – CLV

where:

CLV = hourly curb lane volume,

OLV = hourly volume in all through lanes except the curb lane,

PHV = peak-hour directional volume, and

N = number of through lanes in one direction.

· Presence and density of on-street parking - ***presence of an on-street parking lane and percentage of spaces occupied***. The simple presence of an on-street parking lane may not adversely impact the comfort level of the bicyclist. During the development of the BCI model, it was shown that at least 30 percent of the spaces had to be occupied before the parking lane impacted the bicyclistsÕ comfort level. Thus, it is necessary to collect occupancy data for the hour being evaluated to determine if this 30 percent occupancy threshold is being met.

· Type of development - ***type of development or land use adjacent to the roadway***. For purposes of the model, only two classifications are required, "residential" and "other." The residential development type proved to be significantly different from all other types of development and was shown to positively impact the comfort level of bicyclists.

· Large truck volume - ***hourly large truck volume in the curb lane***. For purposes of the BCI model, large trucks are simply defined as all vehicles having six or more tires. This definition captures most single unit trucks and all combination unit trucks and buses. Most vehicle counters used today provide vehicle classification, and thus the percentage of trucks in the traffic stream is readily available if traffic count data are available. The volume of large trucks in the curb lane can then be determined as follows:

CLTV = PHV x HV x T

where:

CLTV = curb lane truck volume,

PHV = peak-hour directional volume (all vehicles),

HV = the proportion of all vehicles in the traffic stream that can be defined as large trucks (expressed as a decimal), and

T = curb lane truck factor (proportion of large trucks traveling in the curb lane, expressed as a decimal).

On a two-lane roadway (one lane of travel in each direction), the T-factor, or proportion of large trucks traveling in the curb lane, is 1.0 since 100 percent of the trucks will be traveling in the curb lane. On a multilane roadway, however, the T-factor must be calculated or assumed. If traffic counts are collected by lane of travel, the T-factor can be directly determined. If such data are not available, it is recommended that a default value

of 0.80 be used for this factor on multilane roadways, indicating that 80 percent of the large trucks on the roadway are traveling in the curb lane. This value is based on collected data for freeways showing that up to 89 percent of the trucks travel in the curb lane.5 While comparable statistics were not available for arterials and other types of surface streets, the distribution of large trucks by lane of travel is believed to be similar.

If classification counts are not available, the user will have to input a truck percentage value (HV) believed to be appropriate for the type of roadway. In general, many urban streets will have very little or no truck traffic because of travel restrictions placed on such vehicles. An analysis of the FHWA Highway Safety Information System (HSIS) confirmed this fact for certain functional classifications. For the States of Illinois, Utah, and North Carolina, the mean percentage of traffic that was classified as trucks on local streets was less than 1 percent. On collectors, the mean truck percentage ranged from 0.4 to 2.6 percent, while on minor arterials, the range of means was 0.5 to 3.9 percent. The largest percentage of trucks was found on non-freeway principal arterials where the means ranged from 1.4 to 5.4 percent.12 On the basis of this analysis, it is recommended that the truck percentages shown in table 4 be used for the various functional classifications when the practitioner does not have the appropriate data and is not able to adequately determine the actual truck percentage.

· Parking time limits - ***parking time limits for on-street spaces***. Vehicles pulling into or out of on-street parking spaces were shown to adversely impact the comfort level of bicyclists. Thus, as the parking turnover along a street increases, the comfort level for bicyclists decreases. Since most locations will not have parking turnover data or the resources to collect such data, a surrogate measure of parking time limit is recommended. It should be noted, however, that there may be cases where the time limit does not adequately reflect the level of parking turnover. For example, a street in front of a local post office may have 60-minute parking stalls, but the people using these spaces may generally be there no more than 15 minutes at a time. In that case, the value for a 15-minute limit parking stall may be more appropriate.

Right-turn volumes - ***hourly volume of vehicles turning right into all driveways and intersecting streets along the midblock segment being evaluated***. For the BCI model, the adjustment factor is only applied when the hourly number of right turns is 270 or more. Knowing this information will assist in accounting for high-volume driveways or minor streets. Once the peak-hour volume is calculated, determining the number of right-turning vehicles can be done as follows:

RTV = PHV x R

where:

RTV = right-turn volume,

PHV = peak-hour directional volume,

R = proportion of vehicles in the traffic stream turning right into driveways or minor streets along the roadway segment, expressed as a decimal.

Knowledge of the proportion of vehicles turning right into driveways and minor intersection streets along a segment of roadway often may not exist. And since the adjustment factor in the BCI model and the relative impact on the overall bicycle LOS are small, it does not warrant spending resources to obtain this information. Instead, it is recommended that the practitioner use his/her judgment as to whether a specific midblock segment contains a high volume of right-turning traffic during the hour being evaluated. Examples of locations where right-turn volumes may be a factor during the peak hour include business and industrial entrances and minor streets used to cut through neighborhoods.

Table 4. Recommended truck percentages by functional classification for streets where such information is not available.

Functional Classification (Type of Street)	Recommended Truck Percentage (HV)
Principal Arterial (Non-Freeway)	3.5%
Minor Arterial	2.0%
Collector Street	1.5%
Local Street	0.0%

BCI & LOS workbook

The BCI model and the LOS criteria have been incorporated into a workbook to simplify using the model in real-world applications. The workbook is on the enclosed diskette in a Microsoft Excel file named BCI.xls (*see appendix A regarding the English units version*). The definitions, equations, and assumptions described in the previous section have been incorporated where appropriate. The default values used in the workbook are shown in table 5. The workbook includes three separate worksheets that are linked together to produce the BCI and LOS results. The first worksheet is the **Data Entry** form and allows the user to enter location information, geometric and roadside data, traffic operations data, and parking data (*see figure 6*). The location data allows the user to enter a name, number, or other item of information that identifies each midblock segment.

The **geometric and roadside** data elements include:

· Number of through lanes in one direction.

· Curb lane width to the nearest 0.1 meters.

· Bicycle lane or paved shoulder width to the nearest 0.1 meters. Leave blank if non-existent.

· Type of roadside development; specifically whether the development type is residential or not, expressed as ***y*** for yes or ***n*** for no.

The **traffic operations** data elements include:

· Posted speed limit in km/h.

· 85th percentile speed in km/h. Leave blank if it is not known; the workbook will add 15 km/h to the posted speed limit to serve as an estimate of the 85th percentile speed. Note, this additive value can be modified by the user within the worksheet.

· AADT volume.

· Percentage of vehicles in the traffic stream that can be defined as large trucks, expressed as a decimal. See table 4 if this information is unknown.

· Percentage of vehicles in the traffic stream turning right into driveways or minor intersections along the midblock, expressed as a decimal.

Table 5. Summary of default values used in the BCI & LOS workbook.

Variable	Default Value
85th percentile speed	Posted speed limit plus 15 km/h
K-factor	0.10
D-factor	0.55 or 1.0[A]
T-factor	0.80 or 1.0[B]

[A] 0.55 on two-way streets; 1.0 on one-way streets

[B] 0.80 on multilane streets; 1.0 on two-lane streets

[Click here to download the Excel Worksheets for FIGURES 6-8]

Data Entry													
Location	Geometric & Roadside Data					Traffic Operations Data					Parking Data		
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	No. of Lanes (one direction)	Curb Lane Width (m)	Bicycle Lane Width (m)	Paved Shoulder Width (m)	Residential Development (y/n)	Speed Limit (km/h)	85th %tile Speed (km/h)	AADT	Large Truck % (HV)	Right Turn % (R)	Parking Lane (y/n)	Occupancy (%)	Time Limit (minutes)
First Avenue - 5th/6th Streets	2	3.6	1.2		y	30	37	10000	0.02	0.10	y	0.30	120

Figure 6. Data Entry worksheet.

The **parking** data elements include:

· Presence or absence of a parking lane, expressed as ***y*** for yes or ***n*** for no.

· Percentage of spaces occupied, expressed as a decimal.

· Parking time limit, expressed in minutes. Leave blank if there is no limit (e.g., on a suburban neigborhood street).

The second worksheet contains a series of **Intermediate Calculations**, which converts the AADT into hourly volumes and calculates the three adjustments factors contained in the BCI model (see figure 7). The equations associated with each of the cells in this worksheet are also shown in the figure while the Excel logic is provided in appendix B. The peak-hour factor (K), directional split factor (D), and proportion of large trucks in the curb lane (T-factor) are user-defined values in this worksheet. The assumed default values of 0.10, 0.55, and 0.80 (for a multilane two-way street) for K, D, and T, respectively, are shown in the figure. The proportion of all vehicles traveling in the curb lane (curb lane %) is currently calculated using the number of lanes; this value can entered by the user if the lane distribution is known.

The final calculations are made within the **BCI and LOS Computations** worksheet shown in figure 8. This worksheet contains the nine variables that make up the BCI model, the calculated BCI, and the bicycle LOS and compatibility level. No user inputs are required on this worksheet. All of the data needed will have been provided in the **Data Entry** worksheet or determined within the **Intermediate Calculations** worksheet. The equations associated with each of the cells in this worksheet are also shown in the figure while the Excel logic is provided in appendix B.

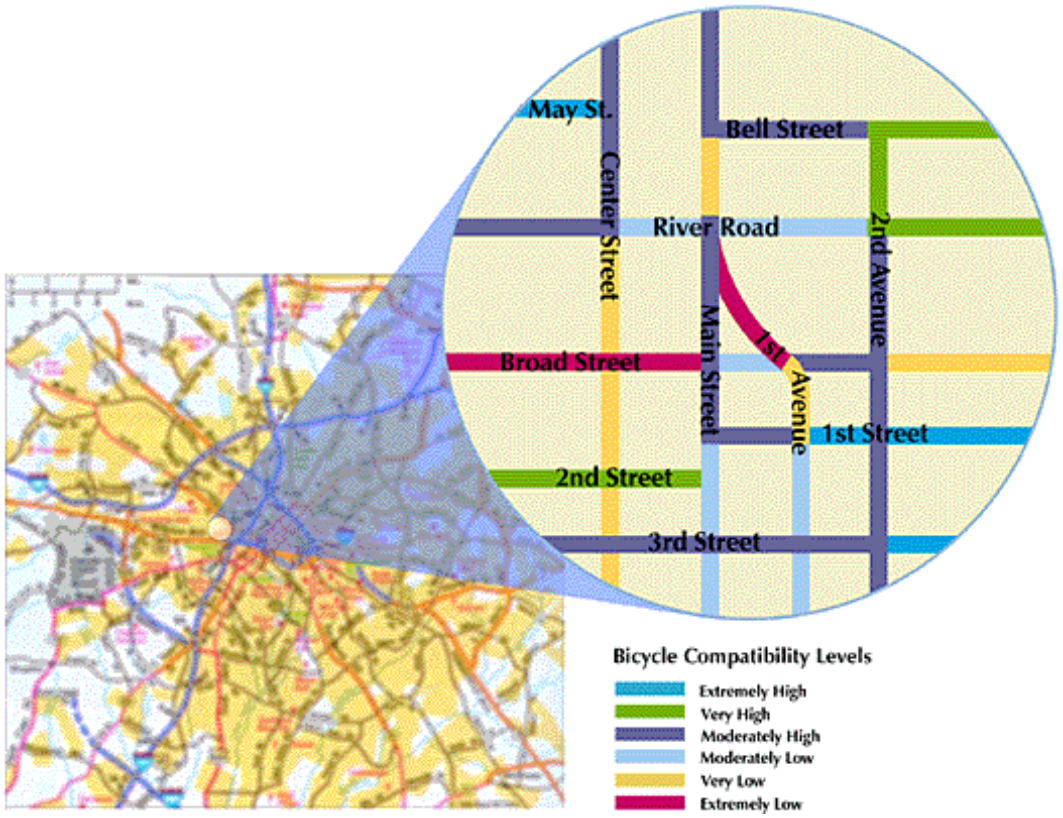
Intermediate Calculations												
Location	Peak-Hour Volume Computations							Adjustment Factors				
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	Peak-Hour Factor (K-factor)	Directional Split (D-factor)	Curb Lane %	Curb Lane Truck % (T-factor)	Peak Hour Volume	Peak Hour Curb Lane Volume	Peak Hour Other Lane(s) Volume	Peak Hour Curb Lane Truck Volume	Large Truck Adjustment Factor (Ft)	Peak Hour Right Turn Volume	Right Turn Adjustment Factor (Frt)	Parking Adjustment Factor (Fp)
First Avenue - 5th/6th Streets	0.10	0.55	0.5	0.8	550	275	275	9	0.0	55	0.0	0.3
	User-defined value (default to 0.10 if unknown)	User-defined value (equal to 1.0 on one-way streets; default to 0.55 on two-way streets if directional distribution is unknown)	= 1/No. of Lanes (can be user-defined if lane distribution is known)	User-defined value (equal to 1.0 on two-lane streets; default to 0.80 on multilane streets if lane distribution is unknown)	= AADT * K-factor * D-factor	= Peak Hour Volume * Curb Lane %	= Peak Hour Volume - Peak Hour Curb Lane Volume	= Peak Hour Volume * Large Truck % * T-factor	Calculated based on Peak Hour Curb Lane Truck Volume using the volume parameters shown in table 1.	= Peak Hour Volume * Right Turn %	Calculated based on Peak Hour Curb Lane Volume using the volume parameters shown in table 1.	Calculated based on Parking Occupancy and Parking Time Limit parameters shown in table 1.

Figure 7. Intermediate Calculations worksheet.

Application examples

As previously noted, the BCI model is a tool that may be used in a variety of applications, including the evaluation of current operating conditions, proposed roadway designs, and long-range transportation plans. All applications involve either an evaluation of existing geometric and operational conditions or an evaluation of proposed or projected conditions. Evaluating existing conditions allows the practitioner to: 1) produce bicycle compatibility maps (*see figure 9*), which help bicyclists make informed decisions regarding route selection; 2) identify the most appropriate routes within corridors to designate as part of the community bicycle network; and 3) identify the "weak links" on the network and prioritize roadway improvement projects and subsequent funding to correct these deficiencies. Evaluating proposed or projected conditions allows one to: 1) assess the bicycle LOS and compatibility level of all roadway design projects (new or retrofit); 2) assess the impact of proposed developments or changes in land use that may change traffic volumes and/or patterns; and 3) provide input to long-range transportation plans regarding the need for roadway improvements to maintain or enhance bicycle compatibility levels.

Provided below are several examples illustrating how the model may be applied to real-world scenarios. The first set of examples looks at three existing roadway segments with very different geometric configurations. The second set examines three proposed roadway designs, and the final set illustrates how the model can be applied to a transportation planning problem. All of the worksheet entries and computations for the examples are shown in figures 11, 12, and 13.



Evaluation of existing conditions

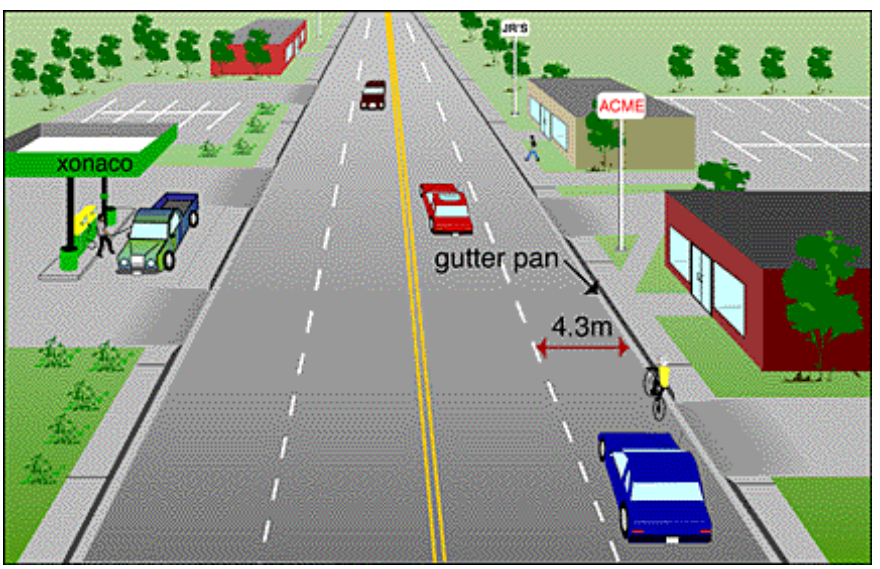


Figure 10. Operational example 1 - multilane wide curb lane street in retail/commercial area.

Operational Example 1 shown in figure 10 is a multilane (two lanes in each direction) wide curb lane arterial that serves as a commuting bicycle corridor. The curb lane width is measured from the center of the lane line to the gutter pan seam and is 4.3 m. The AADT on this segment is 15,000 vehicles per day (vpd). The posted speed limit is 65 km/h, and a speed study showed the 85th percentile speed during the peak-hour to be 75 km/h. As indicated in the figure, there is no on-street parking and the development along the roadside primarily consists of retail centers and commercial businesses. The large truck volume on this route accounts for 5 percent of the traffic during the peak hour, while approximately 10 percent of the vehicles in the traffic stream turn right into driveways or onto minor streets. All of this information has been entered into the data entry form as shown in figure 11 for ***Operational Example 1 - Wide Curb Lane***. The peak-hour volume computations and calculation of adjustment factors are shown in figure 12. The results, shown in figure 13, indicate that this facility produces a BCI of 4.47, which results in a bicycle LOS E and a very low compatibility level for bicycling.

[Click here to download the Excel Worksheets for FIGURES 11-13]

Data Entry

Location	Geometric & Roadside Data					Traffic Operations Data					Parking Data		
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	No. of Lanes (one direction)	Curb Lane Width (m)	Bicycle Lane Width (m)	Paved Shoulder Width (m)	Residential Development (y/n)	Speed Limit (km/h)	85th %tile Speed (km/h)	AADT	Large Truck %[a] (HV)	Right Turn %[a] (R)	Parking Lane (y/n)	Occupancy (%)[a]	Time Limit (minutes)
Operational Example 1 Arterial with Wide Curb Lanes (*figure 10*)	2	4.3			n	65	75	15000	0.05	0.10	n		
Operational Example 2 Collector with Bicycle Lanes (*figure 14*)	1	3.6	1.5		y	50		7000	0.015		n		
Operational Example 3 Street with Shared Parking/Bicycle Lane (*figure 15*)	2	3.4	1.9		y	40	58	6000	0.10		y	0.50	
Design Example Original Proposed Design (*figure 16*)	2	3.4			n	50	60	16000	0.08	0.10	n		
Design Example Wide Curb Lane Option (*figure 17*)	2	4.2			n	50	60	16000	0.08	0.10	n		
Design Example Paved Shoulder Option (*figure 18*)	2	3.4		1	n	50	60	16000	0.08	0.10	n		
Planning Example Proposed New Arterial	3	3.6	1.2		n	75		50000	0.05	0.10	n		
Planning Example Re-designed Existing Arterial	2	3.6	1.5		n	65	75	15000	0.02	0.20	n		

[a] Percentages shown as a decimal or proportion

Figure 11. Data Entry worksheet for all application examples.

Intermediate Calculations												
Location	Peak-Hour Volume Computations							Adjustment Factors				
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	Peak-Hour Factor (K-factor)	Directional Split (D-factor)	Curb Lane %[a]	Curb Lane Truck %[a] (T-factor)	Peak Hour Volume	Peak Hour Volume in Curb Lane	Peak Hour Volume in Other Lane(s)	Peak Hour Truck Volume in Curb Lane	Truck Adjustment Factor (Ft)	Peak Hour Right Turn Volume	Right Turn Adjustment Factor (Frt)	Parking Adjustment Factor (Fp)
Operational Example 1												
Arterial with Wide Curb Lanes (*figure 10*)	0.10	0.55	0.50	0.80	825	413	413	33	0.3	83	0.0	0
Operational Example 2												
Collector with Bicycle Lanes (*figure 14*)	0.10	0.55	1.00	0.80	385	385	0	5	0.0	0	0.0	0
Operational Example 3												
Street with Shared Parking/Bicycle Lane (*figure 15*)	0.10	1.00	0.50	0.80	600	300	300	48	0.3	0	0.0	0
Design Example												
Original Proposed Design (*figure 16*)	0.10	0.55	0.50	0.80	880	440	440	56	0.3	88	0.0	0
Design Example												
Wide Curb Lane Option (*figure 17*)	0.10	0.55	0.50	0.80	880	440	440	56	0.3	88	0.0	0
Design Example												
Paved Shoulder Option (*figure 18*)	0.10	0.55	0.50	0.80	880	440	440	56	0.3	88	0.0	0
Planning Example												
Proposed New Arterial	0.10	0.55	0.33	0.80	2750	917	1833	110	0.4	275	0.1	0
Planning Example												
Re-designed Existing Arterial	0.10	0.55	0.50	0.80	825	413	413	13	0.1	165	0.0	0

[a] Percentages shown as a decimal or proportion

Figure 12. Intermediate Calculations worksheet for all application examples.

Bicycle Compatibility Index and Level of Service Computations												
Location	BCI Model Variables									Results		
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	BL	BLW	CLW	CLV	OLV	SPD	PKG	AREA	AF	BCI	Level of Service	Bicycle Compatibility Level
Operational Example 1												
Arterial with Wide Curb Lanes (*figure 10*)	0	0.0	4.3	413	413	75	0	0	0.3	4.47	E	Very Low
Operational Example 2												
Collector with Bicycle Lanes (*figure 14*)	1	1.5	3.6	385	0	65	0	1	0	2.23	B	Very High
Operational Example 3												
Street with Shared Parking/Bicycle Lane (*figure 15*)	1	1.9	3.4	300	300	58	1	1	0.3	2.77	C	Moderately High
Design Example												
Original Proposed Design (*figure 16*)	0	0.0	3.4	440	440	60	0	0	0.3	4.65	E	Very Low
Design Example												
Wide Curb Lane Option (*figure 17*)	0	0.0	4.2	440	440	60	0	0	0.3	4.25	D	Moderately Low
Design Example												
Paved Shoulder Option (*figure 18*)	1	1.0	3.4	440	440	60	0	0	0.3	3.28	C	Moderately High
Planning Example												
Proposed New Arterial	1	1.2	3.6	917	1833	90	0	0	0.5	5.47	F	Extremely Low
Planning Example												
Re-designed Existing Arterial	1	1.5	3.6	413	413	75	0	0	0.1	3.04	C	Moderately High

Figure 13. BCI and LOS Computations worksheet for all application examples.

Should an individual or agency not have access to a computer or the software necessary to use the spreadsheet application, the computations would have to be made manually. The manual calculations for the operational example just described (***Operational Example 1 - Wide Curb Lane***) are shown in table 6. First, the known information and translation of this information into variables needed for the model or subsequent calculations is shown. Next, the intermediate equations and computations are provided, including the determination of the adjustment factor. Finally, the calculation of the BCI and determination of the bicycle LOS and compatibility level are illustrated.

Known Information	Translation to Known Variables
Number of lanes in one direction is two No bicycle lane or paved shoulder Curb lane width is 4.3 m 85th percentile speed = 75 km/h Roadside development is retail/commercial No on-street parking Large truck percentage is 5 percent Right-turn percentage is 10 percent Average annual daily traffic volume is 15,000 vehicles per day (vpd)	**N** = 2 **BL** = 0, **BLW** = 0.0 m **CLW** = 4.3 m **SPD** = 75 km/h **AREA** = 0 **PKG** = 0 **HV** = 0.05 **R** = 0.10 **AADT** = 15,000 vpd
Equations for Unknown Variables	**Calculation of Unknown Variables**
Peak-hour volume (vehicles per hour - vph) **PHV = AADT x K x D** Curb lane volume **CLV = PHV/N** Other lane volume **OLV = PHV - CLV** Curb lane truck volume **CLTV = PHV x HV x T** Right-turn volume **RTV = PHV x R** Adjustment Factor **AF** = f_t + f_p + f_{rt}	Assume K = 0.10, D = 0.55 *(see table 5)* **PHV =** 15,000 x 0.10 x 0.55 = 825 vph **CLV** = 825/2 = 413 vph **OLV** = 825 - 413 = 412 Assume **T** = 0.80 *(see table 5)* **CLTV** = 825 x 0.05 x 0.80 = 33 **RTV** = 825 x 0.10 = 83 f_t = 0.3 (based on **CLTV** = 33 - *see table 1*) f_p = 0.0 (no on-street parking) f_{rt} = 0.0 (based on **RTV** = 83 - *see table 1*) **AF** = 0.3
BCI Equation and LOS Determination	**Results**
BCI = 3.67 - 0.966**BL** -0.410**BLW** - 0.498**CLW** + 0.002**CLV** + 0.0004**OLV** + 0.022**SPD** + 0.506**PKG** - 0.264**AREA** + **AF** **Bicycle LOS** and **Compatibility Level** *(determined from table 2)*	**BCI** = 3.67 - 0.966**(0)** -0.410**(0.0)** - 0.498**(4.3)** + 0.002**(413)** + 0.0004**(412)** + 0.022**(75)** + 0.506**(0)** - 0.264**(0)** + **0.3** = 4.47 **Bicycle LOS** = E **Compatibility Level** = Very Low

Table 6

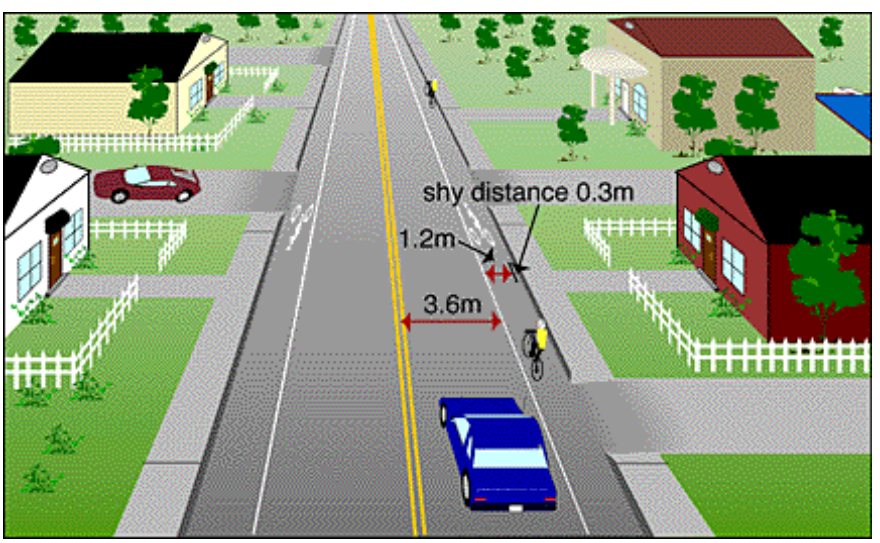


Figure14. Operational Example 2- two-lane collector street with bicycle lane in residential neighborhood

Operational Example 2 is shown in figure 14 and is a two-lane suburban collector street with bicycle lanes. The curb lane and bicycle lane widths are 3.6 m and 1.5 m, respectively. The AADT on this segment is 7,000 vpd, and the posted speed limit is 50 km/h. As shown in the figure, the development type along the roadside is residential, and there is no on-street parking. The volume of traffic turning right during the peak-hour is unknown but is assumed to be insignificant considering the development type. The 85th percentile speed of traffic is also unknown; thus, the default value in the program is being used that simply adds 15 km/h to the speed limit, resulting in an assumed value of 70 km/h. The composition of the traffic is another variable that is not known for this particular street. It is being assumed that the percentage of trucks on this route during the peak hour is only 1.5 percent (*see table 4*). These entries are shown in figure 11 for ***Operational Example 2 - Bicycle Lane***. The intermediate calculations are shown in figure 12 and the results in figure 13. The BCI for this roadway segment is 2.23, which results in a bicycle LOS B and indicates a very high bicycling compatibility level.

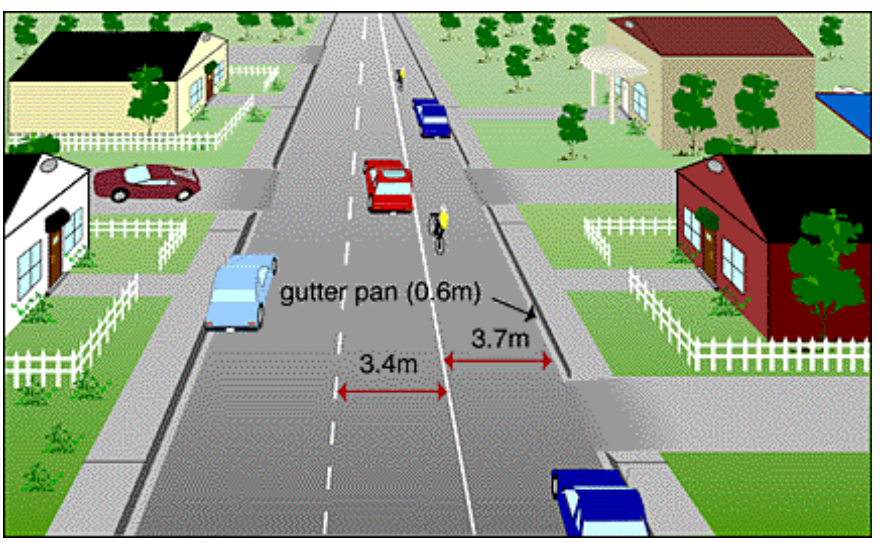


Figure 15. Operational Example 3 - one-way multilane street with a shared bicycle/parking lane in a residential area.

In figure 15, ***Operational Example 3*** is illustrated and includes a shared parking/bicycle lane shown on a one-way multilane street. The width of this shared lane is 3.7 m, measured from the center of the edge line to the gutter pan seam. The gutter pan is 0.6 m wide. Since there is no line separating the parking lane from the bicycle lane, an assumed parking lane width of 2.4 m is used and subtracted from the total width available (including the gutter pan) of 4.3 m, resulting in a bicycle lane width of 1.9 m. The curb lane width is measured from the center of the lane line to the center of the edge line and is 3.4 m. The AADT on this segment is 6,000 vpd, and the truck percentage during the peak hour is 10 percent. Since this location is a one-way street and 100 percent of the traffic on the roadway is now traveling in one direction, the directional split (D-factor) is 1.0.

The posted speed limit is 40 km/h, while the 85th percentile speed is 58 km/h. During the peak hour, approximately 50 percent of the available parking spaces are occupied. Finally, the development type is predominantly residential, and the right-turn volume is known to be very low during the peak hour. The intermediate calculations for ***Operational Example 3 - Shared Parking/Bicycle Lane*** are shown in figure 12, including the change in the directional split factor to 1.0. The results are shown in figure 13 and indicate that the BCI for this roadway segment is 2.77, which results in a bicycle LOS C, reflecting a moderately high compatibility level for bicycling.

Assessment of proposed design alternatives

Another practical employment of the BCI model is in the evaluation of proposed roadway designs. The following example illustrates how the BCI model can be used to achieve a design that is "bicycle friendly." A two-lane minor arterial with a two-way-left-turn lane (TWLTL) is being widened to a multilane roadway with a raised median and left-turn bays to accommodate the projected increase in traffic volume and improve safety along the corridor. The roadway currently has 1.2-m bicycle lanes and serves as an important link in the bicycle network. The roadway presently operates at bicycle LOS C, which indicates a moderately high compatibility level for bicycling. The projected traffic volume being used for the design is 16,000 vpd, with 8 percent of those vehicles being large trucks. The posted speed limit will be 50 km/h, and the 85th percentile speed is expected to be 60 km/h. The development along the route is mixed commercial, and there are no plans for on-street parking.

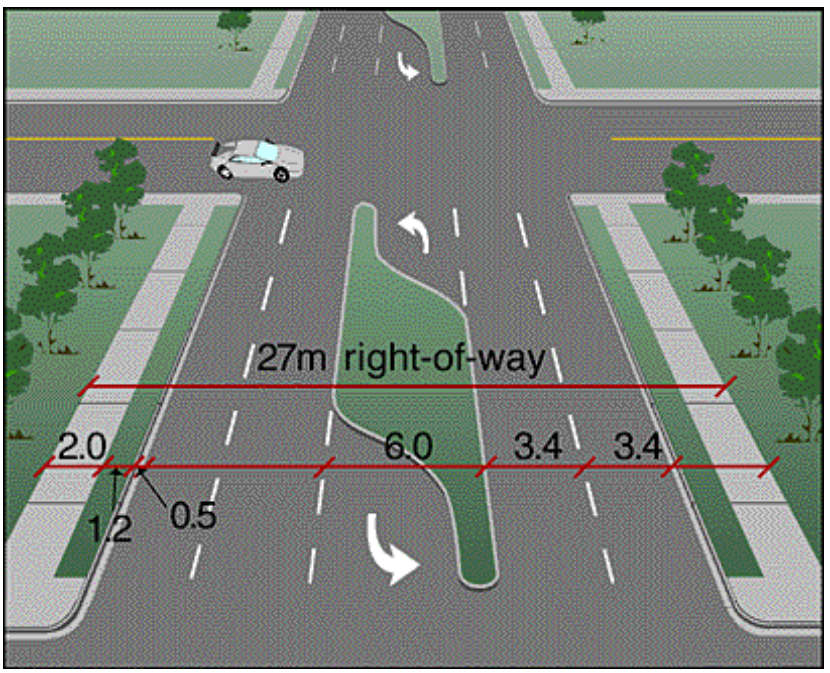


Figure 16. Design Example - original proposed design

The original proposed design was developed within a 27-m right-of-way (ROW) and is shown in figure 16. It consists of four 3.4-m travel lanes, a 6.0-m raised median with left-turn bays, a 2.0-m sidewalk on both sides of the street, a planting strip (1.2 m wide) on both sides separating the travel lanes from the sidewalk, and 0.5-m-wide gutter pans. These geometric data and the operational data provided above are shown in the data entry worksheet in figure 11 for ***Design Example - Original Proposed Design***. The intermediate calculations are shown in figure 12 and the results in figure 13. The BCI for this original design is 4.65, reflecting a bicycle LOS E and a very low compatibility level for bicycling.

Since this route is an important link within the bicycle network, this original design is unacceptable for bicyclists. The goal of the local bicycle coordinator is to maintain the bicycle LOS C, which is currently present on the two-lane facility. After discussing the problems with the roadway design engineers, an alternative plan within the same 27-m ROW is developed in which the median width is reduced from 6.0 m to 4.8 m and the planting strip is reduced from 1.2 m to 1.0 m on both sides of the roadway. The additional 1.6 m in width is added to the curb lanes to create 4.2-m-wide lanes as shown in figure 17. This new curb lane width was entered in the data entry worksheet as shown in figure 11 for ***Design Example - Wide Curb Lane Option***. The results, shown in figure 13, indicate that the BCI for this wide curb lane option is 4.25, which results in a bicycle LOS D and reflects a moderately low compatibility level for bicycling. While this design is an improvement over the original design, it still does not meet the goal of maintaining the existing level of compatibility for bicycling (i.e., LOS C).

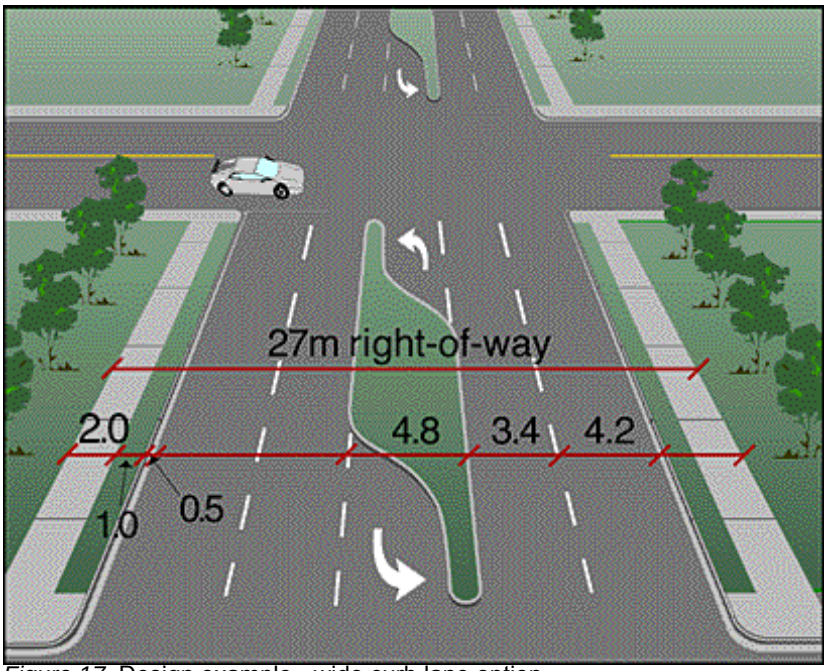


Figure 17. Design example - wide curb lane option

A third alternative was proposed within the existing 27-m ROW in which the median width remained at 4.8 m, the planting strips remained at 1.0 m, and the curb lanes returned to 3.4 m. The only remaining feature that the design engineers were willing to alter was the sidewalk. By reducing the width of the sidewalks from 2.0 to 1.8 m and combining this width gain with those previously achieved in reducing the median width and planting strip widths, a 1.0-m paved shoulder could be incorporated on both sides of the street as shown in figure 18. These new values were entered in the data entry worksheet as shown in figure 11 for ***Design Example - Paved Shoulder Option***. The results, shown in figure 13, indicate that the BCI for this option is 3.28, which corresponds to a bicycle LOS C, reflecting a moderately high compatibility level for bicycling. This design meets the goal of maintaining the present compatibility level for bicycling and is selected as the most desirable alternative.

Bicycle Compatibility Index and Level of Service Computations

Location	BCI Model Variables									Results		
Midblock Identifier (Route/Intersecting Streets, Segment Number, Link Number, Etc.)	BL	BLW	CLW	CLV	OLV	SPD	PKG	AREA	AF	BCI	Level of Service	Bicycle Compatibility Level
First Avenue - 5th/6th Streets	1	1.2	3.6	275	275	37	1	1	0.3	2.44	C	Moderately High
	= 1 if Bicycle Lane Width or Paved Shoulder Width is ≥ 0.9 m; otherwise, the value is 0.	= Bicycle Lane Width or Paved Shoulder Width	= Curb Lane Width	= Peak Hour Curb Lane Volume	= Peak Hour Other Lane(s) Volume	= 85th%tile Speed if provided or Speed Limit + 15 km/h if not provided (Note, the default value of 15 km/h can be changed by the user.)	= 1 if Parking Lane is present ("y") and Occupancy ≥ 0.30; otherwise, the value is 0.	= 1 if Residential Development is present ("y") and 0 if not ("n").	= LargeTruck Adjustment Factor + Right Turn Adjustment Factor + Parking Adjustment Factor	= 3.67-(0.966*BL) - (0.410*BLW) - (0.498*CLW) + (0.002*CLV) + (0.0004*OLV) + (0.022*SPD) + (0.506*PKG) - (0.264*AREA) + AF	Determined based on BCI ranges shown in table 2.	Determined based on LOS (and corresponding BCI) shown in table 2.

Figure 8. BCI and LOS Computations worksheet.

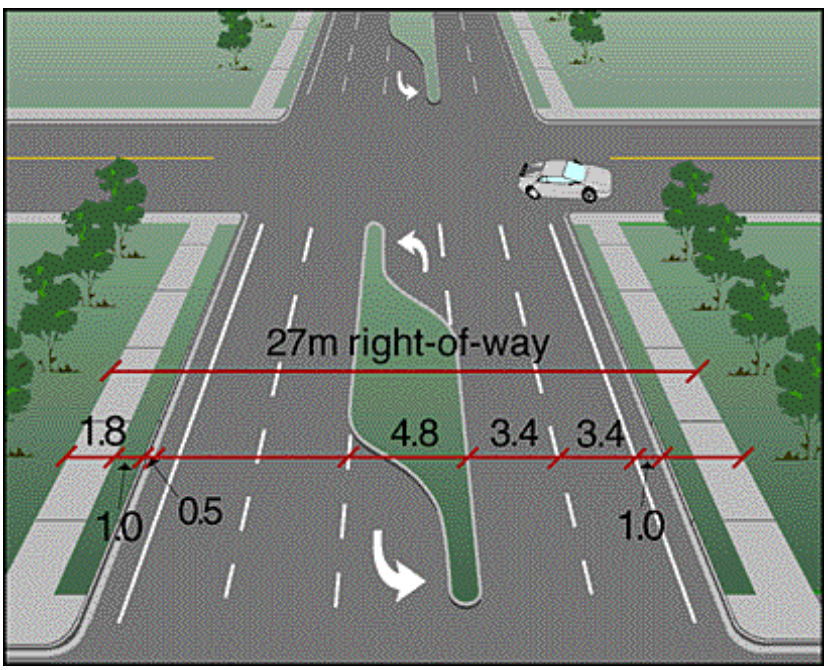
Planning to accommodate bicyclists

The BCI model can also be used to assess long-range transportation plans and the alternatives that may be proposed. The following example illustrates how the model can be used to plan for a bicycle corridor. A suburban area on the west side of the city is currently growing at an exponential rate and is expected to triple its population base within the next 10 years. Consequently, there is a need to either upgrade the major arterial that currently provides access between this area and the central business district or build a new roadway to accommodate the expected increase in traffic. The present arterial is a four-lane facility with a variety of retail and commercial development along the roadside with virtually no right-of-way for additional lanes.

Based on a cost-feasibility study, the decision was made to build a new roadway with a 1.2-m bicycle lane to accommodate bicyclists. Since there is no provision for bicyclists on the current arterial, this plan initially sounded like a major victory for bicycling commuters. The proposed roadway is a

six-lane arterial with a projected traffic volume of 50,000 vpd and a posted speed limit of 75 km/h. The travel lanes will be 3.6 m wide, trucks are expected to comprise 5 percent of the volume, and 10 percent of the traffic is expected to turn right into driveways or onto minor streets. All of these data were entered in the data entry worksheet as shown in figure 11 ***for Planning Example - Proposed New Arterial***. The results, shown in figure 13, indicate that the BCI for this new proposed arterial will be 5.47. This value translates into a LOS F and indicates that the facility will be extremely incompatible for bicycling. So while the addition of a bicycle lane looked like a good idea, the reality is that the combination of other geometric and operational characteristics would create an unfriendly environment for bicyclists.

Since increasing the bicycle level of service to LOS C or better on the new proposed arterial could simply not be done within the right-of-way constraints, it was necessary to look for alternatives to provide a bicycle route within this same corridor. One alternative proposed by the local resident engineer consisted of removing the bicycle lane from the new facility and using the cost savings resulting from the reduced right-of-way needs to improve the old (existing) arterial to accommodate bicyclists. Once the new arterial is built, traffic on the existing roadway is expected to decrease to 15,000 vpd. The percentage of trucks is also expected to decrease to 2 percent while the percentage of traffic making right turns is expected to increase to 20 percent since a greater number of users of this roadway will now be individuals interested in patronizing one of the local businesses. The estimated 85th percentile speed is expected to remain at 75 km/h. The current configuration of lanes on this roadway is four 3.4-m through lanes (two in each direction) and a substandard 3.8-m two-way-left-turn lane (TWLTL). The proposed new configuration eliminates the TWLTL, increases the through lanes to 3.6 m in width, and includes 1.5-m bicycle lane on both sides of the roadway. This information was entered in the data entry worksheet in figure 11 for ***Planning Example - Re-designed Existing Arterial***. The results, shown in figure 13, indicate that the BCI for this new proposed arterial will be 3.04. This value translates into a LOS C and indicates that the bicycling compatibility level will be moderately high. Ultimately, these results indicate the need to revise the plans for the new arterial, including reducing the right-of-way required, and the need to plan on reconfiguring the existing roadway to create a more user-friendly roadway for bicyclists.



References

1. *The National Bicycling and Walking Study*, Report No. FHWA-PD-94-023, Federal Highway Administration, Washington, DC, 1994.

2. A. Sorton and T. Walsh, "Bicycle Stress Level as a Tool to Evaluate Urban and Suburban Bicycle Compatibility," *Transportation Research Record 1438*, Transportation Research Board, Washington, DC, 1994.

3. Geelong Planning Committee, *Geelong Bikeplan*, Geelong, Australia, 1978.

4. D.L. Harkey, D.W. Reinfurt, M. Knuiman, and A. Sorton, *Development of the Bicycle Compatibility Index: A Level of Service Concept, Final Report*, Report No. FHWA-RD-98-072, Federal Highway Administration, Washington, DC, August 1998.

5. *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, DC, 1994.

6. *Guide for the Development of Bicycle Facilities*, American Association of State Highway and Transportation Officials, Washington, DC, August 1991.

7. *A Policy on the Geometric Design of Highways and Streets*, American Association of State Highway and Transportation Officials, Washington, DC, 1994.

8. D.L. Harkey and J.R. Stewart, "Evaluation of Shared-Use Facilities for Bicycles and Motor Vehicles," *Transportation Research Record 1578*, Transportation Research Board, Washington, DC, 1997.

9. H.D. Robertson (editor), *Manual of Transportation Engineering Studies*, Institute of Transportation Engineers, Washington, DC, 1994.

10. D.L. Harkey, H.D. Robertson, and S.E. Davis, "Assessment of Current Speed Zoning Criteria," *Transportation Research Record 1281*, Transportation Research Board, Washington, DC, 1990.

11. W.R. McShane and R.P. Roess, Traffic Engineering, Prentice Hall, Englewood Cliffs, NJ, 1990.

12. *Highway Safety Information System*, Internal Project Memorandum, Federal Highway Administration, Washington, DC, February 1998.

Date: March 9 & 10, 2009

Vinton Area Corridors Plan: Sidewalk Inventory

Street or Path	Direction/Side	From/To	Condition Score	Notes	ADA Ramp	# of Curb Cuts
			A=Excellent Condition B=Good Condition C=Serviceable; Consider Patching/Replacing Sections		S=Start of Segment E=End of Segment B=Both Ends	
Walnut	Eastbound	421 Walnut to 4th St.	B	No Curb	E	0
Walnut	Eastbound	4th to 3rd	B		B	3
Walnut	Eastbound	2nd to 1st	B	30 Foot Gap in Sidewalk	None	4
Walnut	Eastbound	1st to Jackson	B		E	2
Walnut	Eastbound	Alley at 6 Walnut to Lee	A		B	1
Walnut	Westbound	Alley at 6 Walnut to Lee	A		E	1
Lee	Eastbound	Walnut to Pollard	A		B	1
Lee	Westbound	Walnut to Pollard	A		B	3
Pollard	Northbound	Gus Nicks to Lee	A		B	2
Pollard	Southbound	Gus Nicks to Lee	A		B	1
Pollard	Northbound	Lee to Jackson	A		B	2
Pollard	Southbound	Lee to Jackson	A		B	1
Pollard	Northbound	Jackson to Cleveland	A		B	2

Date: March 9 & 10, 2009

Vinton Corridors Study: Sidewalk Inventory

Street or Path	Direction/Side	From/To	Condition Score	Notes	ADA Ramp	# of Curb Cuts
			A=Excellent Condition B=Good Condition C=Serviceable; Consider Patching/Replacing Sections		S=Start of Segment E=End of Segment B=Both Ends	
Pollard	Southbound	Jackson to Cleveland	A		B	1
Pollard	Northbound	Cleveland to Jefferson	B		B	0
Pollard	Southbound	Cleveland to Cedar	A		B	4
Pollard	Northbound	Jefferson to Virginia	B	Retaining wall failure on private property causing encroachment onto sidewalk facility.	S	0
Pollard	Southbound	Cedar to Virginia	C	Gap in Sidewalk in Front of 509 Pollard; Low Spots	None	2
Gus Nicks	Northbound	Town Line to W Madison	A		B	2
Gus Nicks	Southbound	Town Line to Highland	A		B	2
Gus Nicks	Northbound	Madison to Pollard	A		B	0
Gus Nicks	Southbound	Highland to Pollard	A		B	2
Washington	Eastbound	Pollard to Maple	A		B	3

Date: March 9 & 10, 2009

Vinton Corridors Study: Sidewalk Inventory

Street or Path	Direction/Side	From/To	Condition Score	Notes	ADA Ramp	# of Curb Cuts
			A=Excellent Condition B=Good Condition C=Serviceable; Consider Patching/Replacing Sections		S=Start of Segment E=End of Segment B=Both Ends	
Washington	Westbound	Pollard to Maple	A		B	4
Washington	Eastbound	Maple to Poplar	A		B	0
Washington	Westbound	Maple to Poplar	A		B	2
Washington	Eastbound	Poplar to Blair	A		B	2
Washington	Westbound	Poplar to Blair	A		B	2
Washington	Eastbound	Blair to Church	A		B	5
Washington	Westbound	Blair to E Madison	A		B	5
Washington	Eastbound	Church to Pine	A		B	0
Washington	Westbound	E Madison to Meadow	A		B	1
Washington	Eastbound	Pine to Mtn View	A		B	9
Washington	Westbound	Meadow to Mtn View	A		B	12
Washington	Eastbound	Mtn View to Mitchell	A		S	1
Washington	Westbound	Mtn View to Mitchell	A		S	2

Date: March 9 & 10, 2009

Vinton Corridors Study: Sidewalk Inventory

Street or Path	Direction/Side	From/To	Condition Score	Notes	ADA Ramp	# of Curb Cuts
			A=Excellent Condition B=Good Condition C=Serviceable; Consider Patching/Replacing Sections		S=Start of Segment E=End of Segment B=Both Ends	
Washington	Westbound	N Preston to N Marshall	A		None	5
Virginia	Eastbound	Tinker Creek/Glade to 3rd	B	Low spots	None	1
Virginia	Westbound	Tinker Creek/Glade to 4th	B		None	3
Virginia	Eastbound	3rd to 2nd	B		None	4
Virginia	Westbound	4th-3rd	B		None	3
Virginia	Westbound	3rd to 2nd	B		None	6
Virginia	Eastbound	2nd to Pollard	B		None	3
Virginia	Westbound	2nd to Pollard	B		None	4
Virginia	Eastbound	Pollard - 200 ft east of Pollard	B		None	2
Virginia	Westbound	Pollard - 200 ft east of Pollard	B		None	1
Virginia	Eastbound	Rancho Viejo Frontage	B		None	0
Hardy	Eastbound	Niagara (Burger King) to Vineyard	B		B	5
Hardy	Westbound	Niagara to Vineyard	B		E	4

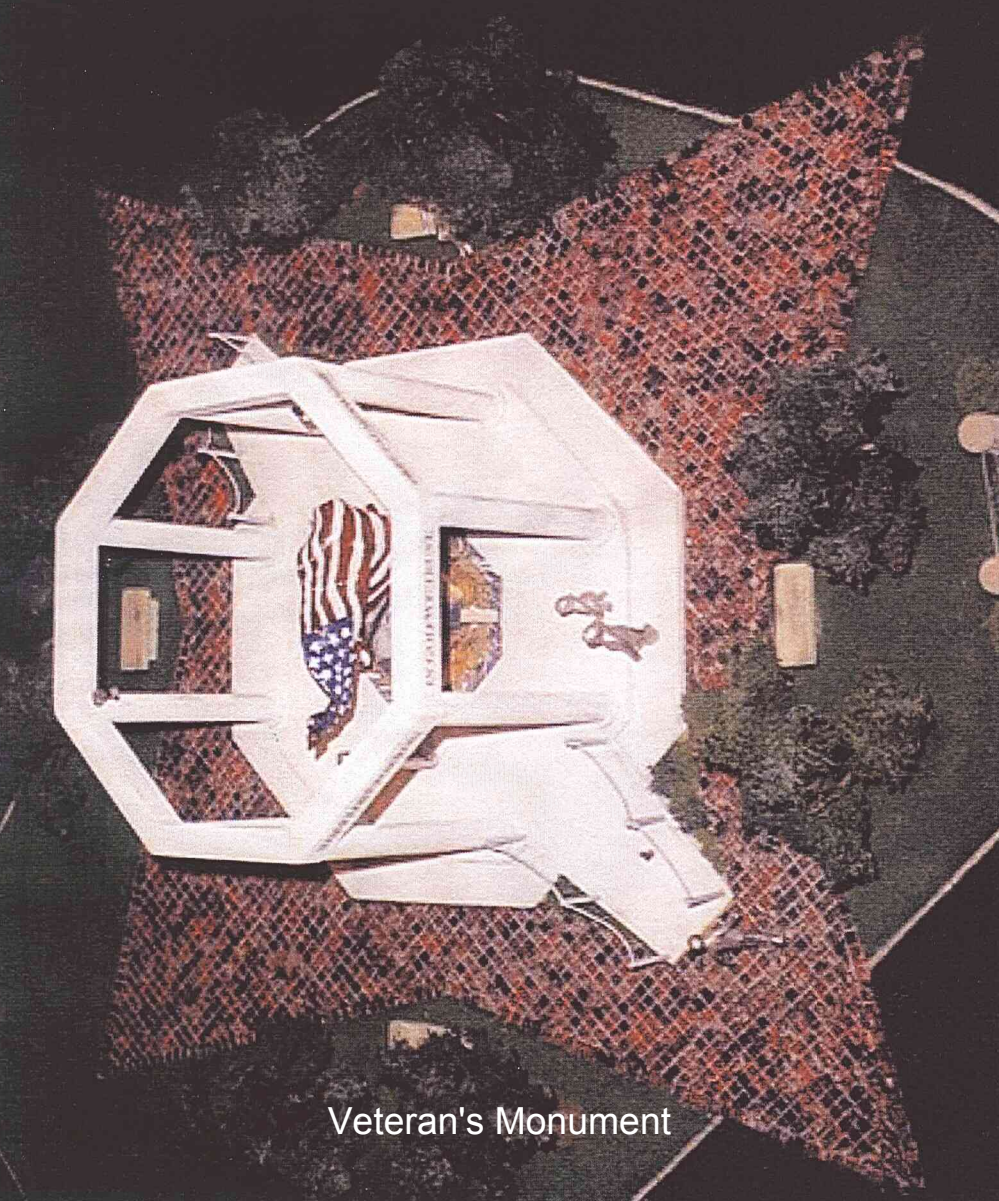
Date: March 9 & 10, 2009

Vinton Corridors Study: Sidewalk Inventory

Street or Path	Direction/Side	From/To	Condition Score	Notes	ADA Ramp	# of Curb Cuts
			A=Excellent Condition B=Good Condition C=Serviceable; Consider Patching/Replacing Sections		S=Start of Segment E=End of Segment B=Both Ends	
Hardy	Eastbound	Vineyard to Clearview	B		B	3
Hardy	Westbound	Vineyard to Bedford	B		B	2
Hardy	Westbound	Bedford to 634	B		S	4
Hardy	Eastbound	Clearview to 634	B		S	2
Hardy/634	Eastbound	Virginia to Dillon	A		B	10
Hardy/634	Eastbound	Dillton to Wolf Creek	A		S	14
Hardy/634	Westbound	Greenway -McDonald	A		E	3
Hardy/634	Westbound	McDonald to Preston	A		B	3
Hardy/634	Westbound	Preston - Nelson	A		B	1
Hardy/634	Westbound	Nelson -Virginia	A		B	0

Document 4

Veteran's Monument



Veteran's Monument

Additional Questions, Comments and/or Concerns

14. Please use this space to provide additional comments regarding the study corridors.

15. Please use this space to provide feedback regarding this survey.

Survey Results, Questions and Additional Information

Thank you again for your input and participation in this survey for the Vinton Area Corridors Plan! Staff will be compiling results of the survey for incorporation into the Vinton Area Corridors Plan. The results of the survey will be available at the next community meeting expected to be held in late March, as well as on the County's webpage (www.roanokecountyva.gov).

If you would like to receive a copy of the survey results, please contact Lindsay Blankenship, Roanoke County Department of Community Development, (540) 772-2068 ext. 283 or email lblankenship@roanokecountyva.gov, or Anita McMillan, Town of Vinton Planning Department, (540) 983-0601 or email amcmillan@vintonva.gov.

Please return your survey to the Roanoke County Department of Community Development, Attn: Lindsay Blankenship, 5204 Bernard Drive, Roanoke, VA 24018 by February 28, 2009.

Vinton Area Corridors Plan Community Survey

Introduction

On behalf of the Town of Vinton and the County of Roanoke, thank you for taking the time to participate in the development of the Vinton Area Corridors Plan. This plan will ultimately help guide future development along thefollowing corridors in your community: Bypass Road, Hardy Road, South Pollard Street, Virginia Avenue, Walnut Avenue and Washington Avenue. Staff will be compiling results of the survey for incorporation into the Vinton Area Corridors Plan. The results of the survey will be available at the next community meeting expected to be held in late March.

If you have any question or concerns pertaining to this online survey, please contact Lindsay Blankenship at the Roanoke County Department of Community Development by phone (540) 772-2068 ext. 283, or by email at lblankenship@roanokecountyva.gov. Thank you for your assistance in this process!

Please return your survey to the Roanoke County Department of Community Development by February 28, 2009.

Getting to Know You

1. Please provide your gender:
   - ☐ Male
   - ☐ Female

2. Please provide your age:
   - ☐ Under 18
   - ☐ 18-24
   - ☐ 25-34
   - ☐ 35-49
   - ☐ 50-64
   - ☐ 65 and older

3. Please select the choice that most accurately describes your connection with the study corridors.
   - ☐ Live/Work Along the Corridors
   - ☐ Drive Along the Corridors
   - ☐ Neither

4. How long have you lived/worked along the study corridors?
   - ☐ Less than 5 years
   - ☐ 5 -10 years
   - ☐ 11-20 years
   - ☐ More than 20 years

5. On average, how often do you travel along the study corridors?
   - ☐ Daily
   - ☐ 2-3 times per week
   - ☐ Once a week
   - ☐ 2-3 times per month
   - ☐ Once a Month
   - ☐ 3-4 times per year
   - ☐ Once a year or less

Transportation

6. What modes of transportation do you take along the corridors?
   - ☐ Automobile
   - ☐ Bicycle
   - ☐ Bus
   - ☐ Motorcycle
   - ☐ RADAR
   - ☐ Taxi
   - ☐ Walk
   - ☐ Other, please specify: _____

7. If bicycle and pedestrian improvements were made along the study corridors, would you walk or bike more often?
   - ☐ Yes
   - ☐ No

8. Please list any transportation improvements and/or features that you feel are needed along the study corridors.

	Bypass Road	Hardy Road	South Pollard Street	Virginia Avenue	Walnut Avenue	Washington Avenue
Access Points	☐	☐	☐	☐	☐	☐
Bicycle Lanes	☐	☐	☐	☐	☐	☐
Bus Stops	☐	☐	☐	☐	☐	☐
Crosswalks	☐	☐	☐	☐	☐	☐
Guardrail	☐	☐	☐	☐	☐	☐
Intersections	☐	☐	☐	☐	☐	☐
Medians	☐	☐	☐	☐	☐	☐
Sidewalks	☐	☐	☐	☐	☐	☐
Traffic Signs	☐	☐	☐	☐	☐	☐
Turning Lanes	☐	☐	☐	☐	☐	☐

Other Improvements with Corresponding Locations: _____

9. While traveling along the study corridors, where do you encounter the most inconveniences?

	Bypass Road	Hardy Road	South Pollard Street	Virginia Avenue	Walnut Avenue	Washington Avenue
Congestion	☐	☐	☐	☐	☐	☐
Delays	☐	☐	☐	☐	☐	☐
Excessive Speed	☐	☐	☐	☐	☐	☐
Heavy Truck Traffic	☐	☐	☐	☐	☐	☐
Signal Coordination/Timing	☐	☐	☐	☐	☐	☐

Other Inconveniences with Corresponding Locations: _____

Land Use and Development

10. As opportunities for redevelopment and new development arise throughout the Vinton area, what type of businesses and/or services would you like to see along the study corridors? Please check all that apply.

- ☐ Big Box Stores (i.e. Lowes, Wal-Mart, Home Depot, Target, etc.)
- ☐ Car Dealership
- ☐ Car Washes
- ☐ Convenience Stores/Gas Stations
- ☐ Financial/Lending Institutions
- ☐ Garden Centers/Hardware Stores
- ☐ Grocery Stores
- ☐ Medical Offices
- ☐ Mini-Warehouses/Storage
- ☐ Personal Services (i.e. barber shops, salons, spas, etc.)
- ☐ Pharmacies
- ☐ Post Offices
- ☐ Professional Offices
- ☐ Restaurants (fast food)
- ☐ Restaurants (sit-down, family)
- ☐ Retails Establishments

Other Businesses/Services with Corresponding Locations: _____

11. What streetscape features would you like to see added or improved along the study corridors? Please check all that apply.

	Bypass Road	Hardy Road	South Pollard Street	Virginia Avenue	Walnut Avenue	Washington Avenue
Benches	☐	☐	☐	☐	☐	☐
Bicycle Racks	☐	☐	☐	☐	☐	☐
Building Facades	☐	☐	☐	☐	☐	☐
Business Signs	☐	☐	☐	☐	☐	☐
Bus Shelters	☐	☐	☐	☐	☐	☐
Bus Stops	☐	☐	☐	☐	☐	☐
Directional/Wayfinding Signs	☐	☐	☐	☐	☐	☐
Lighting	☐	☐	☐	☐	☐	☐
Gateway/Entrance Signs	☐	☐	☐	☐	☐	☐
Landscaped Medians	☐	☐	☐	☐	☐	☐
Light Post Banners	☐	☐	☐	☐	☐	☐
Parking Area (relocated to side or rear of buildings or interior landscaping)	☐	☐	☐	☐	☐	☐
Screening for Outside Storage of Materials	☐	☐	☐	☐	☐	☐
Sidewalks	☐	☐	☐	☐	☐	☐
Street Trees	☐	☐	☐	☐	☐	☐
Trash Receptacles	☐	☐	☐	☐	☐	☐
Underground Utilities	☐	☐	☐	☐	☐	☐

Other Features with Corresponding Locations: _____

Resource Preservation

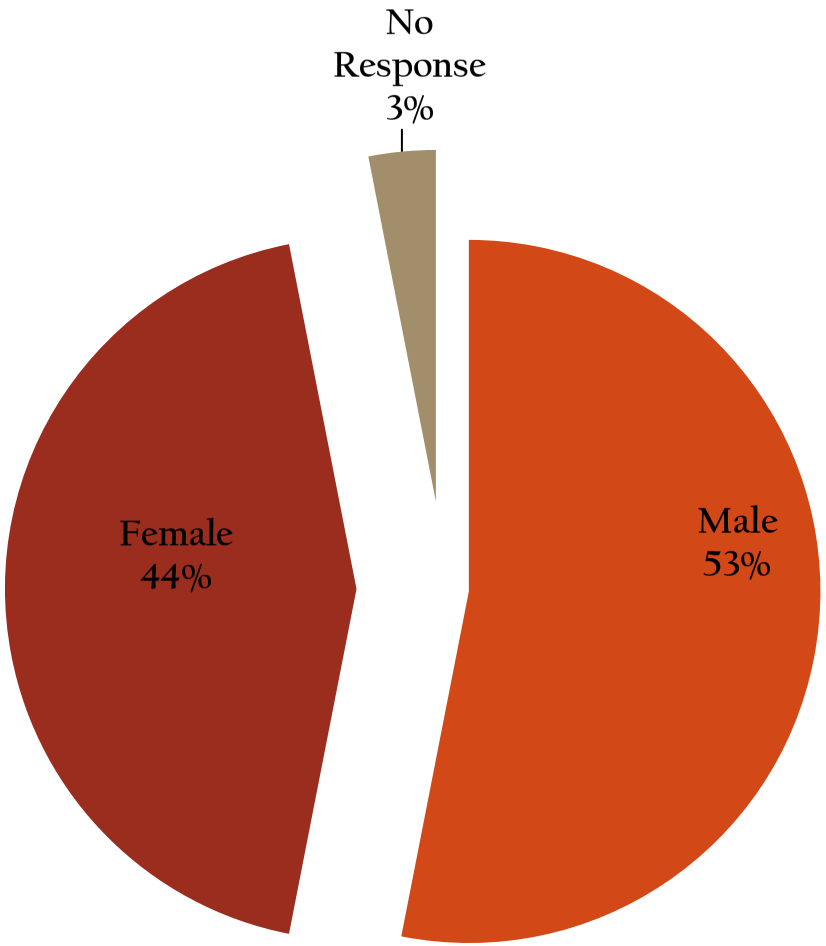
12. Please use this space to provide comments or concerns regarding cultural, environmental and/or historical resources along the study corridors. _____

13. Please list any improvements to community facilities and/or services that you feel are needed along the study corridors.

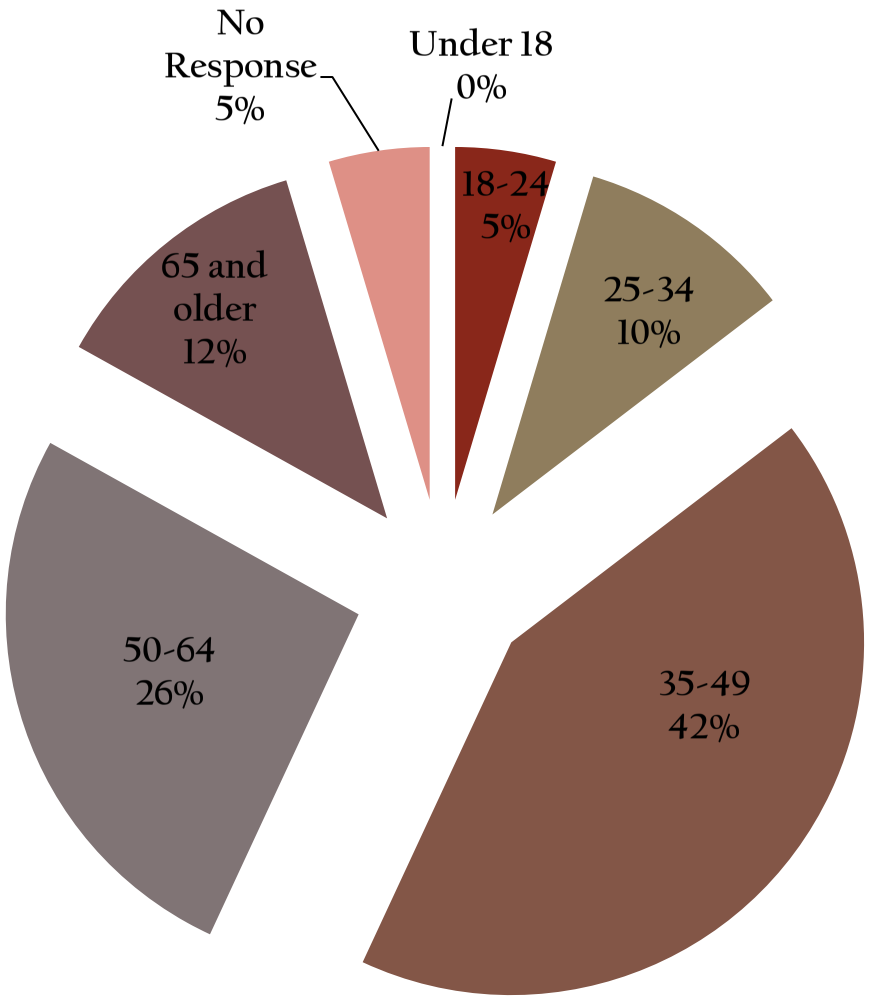
- Fire/Rescue Services
- Police Services
- Tinker Creek Greenway
- Vinton Library
- Vinton War Memorial
- W.E. Cundiff Elementary School
- William Byrd Middle/High Schools
- Wolf Creek Greenway

Other Improvements and/or Services with Corresponding Locations: _____

Demographics



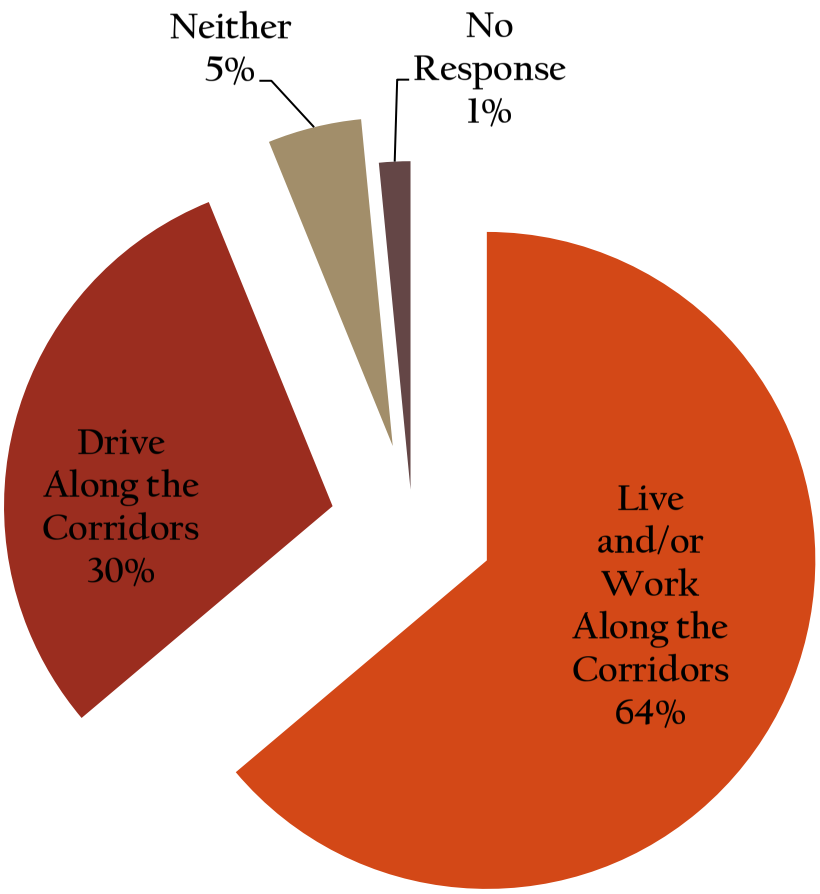
Gender

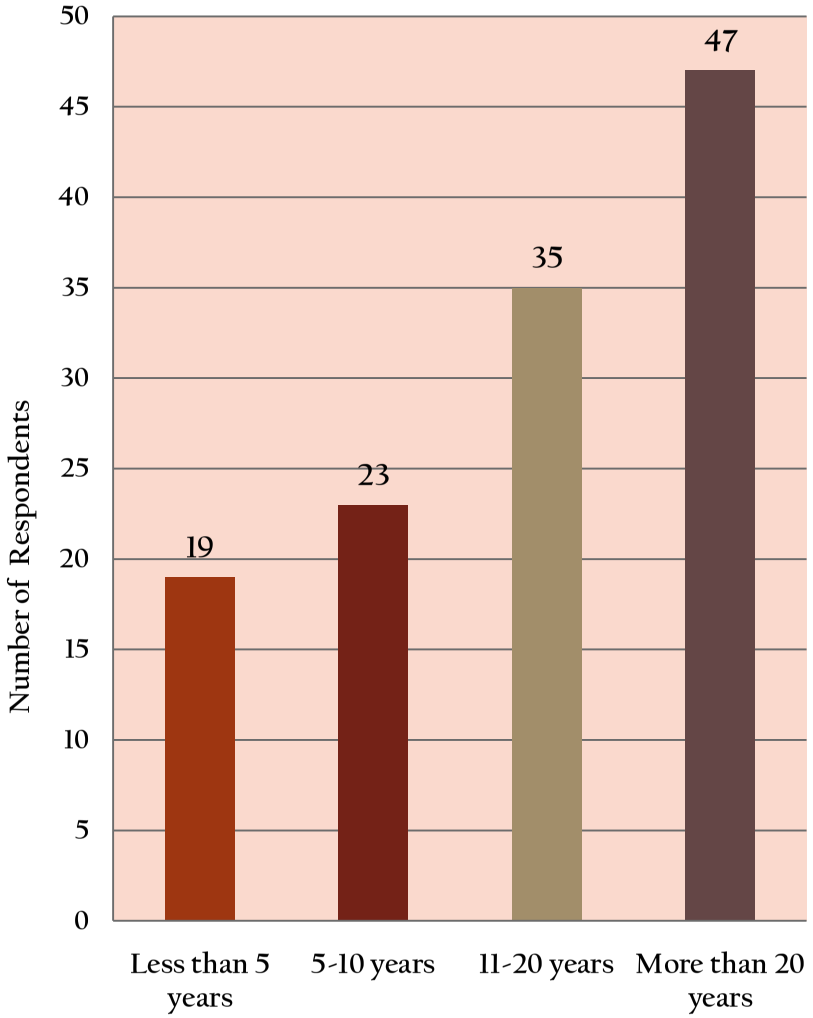


Age

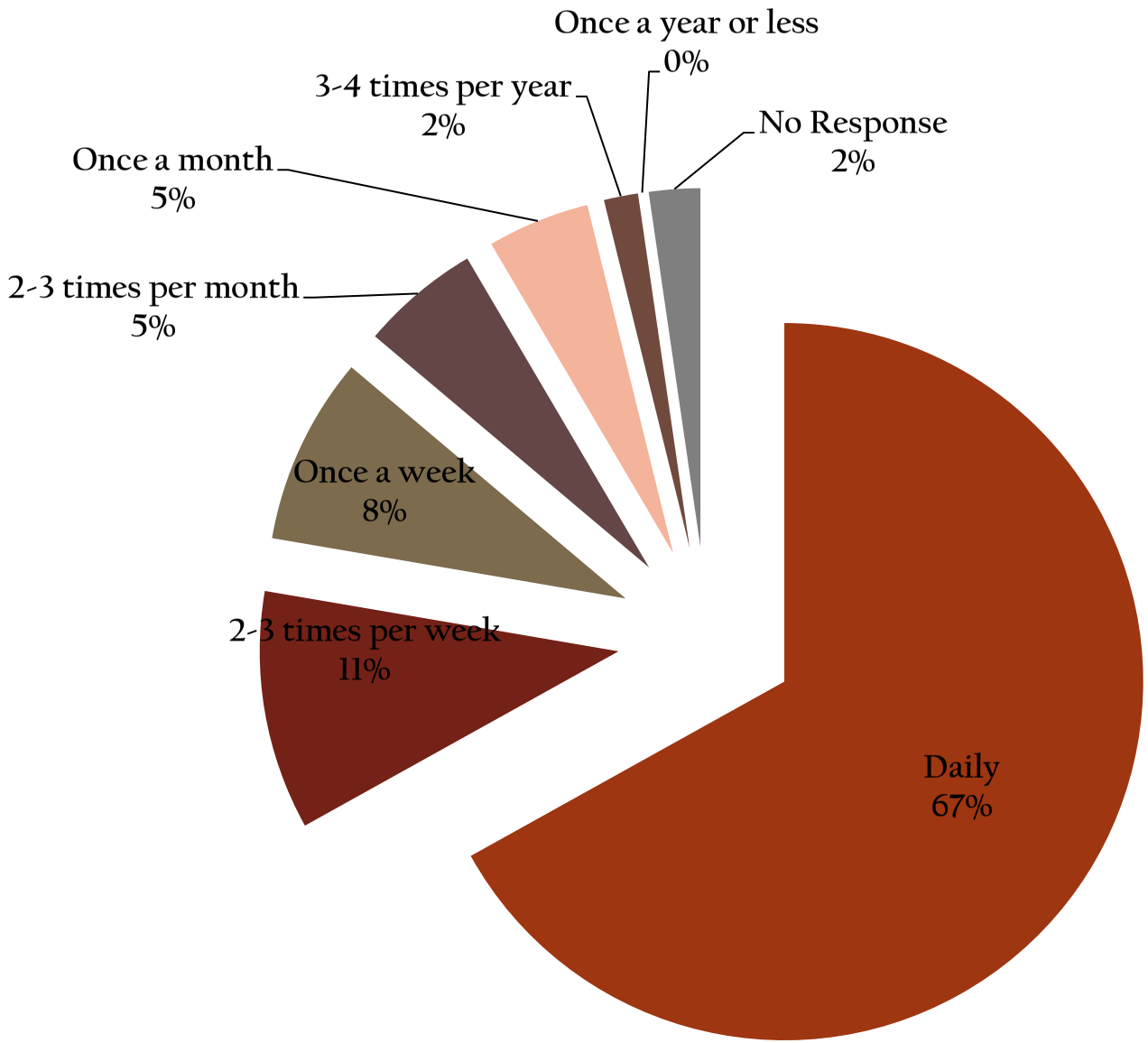
Document 6

Relationship to Study Corridors

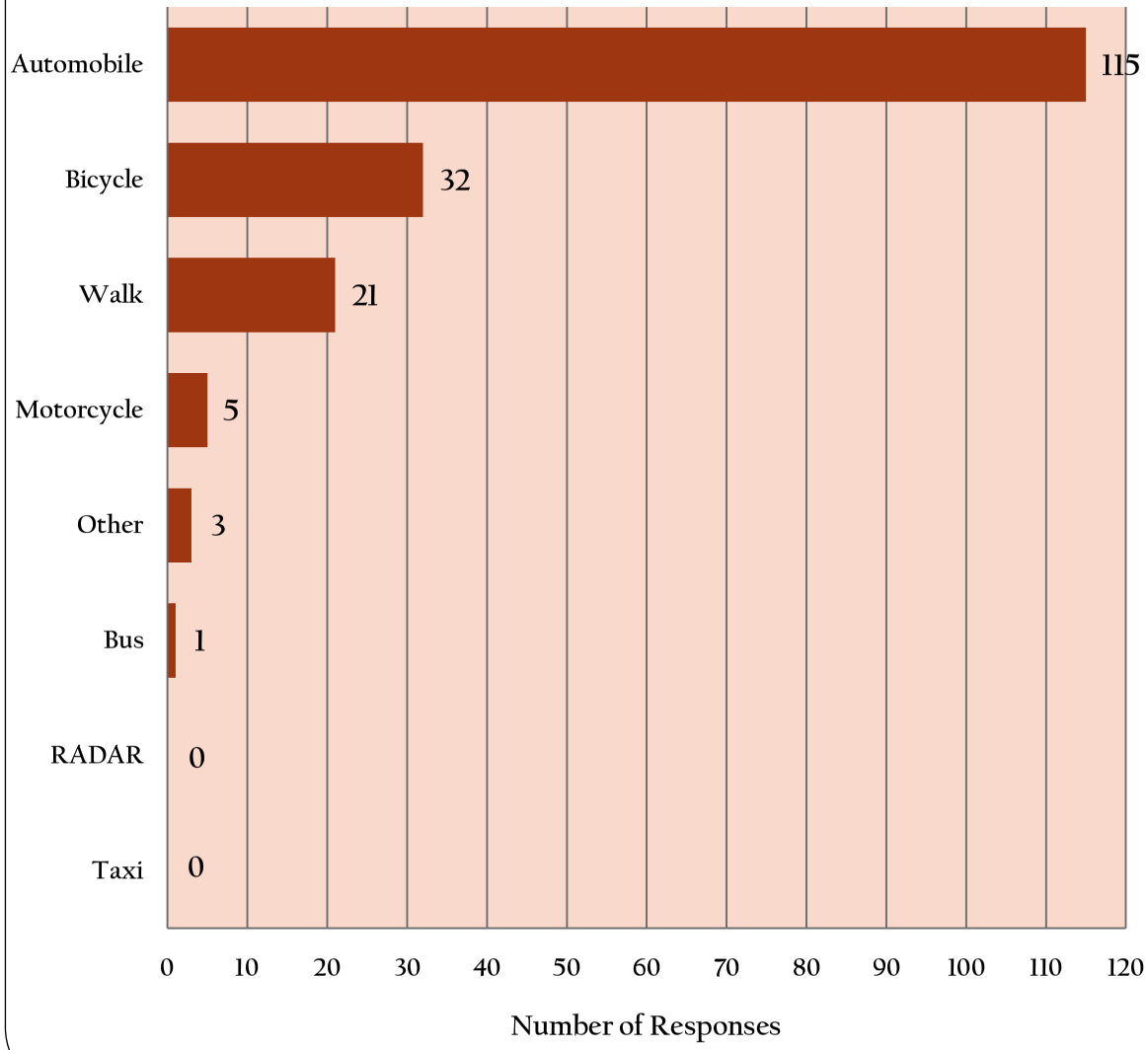


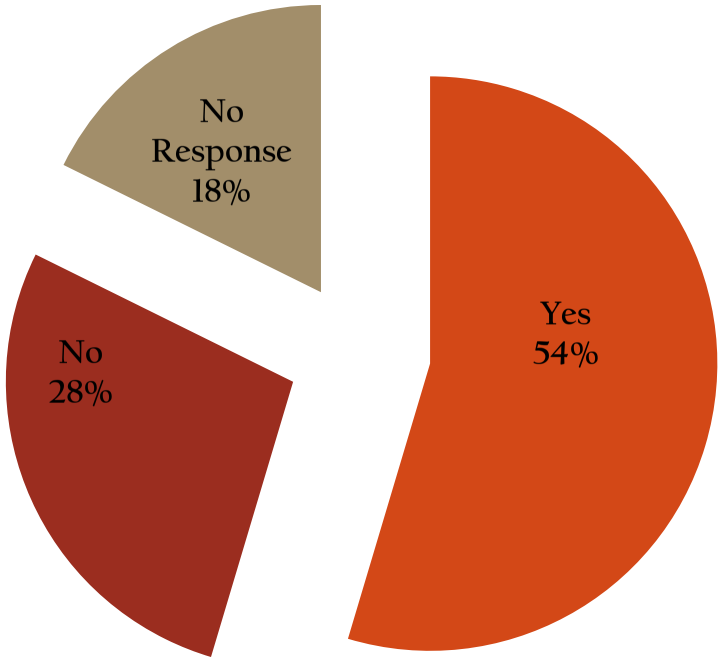


Traveling the Study Corridors



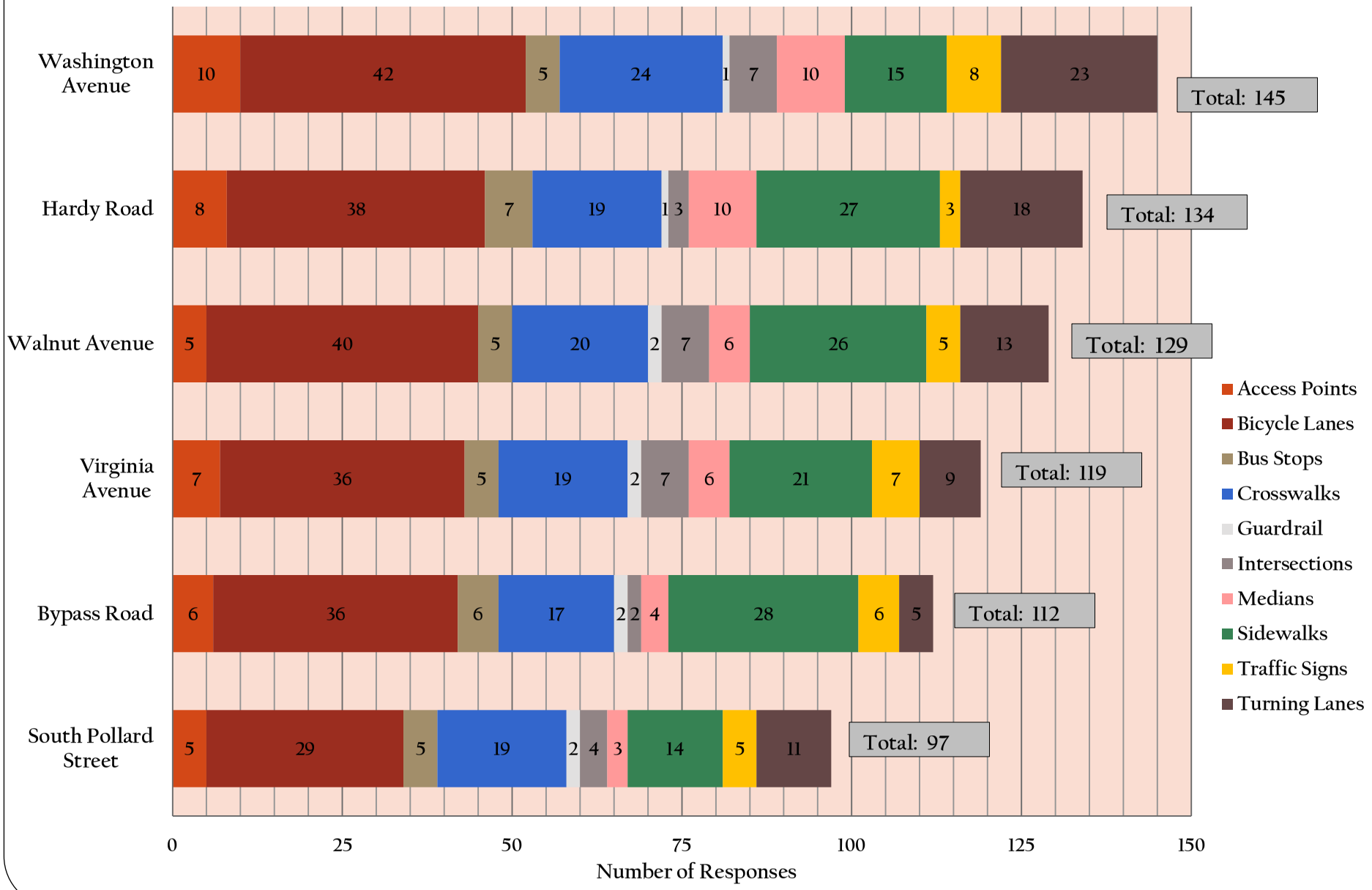
Bicycle and Pedestrian Amenities



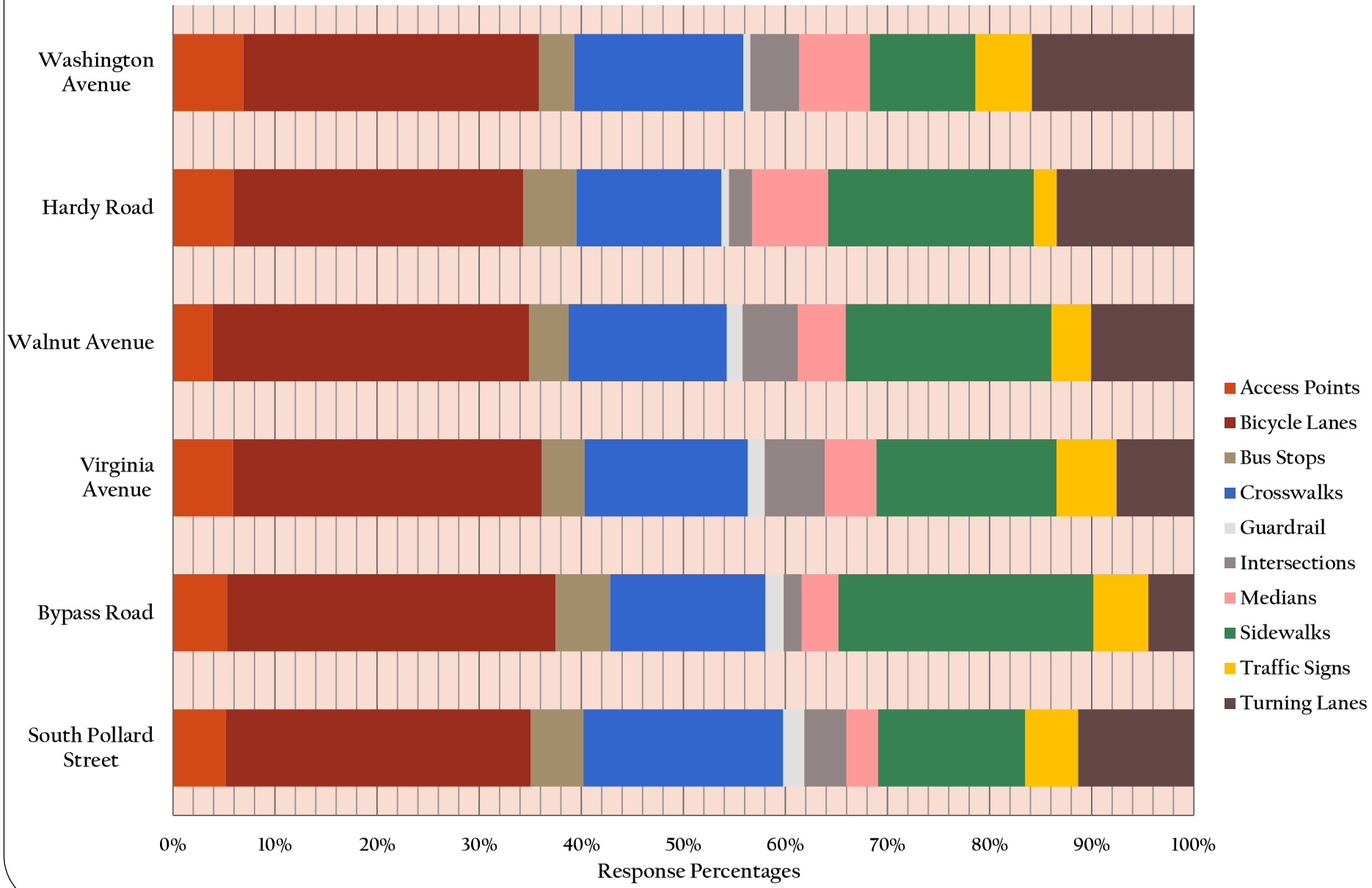


If bicycle and pedestrian improvements were made along the study corridors, would you walk or bike more often?

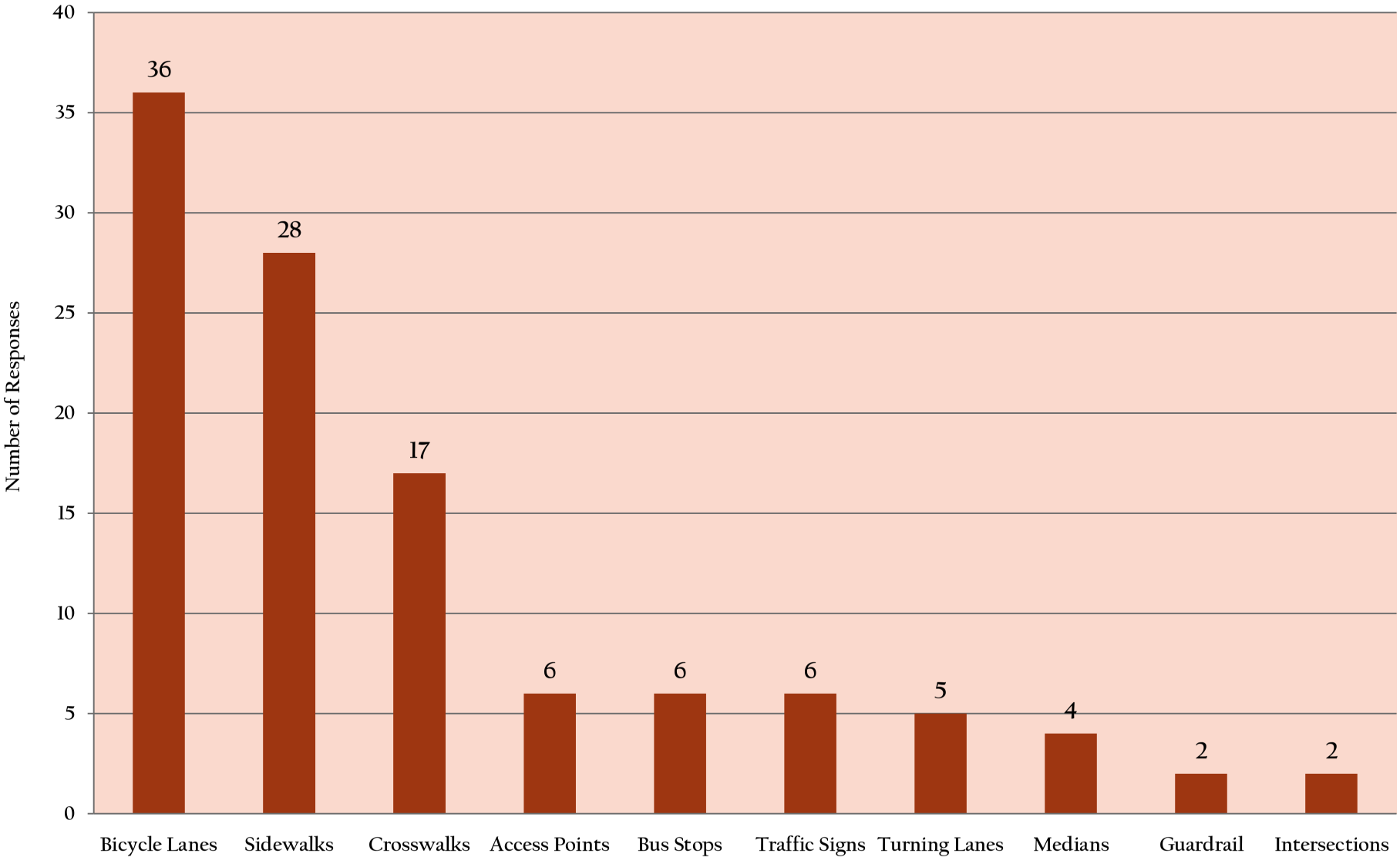
Transportation Improvements



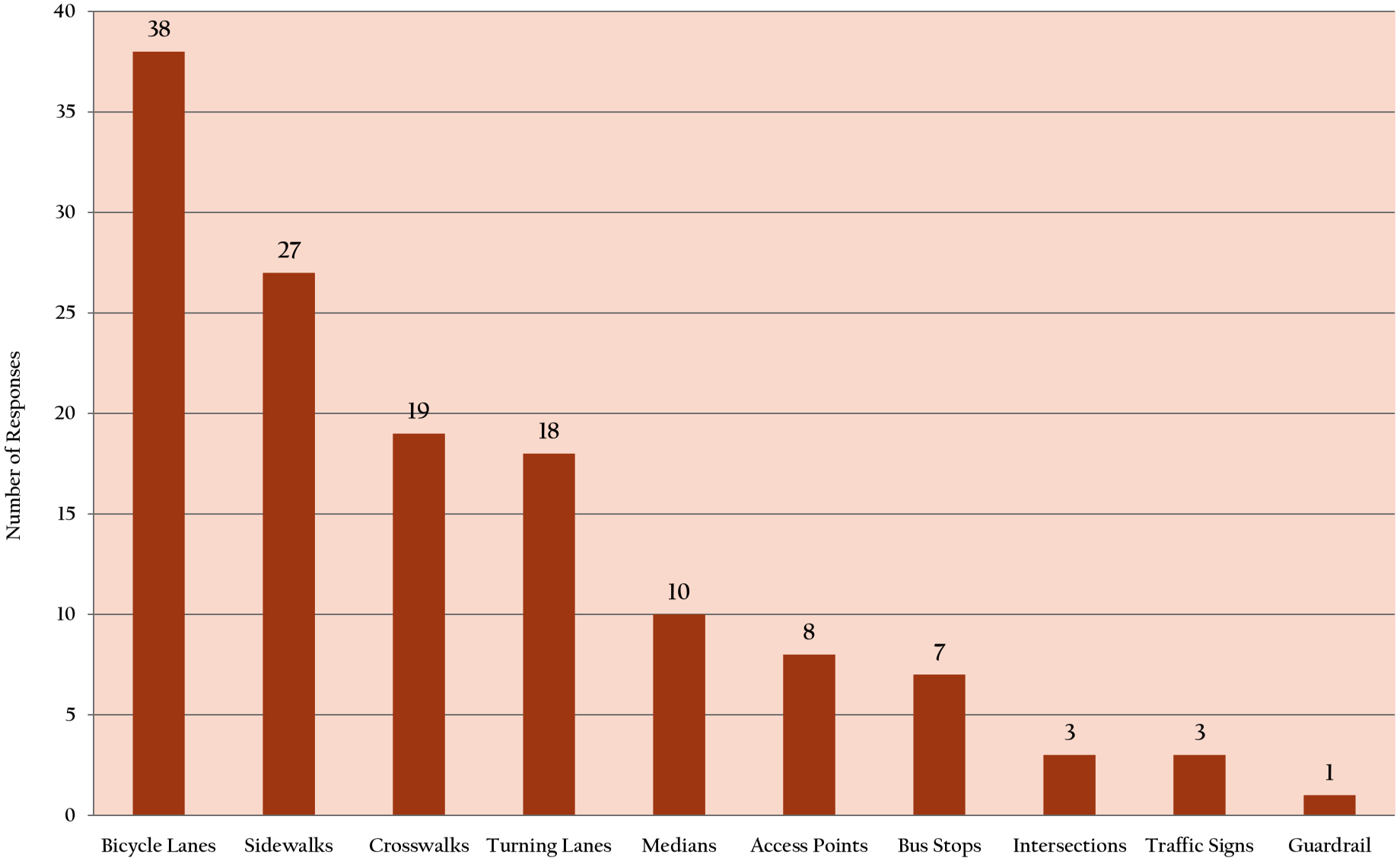
Transportation Improvements



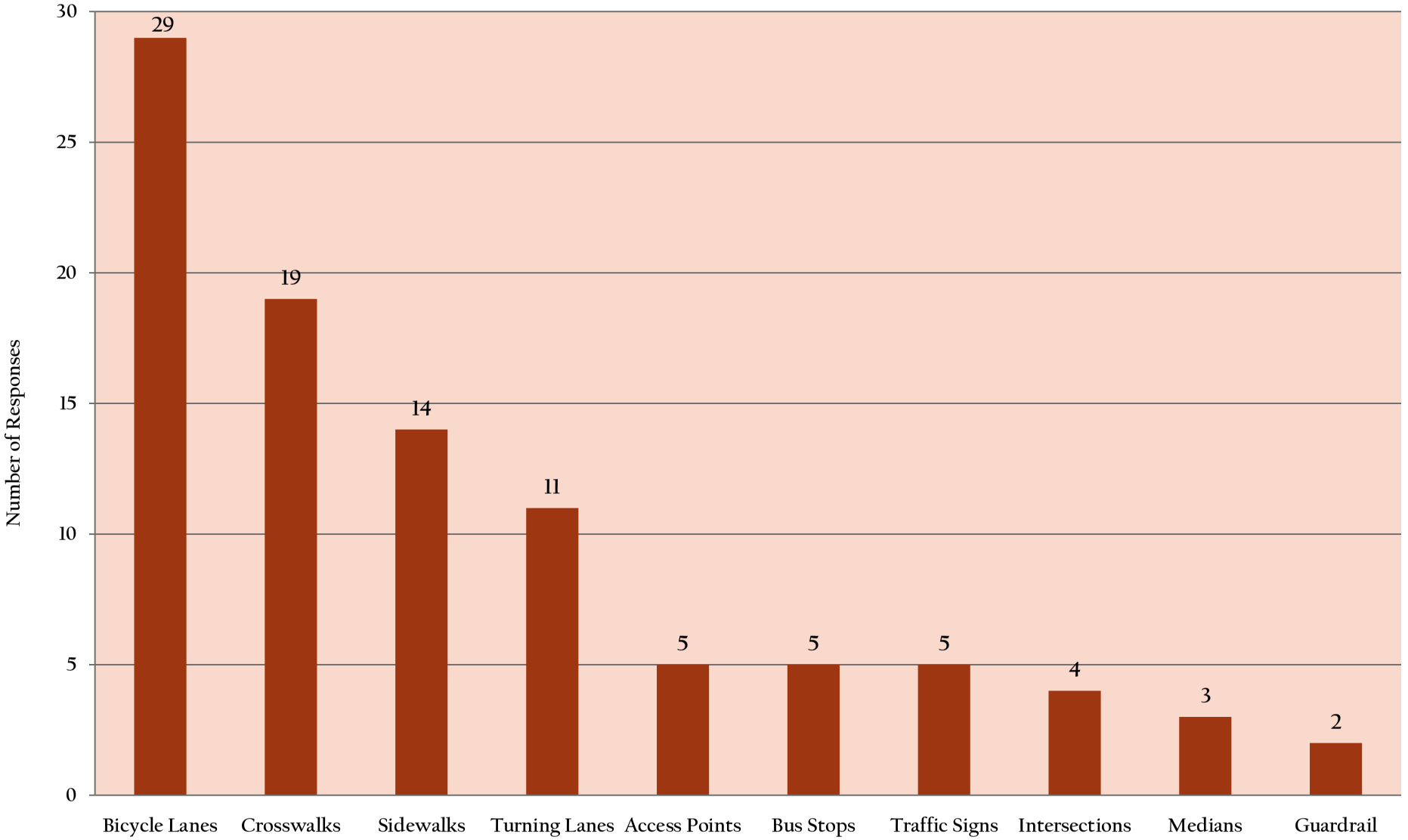
Transportation Improvements on Bypass Road



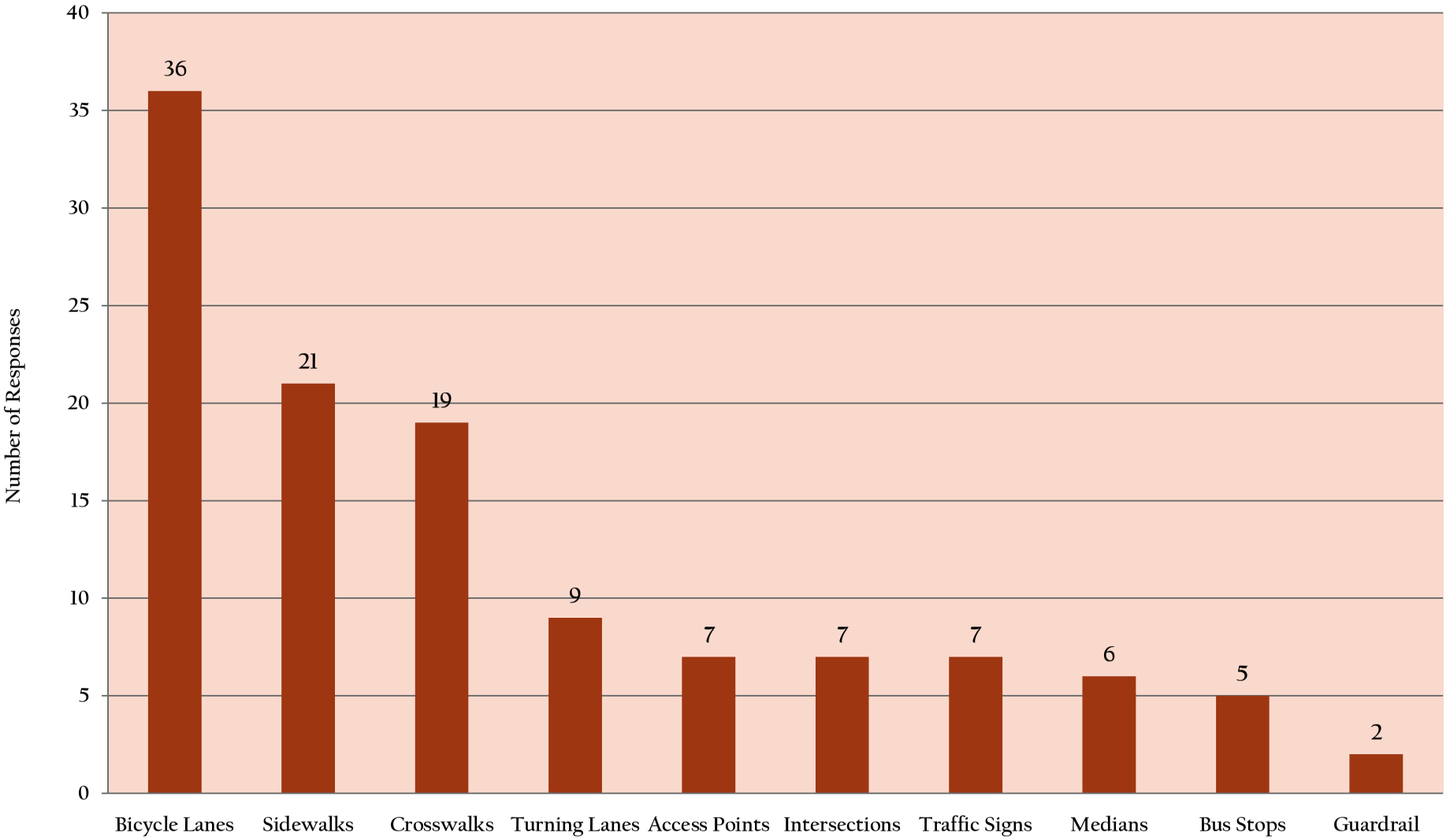
Transportation Improvements on Hardy Road



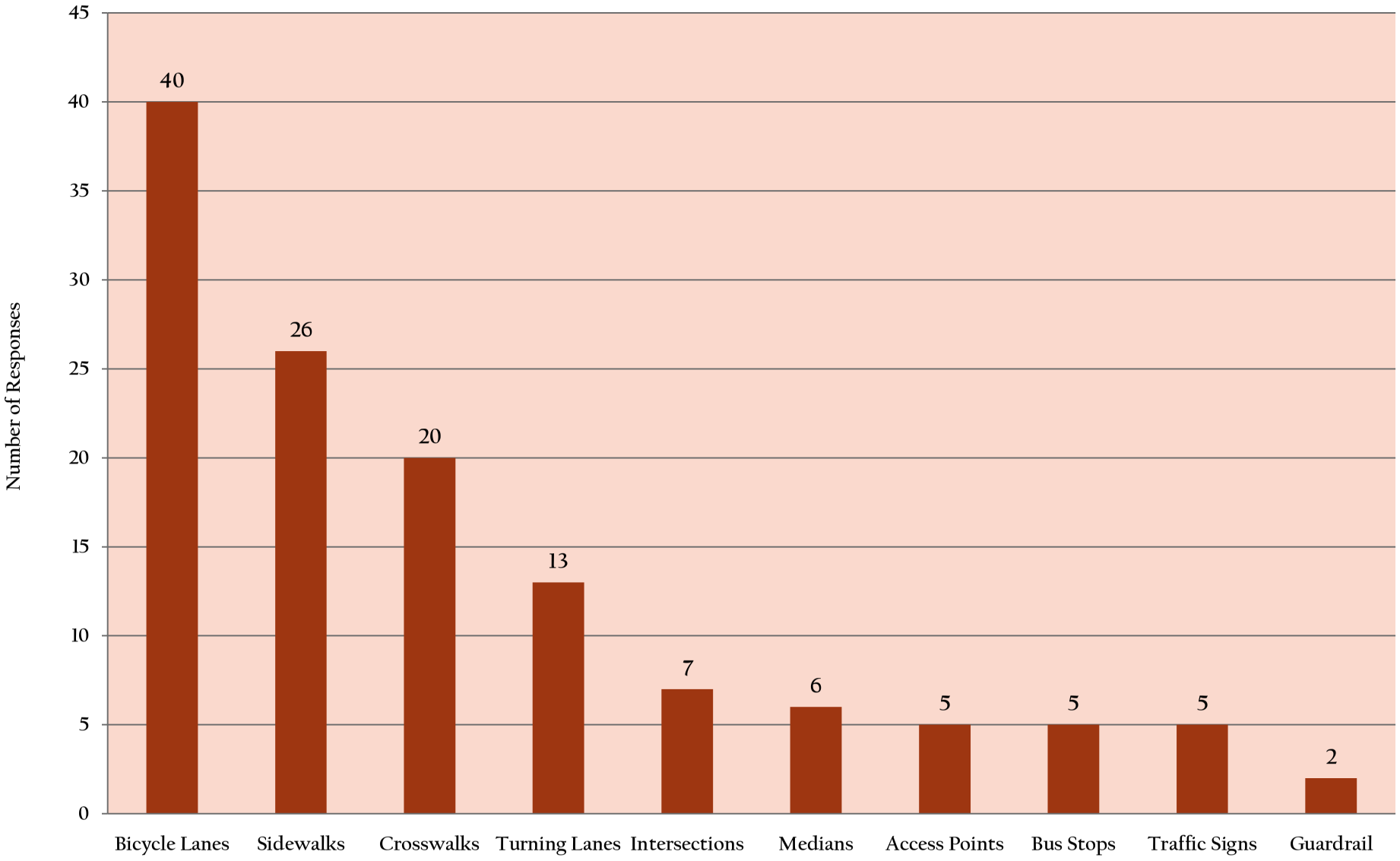
Transportation Improvements on South Pollard Street



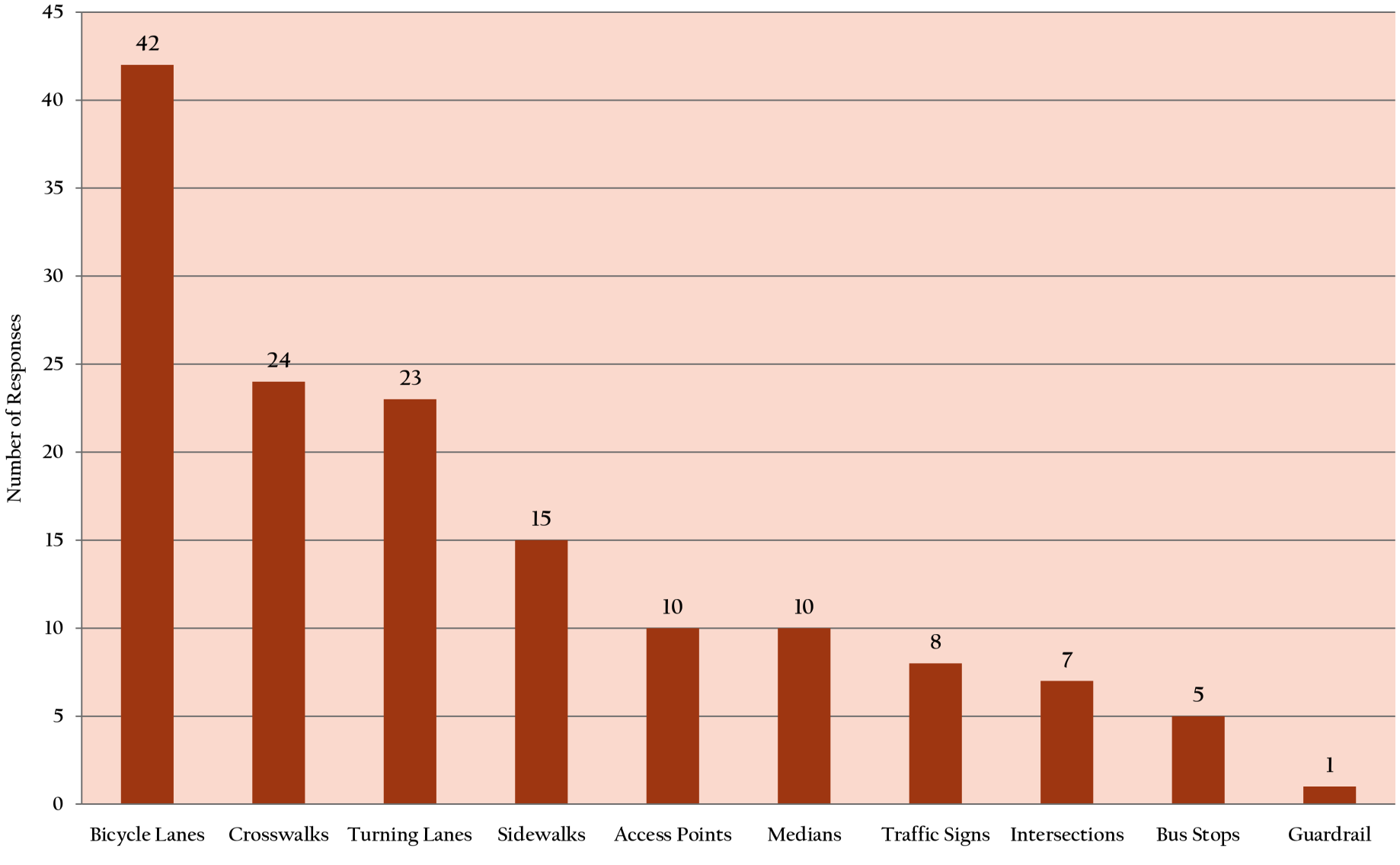
Transportation Improvements on Virginia Avenue



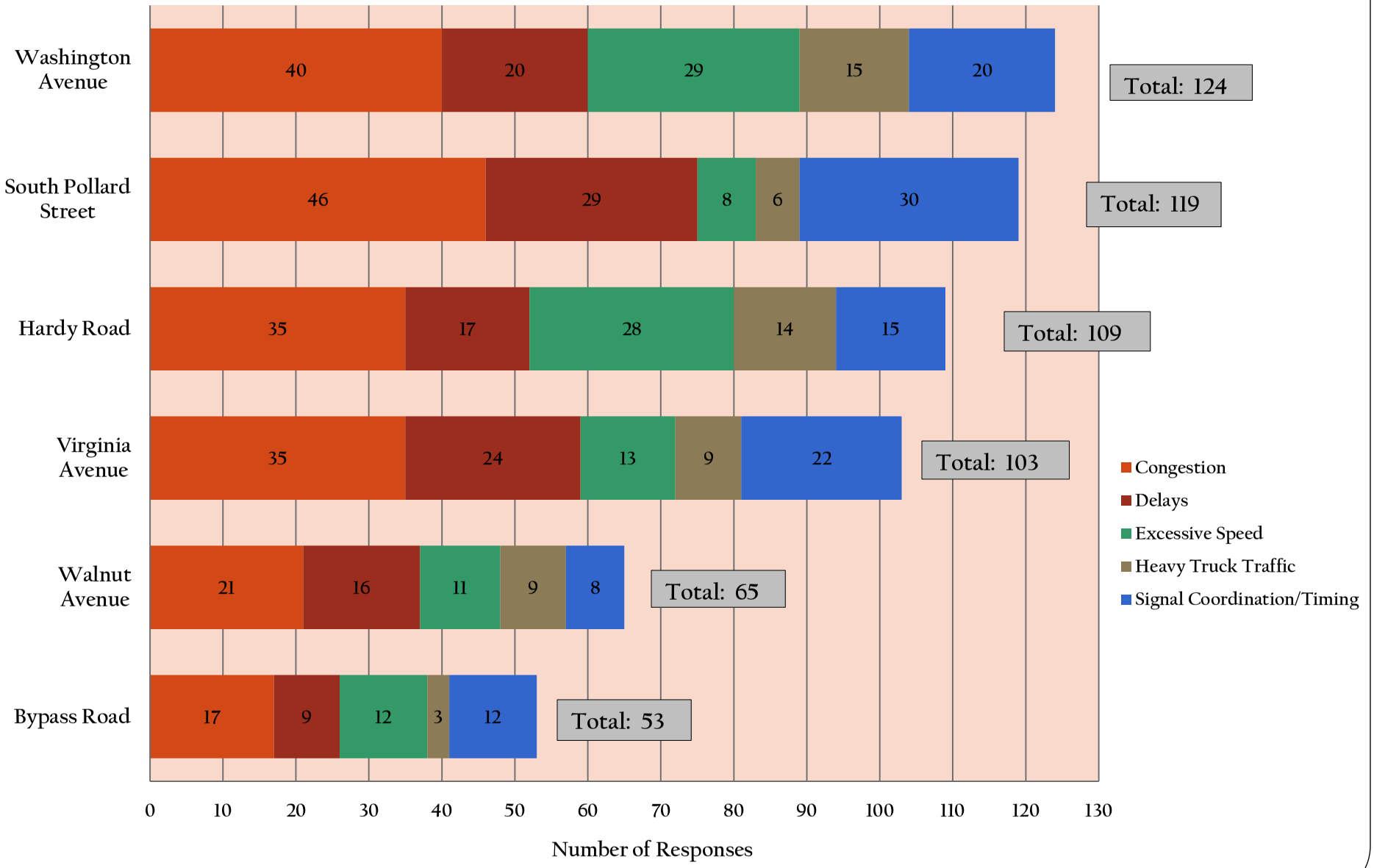
Transportation Improvements on Walnut Avenue



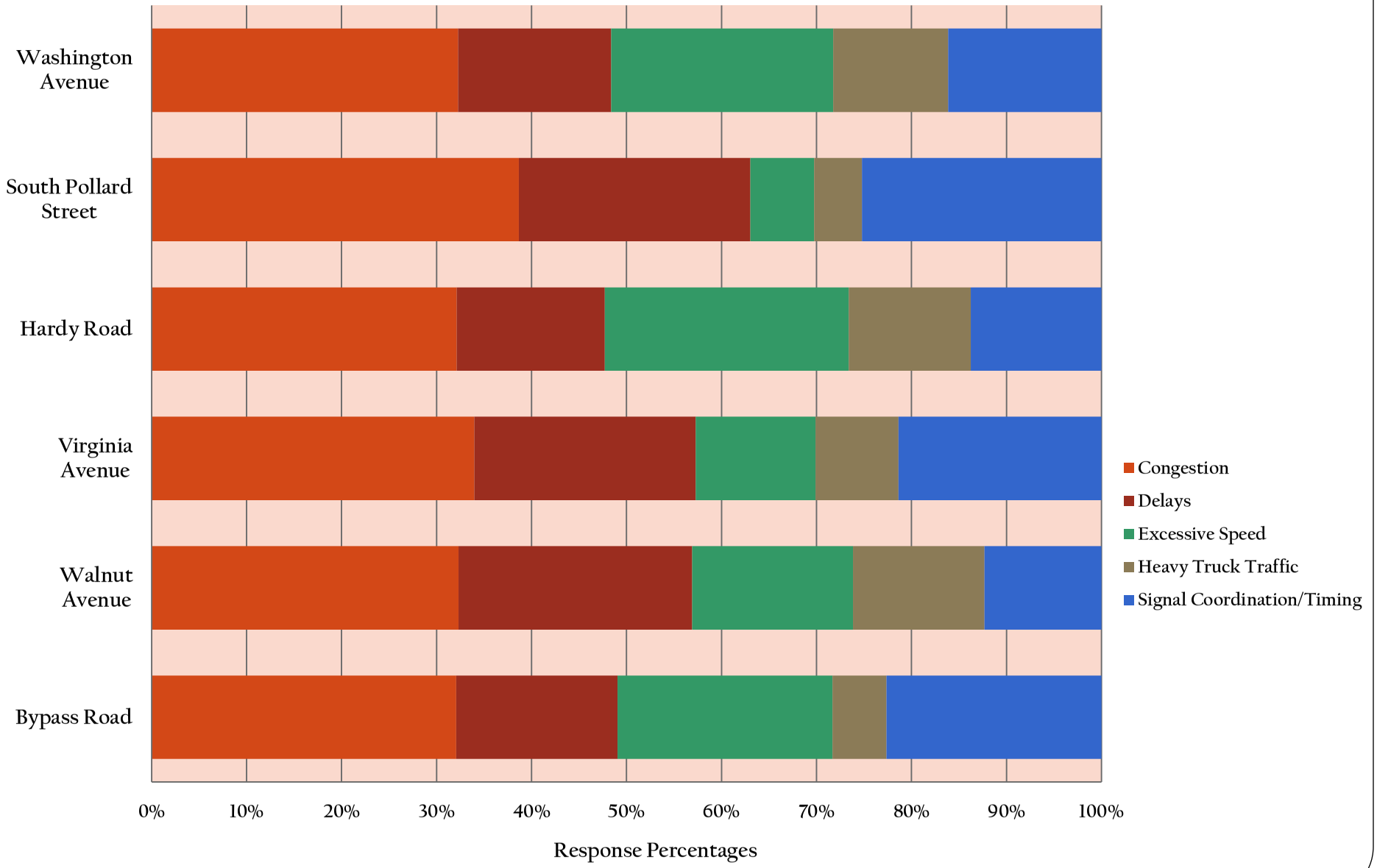
Transportation Improvements on Washington Avenue



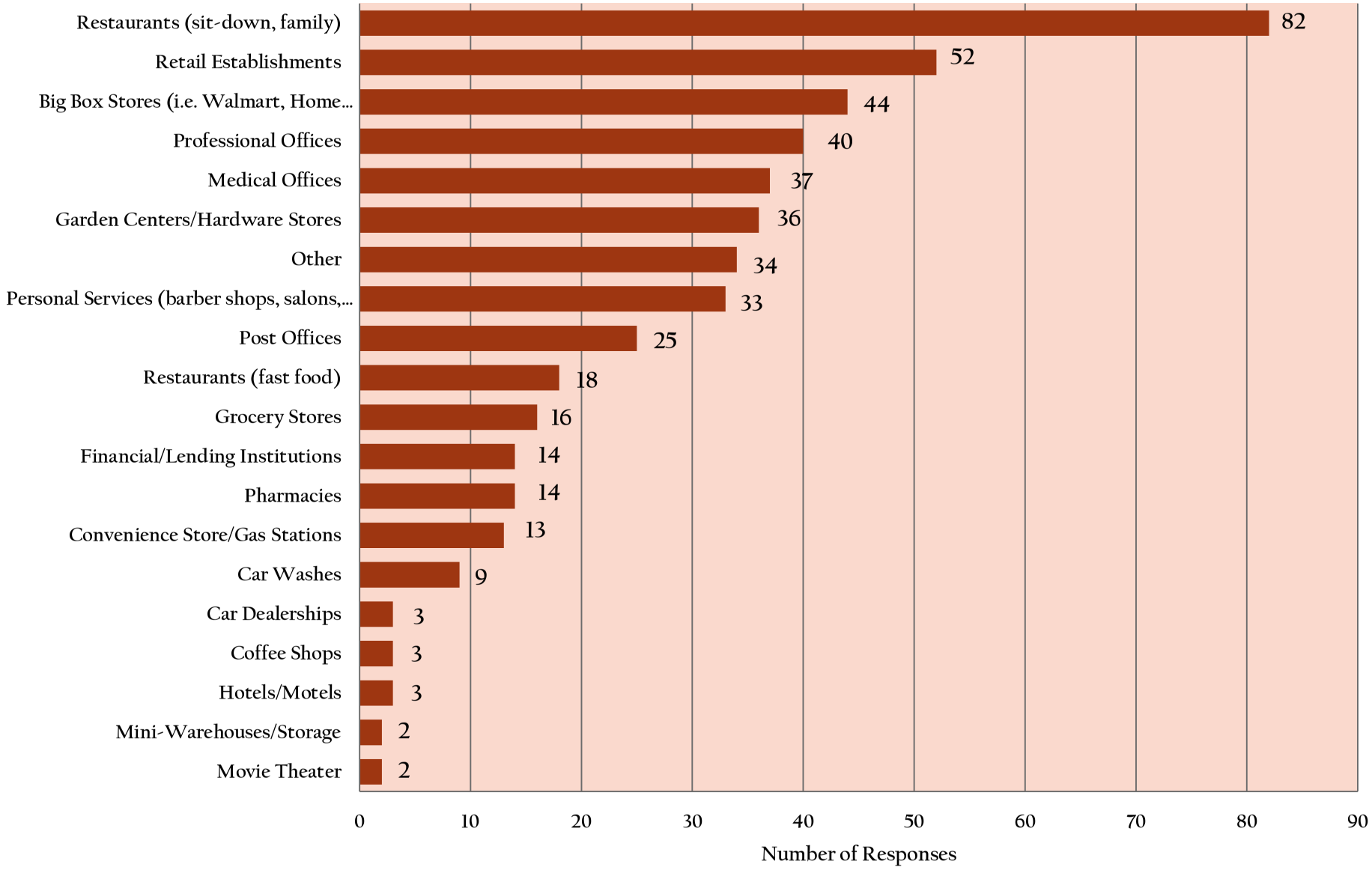
Transportation Issues



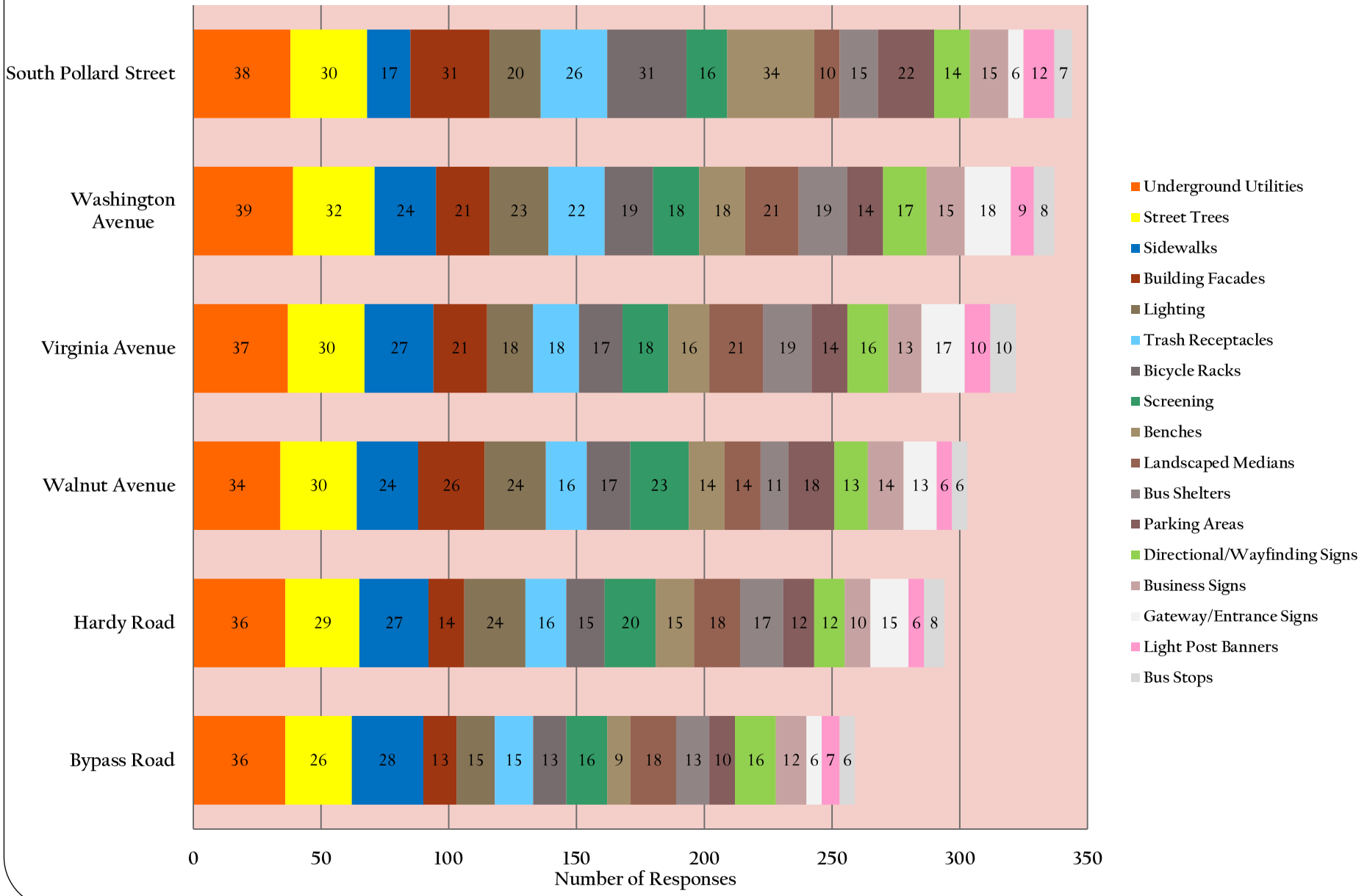
Transportation Issues



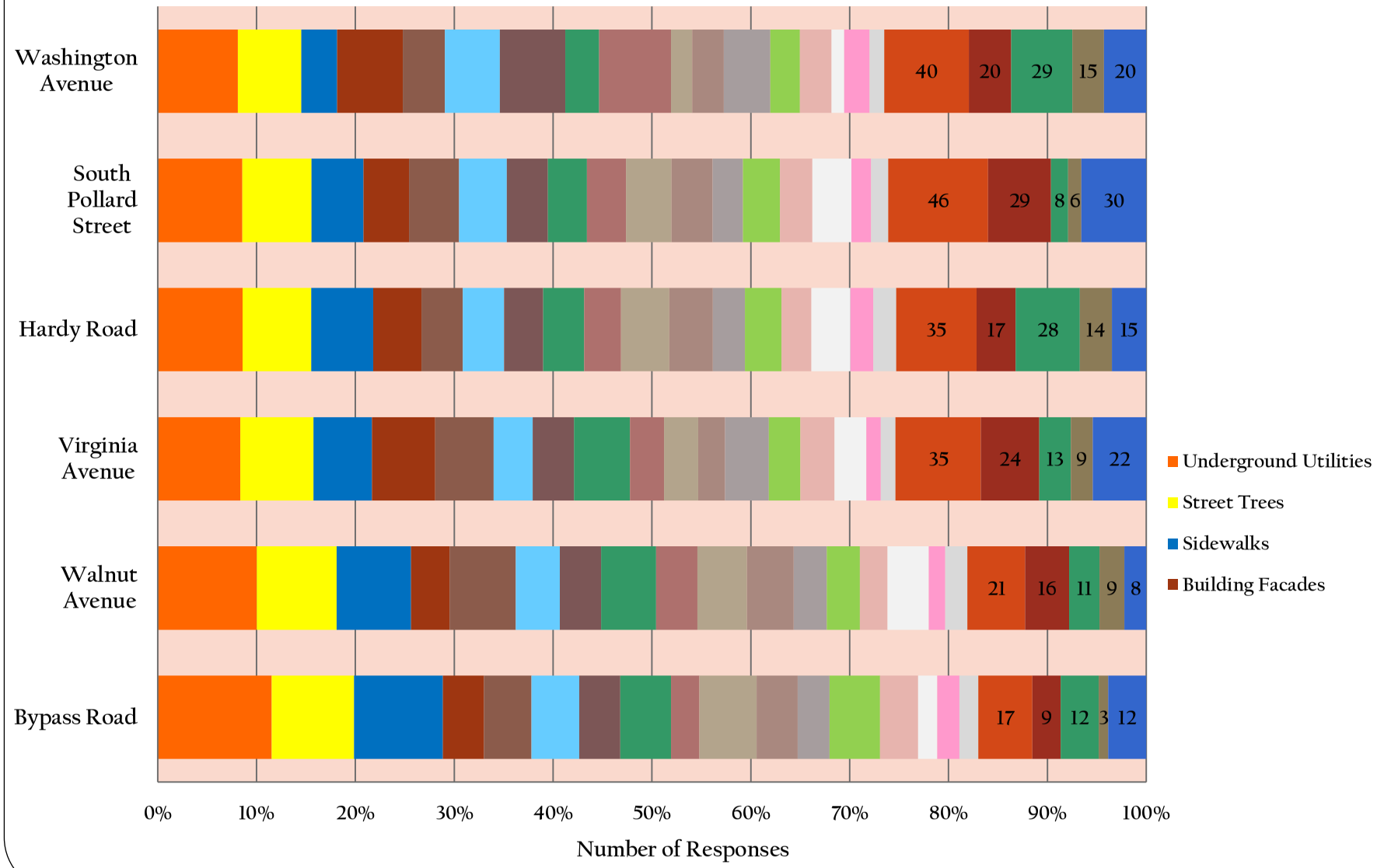
Business & Services



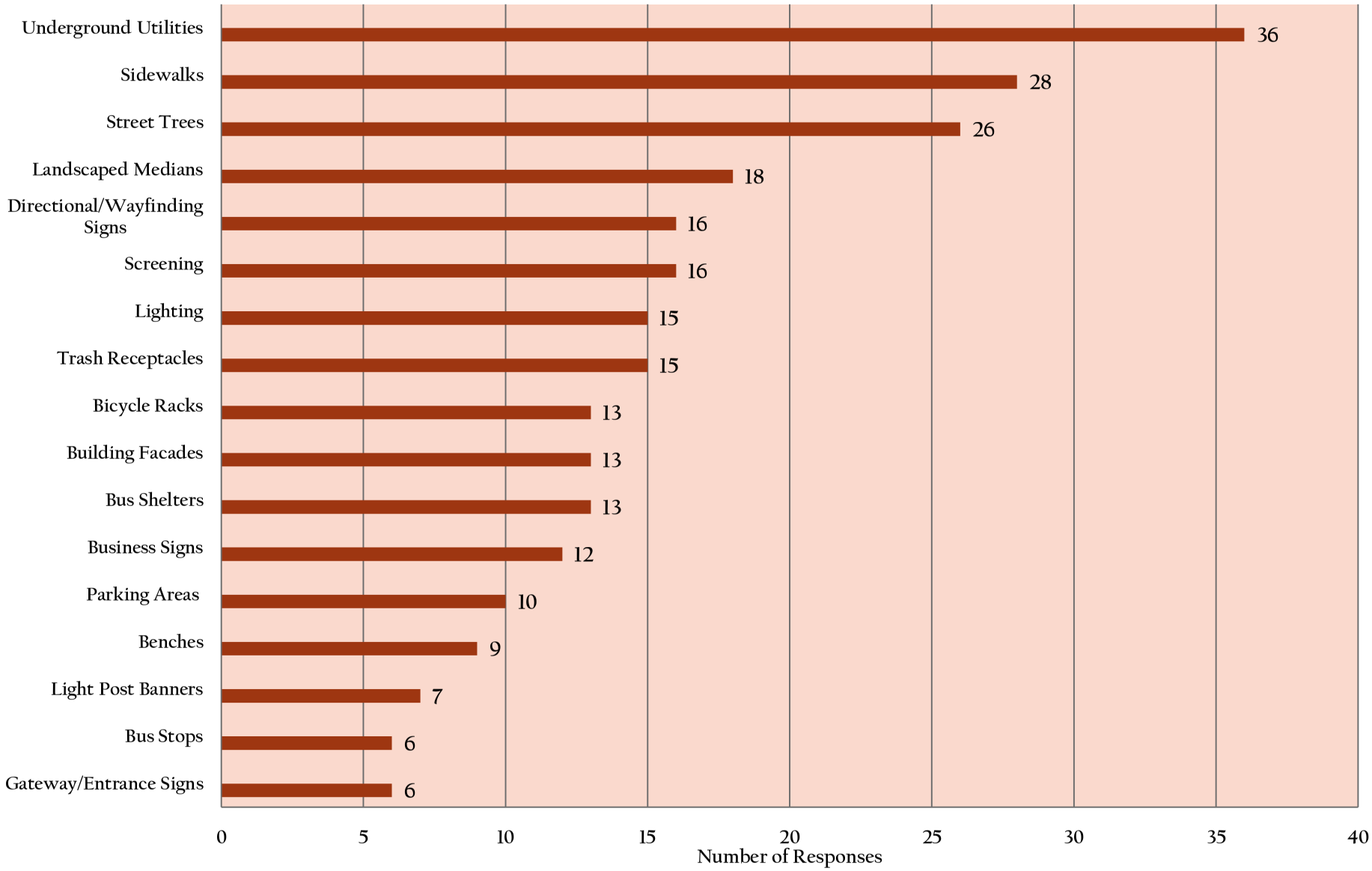
Streetscape Features – By Corridor



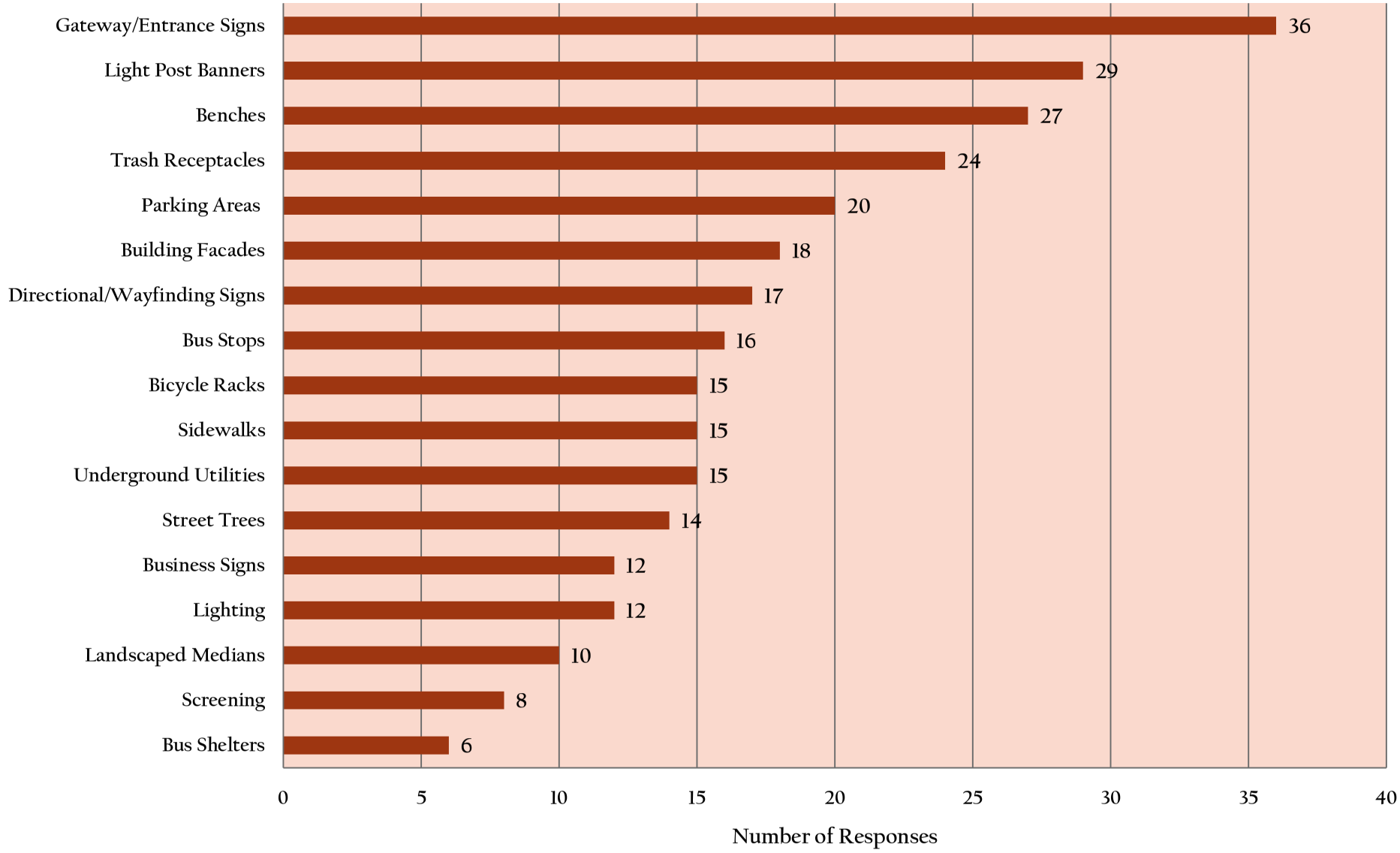
Streetscape Features – By Corridor



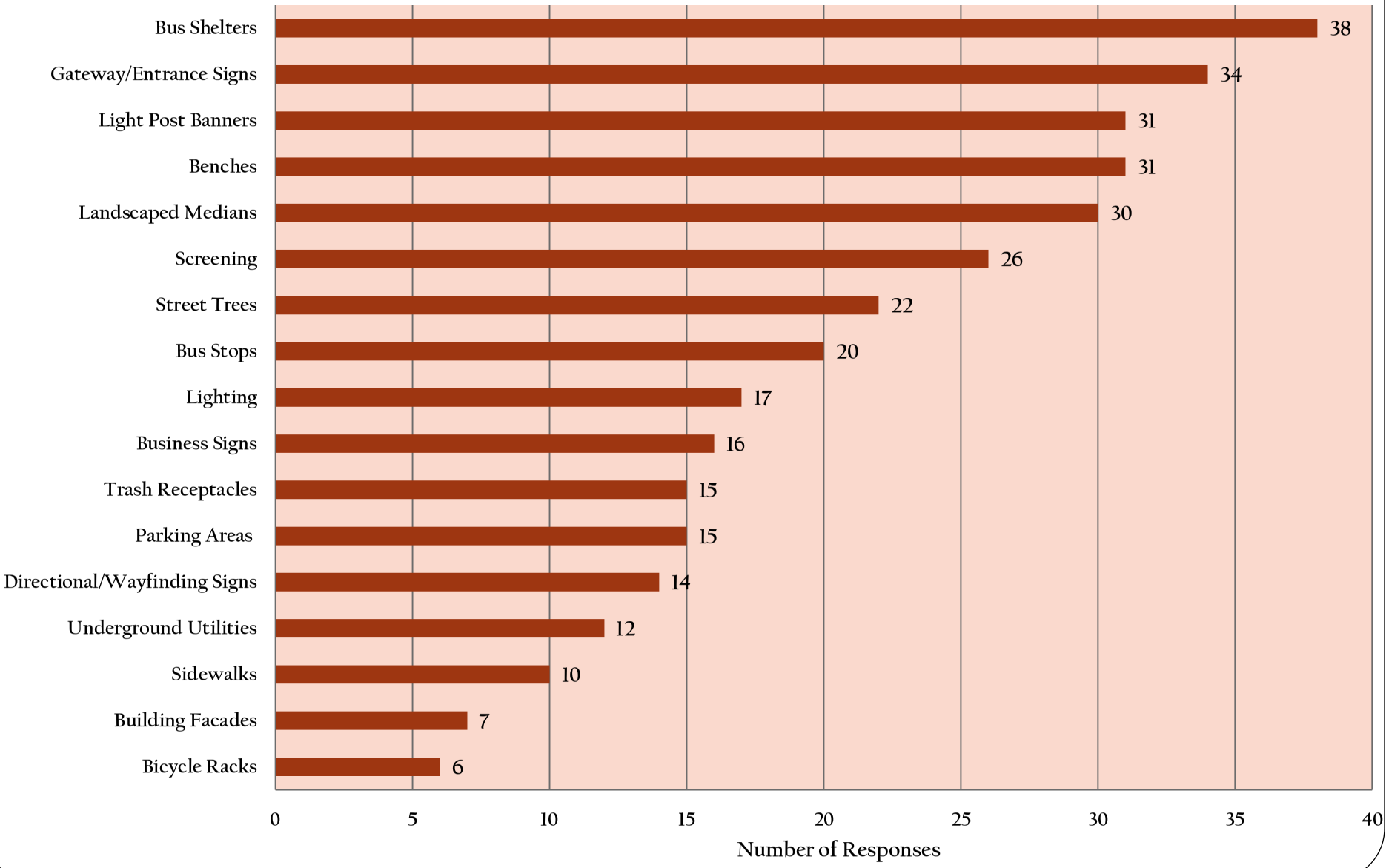
Streetscape Features– Bypass Road



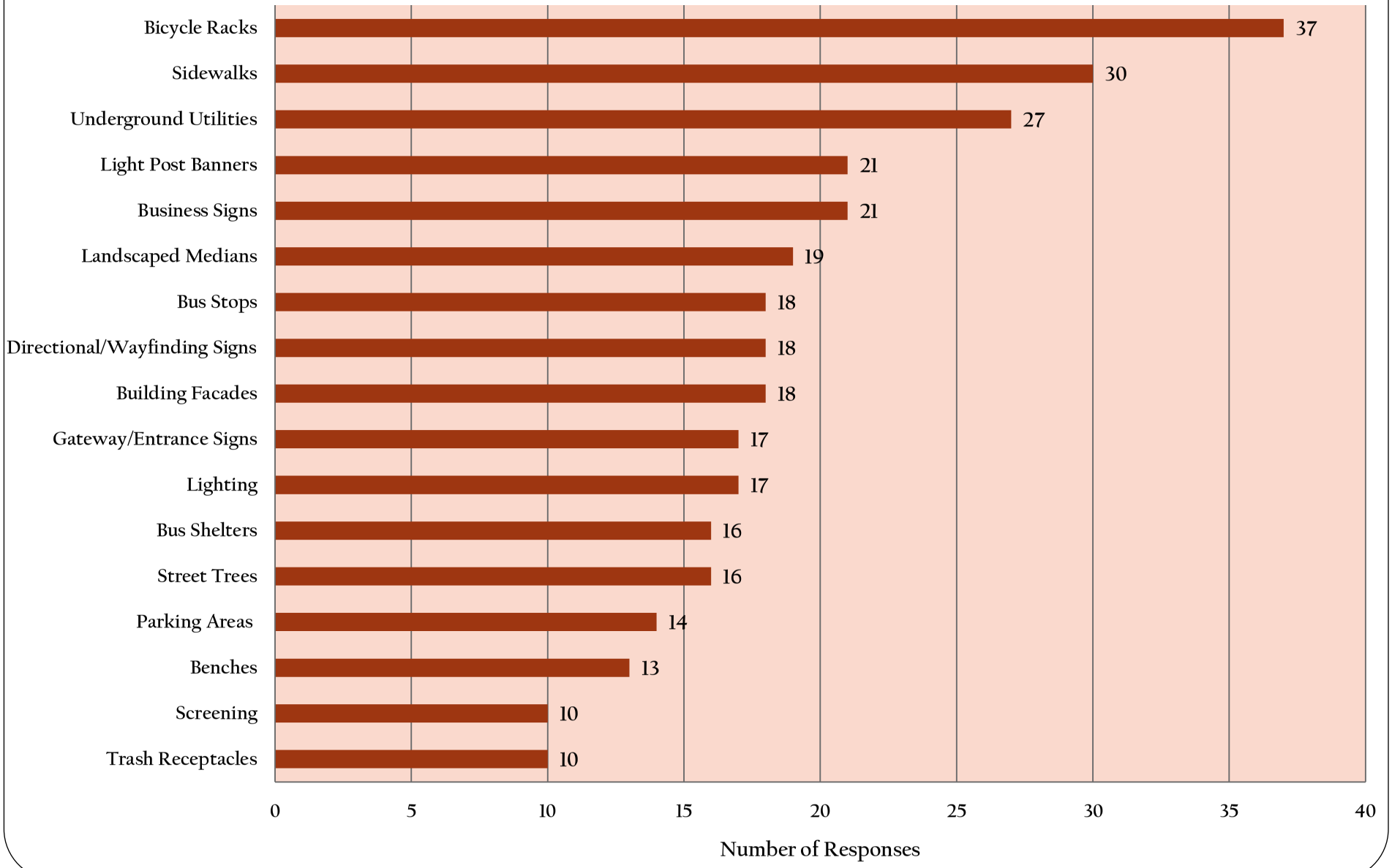
Streetscape Features – Hardy Road



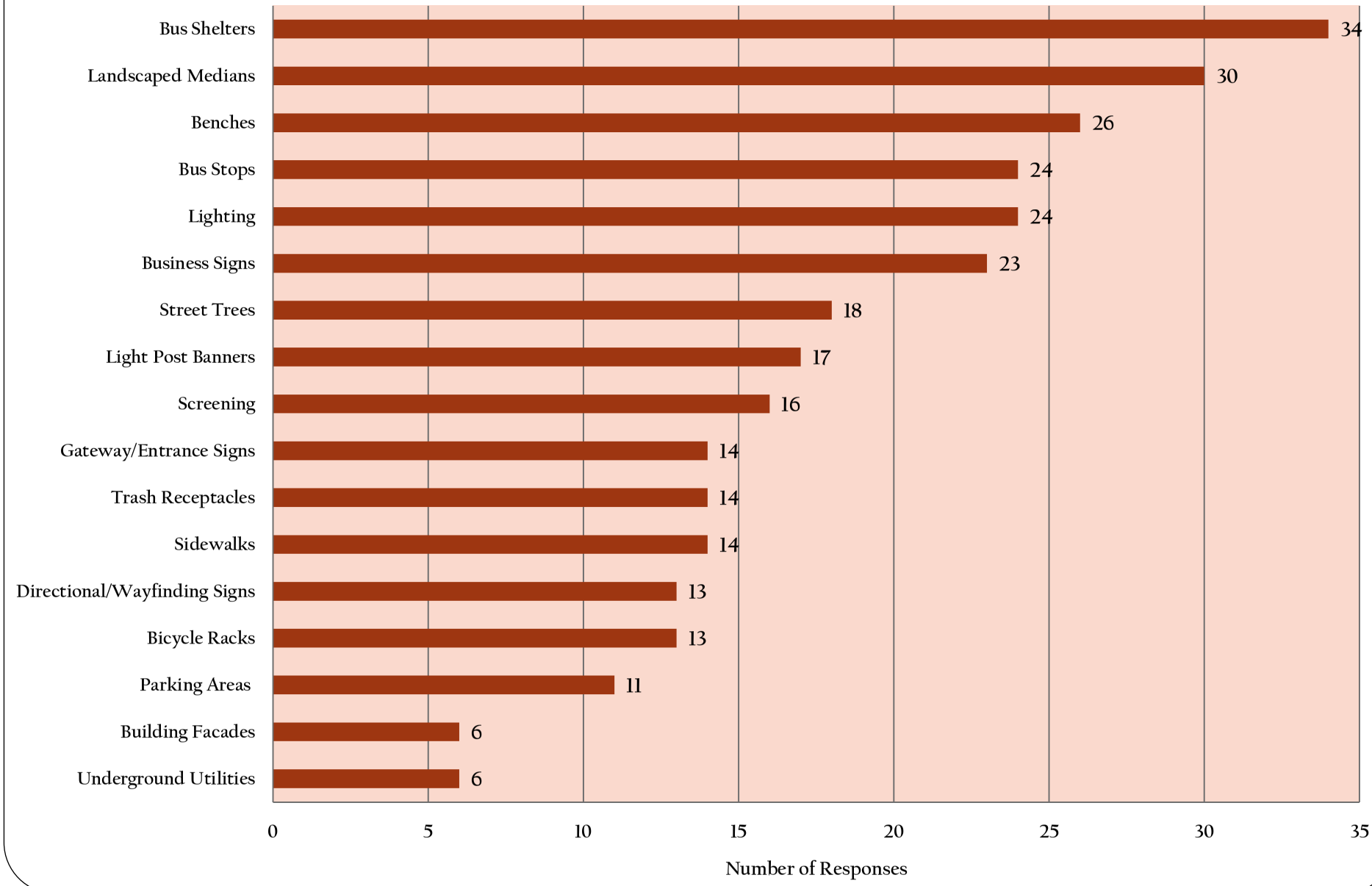
Streetscape Features – South Pollard Street



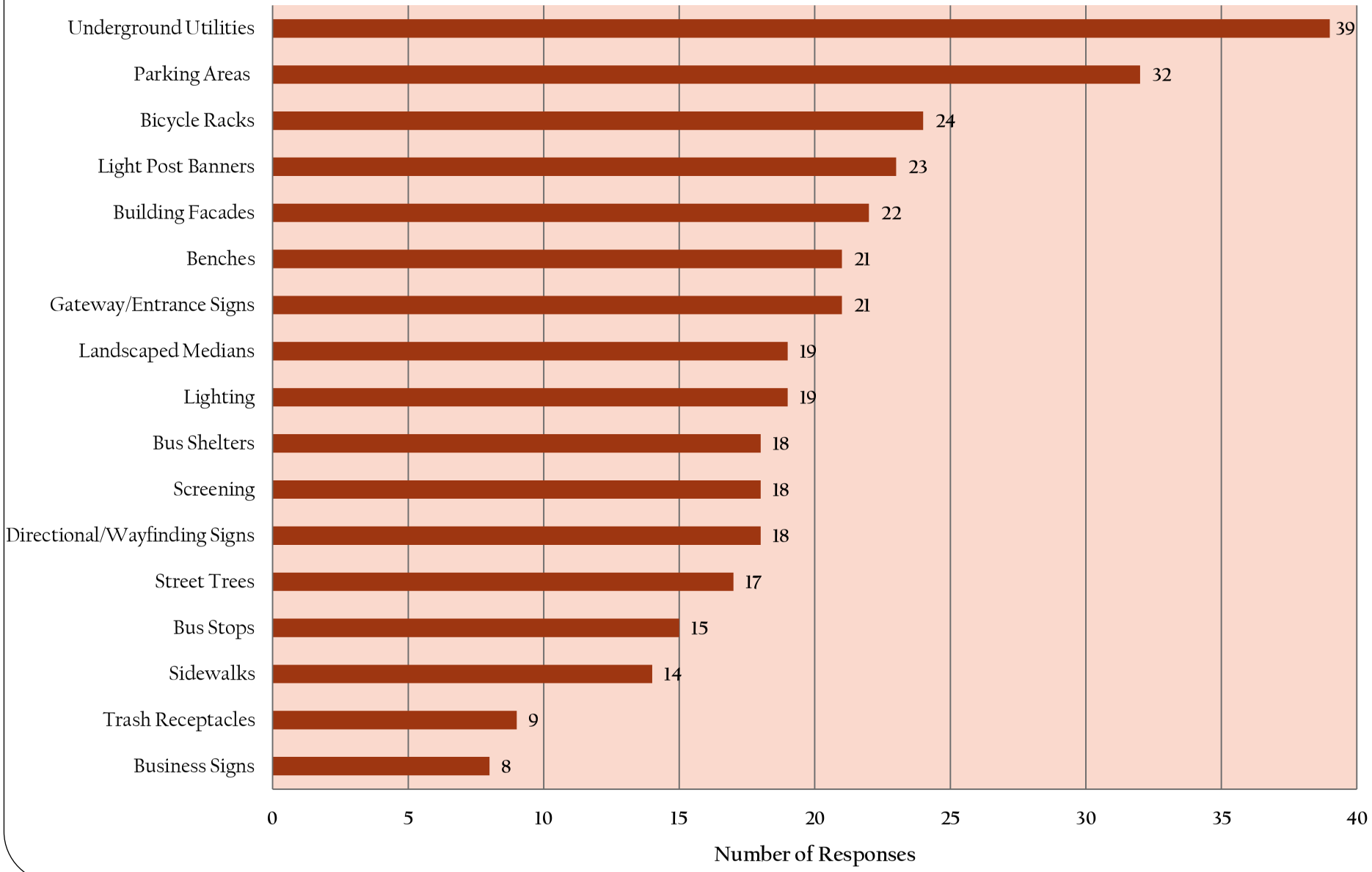
Streetscape Features – Virginia Avenue



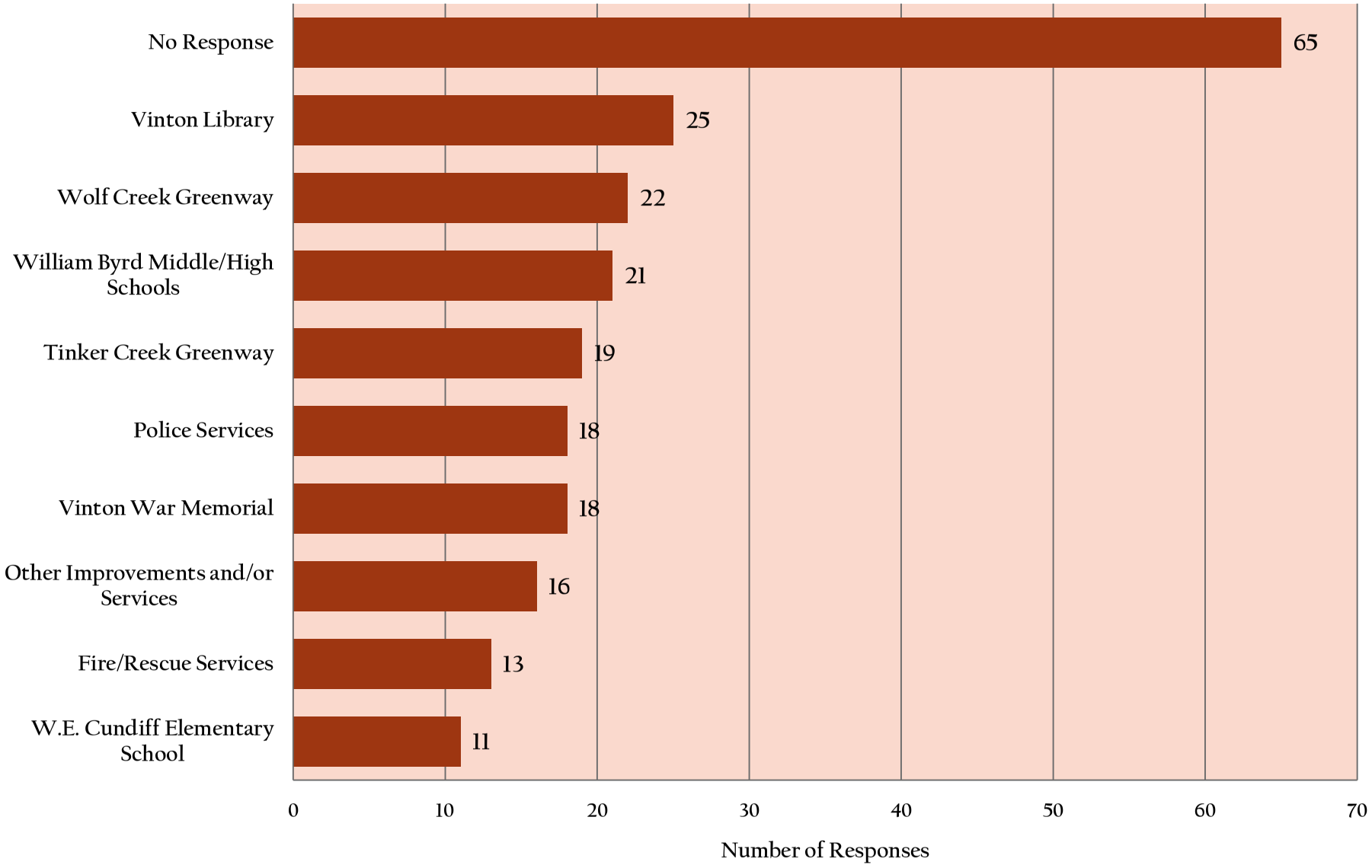
Streetscape Features – Walnut Avenue



Streetscape Features – Washington Avenue



Community Facilities & Services



Question 8: Please list any transportation improvements and/or features that you feel are needed along the study corridors.
need street lights on hardy rd. across from w.e. cundiff elem. school
The post office needs to be moved from downtown Vinton because of the traffic it creates. It is dangerous getting in and out of the parking lot where it is now.
The old houses just past the railroad bridge on gus nicks blvd., look awful and at least one of them should be condemed.
Delay due to traffic trying to get to and away from WE Cundiff Elementary School daily M-F.
Sidewalks are in bad shape. Need improvement including for handicap access. The handicap people ride their wheelchairs in the road because the sidewalks are so bad and it is very dangerous.
South Pollard needs to be a one way street from Jefferson to Washington Ave. Maple can accomodate the other direction.
Stricter traffic law enforcement!
Hardy road in the county needs to be widened to four lanes as it is in the town. With the increased large truck traffic, as well as the ever increasing car traffic on Hardy road, this has become a very dangerous stretch of road to travel.
Bike lanes between Virginia and Washington in the downtown area can be routed through neighborhoods, not down Pollard Street.
Widen the Hardy Road, at the now very narrow parts, between Vinton and SML.
Some of the roads are in desperate need of re-paving.
The morning traffic conjestion around Wm Byrd needs to be addressed. Could there be a second exit (right turn only) made from the school parking lot to Washington Ave near Spring Grove Dr? Hardy Road, especially near Kroger, seems to have more pedistrians lately. A sidewalk seems needed. A left turning lane from Washington to Mountainview Dr would be helpful to keep traffic from stopping for left turning vehicles.
Can you do anything about the entrance to Byrd in the morning?
need a turn lane and signal at gus nick and king

Question 8: Please list any transportation improvements and/or features that you feel are needed along the study corridors.
Mountain View bile lane needs to be completed from the existing lane to Herman L Horn School. Walnut needs a bike lane along Southern States, otherwise it is fair. A paved greenway should be constructed between Hardy Road and the Roanoke River Greenway. The Roanoke River Greenway should be completed as paved to the Parkway. The Hardy Road bike improvements should be completed to the Parkway. Other bike destinations along Hardy Road are Turner Branch. Smith Mountain Lake would be a destination, but it is too dangerous now with a narrow, curvy road with high speed traffic.
More Trees/Landscaping along these routes
NEED A NO LEFT TURN SIGN ONTO WASHINGTON AVE FROM N PRESTON RD DURING PEAK TRAFFIC HOURS.
No Medians with Trees! Leave it open for visablity and access.
The entire area need a traffic flow study. They also need to repair or replace signals that are constantly malfuntioning like the one at Pollard and Hardy/24. Less festivals closing ALL means of moving through the area. If there is a festival, you can not get into Roanoke.
add a no left turn sign on eastbound 24 at new york pizza and a sign recommending use of the next light (Niagara Rd.) for access to that business. Expansion of left turn lane on eastbound virginia avenue at Niagara Rd. rework right turn arrangements on eastbound Virginia avenue to either add right turn lanes before certain business accesses or disallow incoming traffic to those business accesses. Particularly, the McDonalds and the first or second entrance to the Kroger shopping center. Currently these hard right turns contribute to eastbound congestion, especially in conjunction with the high proportion of travelers needing the right lane to either access businesses or continue on Hardy Rd. by turning right. Extension of bicycle lanes / hard shoulders on Hardy Rd. to the County line. Coordination with Bedford county to encourage improvement of segments of Hardy Rd. shoulders to hard shoulders (some gaps remain in Bedford. End Goal: safe bicycle access to public water access on SML at Hardy Rd bridge. Connect to greenway system. Allow bicycles on sidewalks on Virginia Avenue in high congestion, low visibility segments without bicycle lanes.
i live in SW County but go there to walk and run. Please connect more places to bike and run! We are so limited.
NONE
Connect the Tinker Creek Greenway with the Roanoke River Greenway.
wider lane for bike to use is preferable to bike lanes which are preferable to nothing

Question 8: Please list any transportation improvements and/or features that you feel are needed along the study corridors.
Plant trees along Hardy Road to provide shade for walkers and bicyclists Connect Hardy Road Bike Lanes to Tinker Creek Greenway Continue Hardy Road Bike Lanes to Bay Rock Marina on Smith Mnt Lake
In general, let's make Vinton beautiful. It could have so much more small town charm. We need to make massive structural improvements…demolish several buildings and residences….bring in new business and make a safe, inviting community. Suffolk Virginia did just that. Get on board and make a small town atmosphere we can be proud of!
Virginia Avenue- flasking warning lights to warn oncoming traffic light and changes in traffic light
Blair Street - would like to see sidewalk and/or bike lane created to allow walking or biking to Vinton Park at Benille - S
Roundabout at Southern States Crosswalks at schools
S. Pollard decorative lighting would improve the texture of downtown
Wolf Creek needs connector to Tinker Creek. Install bicycle sensors at intersections under the pavement.
Hardy Rd - west & east Virginia Ave - westbound & eastbound
Install traffic light at Washington and Spring Grove to ease congestion.
Traffic light on corner of Washington Ave & Lindenwood Drive

Question 9: While traveling along the study corridors, where do you encounter the most inconveniences?
Post office area in town very difficult to turn into post office.
On Washington Avenue, delays and congestion correlate only to the morning and evening to/from work traffic. A central tuning lane would improve the flow, removing local traffic from through traffic.
getting in and out of Post Office lot is a nightmare at certain times of the day.
I am not usually inconvenienced on any of these streets/roads.
The handicap people on the wheelchairs in the road are the main problem. They travel on Route 24 from Dale Ave through Virginia Ave. You can't see them until you almost hit them.
trying to turn in my driveway. you have people wright up on you. cant get out blocking my driveway.we need signs up.
Post office area. Too much traffic trying to leave this area and getting on East Lee Avenue at 5 pm. At times, vehicles are parked in the No Parking zone after 4 pm, further, causing more frustration. (on Pollard St.)
Intersection on Walnut and 10th St. with the train crossing is a real problem
Pollard & Lee - people trying to turn left into post office.
Seeing it take 3 men to recement one sign, the traffic going into and out of Mcdonalds is insane,driver education that would include who has the right of way at berkleys bottom and the intersection of ruddell and mt view, post office traffic is awful.
The biggest issue with all the corridors is no allowance for bicycles with a wide shoulder or lane; coupled with high volumes of auto traffic.
too many signs along the roads
Poor asphalt quality, deteriorated asphalt, gravel
constant radar on hardy rd -make it one constant speed limit and quit trying to trap people at the point where the limit changes!

Question 9: While traveling along the study corridors, where do you encounter the most inconveniences?
I would like to see bike lanes on all of Mt View Rd. It is a heavily traveled bike route, with good accommodation on one end, and danger on the other. Hardy Rd is another route that needs extended bicycle accommodation. The area with bike lanes is difficult or imposible to bypass.
IS THE TRAFFIC SIGNAL AT POLLARD ST AND VIRGINIA AVE FINALLY FIXED???
Stop blocking the left turn lane on Virginia Ave that accesses downtown Vinton.
On S. Pollard, the congestion is a plus, not a negative, in the downtown area. The parking on both sides of the street reduces speeding. Downtown needs to be a destination - Vinton Village. Through traffic connecting 24 to 460 should be directed another way. Gus Nick Blvd, Washington Ave, and another corridor to Walnut should help direct traffic from the village center. The intersection on Walnut across the tracks can be a challenge depending on the time of day. The no bicycling, no skateboarding signs are turn offs for bicyclists who eat in downtown restaurants and visit the municipal building. Add bike racks to public buildings. The post office, library, municipal building, Vinton War memorial are some of the places around town that would benefit from more pro bike accomodations. More parking spaces for motor vehicles would be available if downtown was accessible by bicycle.
Entrance to post office
No way to walk from Washington to Virginia/Hardy at Bypass Rd
Heavy truck traffic routed into residential street!!! Lack of enforcement of existing laws & ordinances. NO SPEED ENFORCEMENT!!!!
Walnut Ave needs sidewalks and bike lanes.
Bypass Road, Hardy Road, Virginia Ave - No sidewalks along - shoppers walk in grass
Congestion is worse from around 7:30 to 8:30 in the morning; afternoons - no problem.
Cars coming out of Maplewood turning on Washington Ave east then turning left at Lindenwood onto Washington Ave west

Question 10: As opportunities for redevelopment and new development arise throughout the Vinton area, what type of businesses and/or services would you like to see along the study corridors? Please check all that apply.
I would like to see S. Pollard carefully developed as a "Town Center", with an emphasis on the community's small businesses and related access to them.
NONE
I think we have enough of the above businesses in the study corridors with the exception of sit-down family restaurants.
Any specialty shops make the community more appealing to residents and visitors, examples: coffee shops, art gallery, antiques, hobbies.
The main problem in Vinton is lack of restaurants. You have to leave Vinton to eat so it hurts businesses in the area because of lack of sit down restaurants.
Specialty shops not located in Roanoke or Bedford
Please no large department stores. Please no more gas stations. Please no more oil change/garages. Please no more storage buildings. Please no more salons or barber shops. A nice upscale spa would be nice to have in Vinton, there are people who drive to Roanoke for that stuff, why not have it in Vinton? Would LOVE to see some small retail establishments, ie boutiques (clothing or home interior), Vinton needs a cafe/coffee house, maybe an upscale grocery store like Fresh Market. It would be great to have a nice sit down restaurant that serves something different. Please no more fast food restaurants! As I like Mexican food we already have a Mexican restaurant. Can we move the Post Office to the Rite Aid building? We also have our fair share of banks, a mortgage company would be okay, but how many banks does one town need?
motel
Ladie's Speciality Clothing Shop
Moving the post office to the river park shopping center would be a tremendous idea, the parking is much better than the current location, and this would actually help the businesses located there with the increased traffic. The current post office location is horrible at best, and is well past needing upgrades.
We would LOVE not to have to go "into" Roanoke for office supplies, etc. We would also like to be able to go to a decent sit-down restaurant in Vinton.
Chick-fila, target would be nice.
office or light business park
Hotels
Light industry
none of the above along Hardy road
I think there is enough of the usual items in and around. I would like to see some GOOD sit down resteraunts and some locally owned shops.
Whatever the market will bear. It is not worthwhile to try to force development that is unsustainable by the local market. It would be very bad for businesses (especially big box stores) to be incentivized to come to the area only to close shortly thereafter. Also, and especially in the case of big box stores or strip malls, offset for road infrastructure impact (added congestion and altered traffic patterns) must be included in the development plan from the beginning. It is important to not strangle major arteries. In the end, ill-considered growth will reduce commerce by making it harder for travel and commerce to occur.

Question 10: As opportunities for redevelopment and new development arise throughout the Vinton area, what type of businesses and/or services would you like to see along the study corridors? Please check all that apply.

ANY BUSINESS THAT CAN SUPPORT ITSELF AND NOT REQUIRE TAXPAYER MONEY TO SUPPORT IT
It would be great to have a Target closer than Valley View if everything could support it (roads, business, etc). It would be great if Vinton could get an Outback or some type of good steakhouse.
The exterior facade and land use site plan are more important than the nature of the business. Vinton is a charming town located on the Blue Ridge Parkway. I would like for the look (design) of downtown to be implemented on the corridor roads. Have minimum setback with parking to the rear or side. Connect Greenways Tinker, Wolf, Glade to provide a more people friendly environment. Rezone the old house for sale on Mnt View for a Bed a Breakfast for walkers and bicyclists using the Blue Ridge Parkway (and motorists). Add trees along the major corridors. Height and tree canapy provide a cooling and inviting environment in summer, reduce traffic speed and add increased dollar value to the street scape.
I would support just about all development so long as it was well thought out and planned. Most development is neither as the local authorities having juristiction seem reactionary as opposed to visionary.
We need another nice restaurant like Cafe Succotash was, but maybe not quite so pricey. Teaberry's is great but not open for dinner.
Old Vinton Motors - big gas station - do not allow Wjould like to see more 'mom & pop' business downtown & Washington Ave
I would love to have a movie theater in Vinton, so that people in Vinton and Goodview part of town have something fun to do.
Theater Childrens activities/business
Need motel for Parkway visitors
We need to attract a more professional clientele. This will help bring other establishment to the Vinton area. A hotel at the bypass would help bring business to the area and provide lodging for meeting at the War Memorial. This would also help attract restaurants to the hotel location. We have enough convenience stores, lending institutions, fast food.
Big Box Stores - Absolutely No! Car Dealership - NO MORE JUNK DEALERS
No Big Box Stores; No Restaurants (fast food) Reduce sprawl concentrate density in downtown and promote the village conception.

Question 10: As opportunities for redevelopment and new development arise throughout the Vinton area, what type of businesses and/or services would you like to see along the study corridors? Please check all that apply.
Pharmacies - competition for CVS Restaurants (sit-down, family) - no Chinese I've heard not enough to attract a retaurant. "If you put out a good product the customers will find you." Example = Homeplace
I would like for downtown Vinton to take on a village look & atmosphere with shops - clothing, antiques, coffee, etc.
New post office that is better to enter & exit A restaurant comparable to K&W Cafeteria
Keep Vinton a small personable town

Question 11: What streetscape features would you like to see added or improved along the study corridors? Please check all that apply.
many signs in rb district too small and can not be read while driving , need to be large
I would like to see the lane stripes painted on the streets now. It is quite a hazard because they have become so invisible!
Benches at bus stops.
ornamental street lighting downtown
Take a stand….have New York Pizza clean up their act. How much time is enough? The EZN has a new store facade, Oakeys is well kept, KFC has a fairly new building, as does Burger King and McDonalds, and the Kroger strip mall also has a new Facade. The only eye sore continues to be New York Pizza!!
South Pollard is the center location. It should be a focal point of the town. Why not line the downtown streets with old fashioned street lights. Connect the bike trail somehow to downtown. The Farmers Market could have bike racks where people can come downtown and walk around because there WILL be shops and restaurants to patronize. Walnut Ave could be redesigned to show a distinct separation between Roanoke City and the Town of Vinton. Sidewalks, bike path, trees and plants lining the street, the old fashioned street lights guiding you to the downtown centre. Redesign the look of the businesses and houses along that street so show what Vinton has to offer.
Good Landscaping
While undergroud utilities would be great, the cost is prohibitive - at least minimizing the lines perpendicular to the travel lanes would help
I THINK EVERY OTHER STREET LIGHT SHOULD BE TAKEN DOWN GOING UP VIRGINIA AVE FROM THE TOWN LINE UP PAST KROGER.
No trees along the corridors, perhaps some low blooming bushes.
Underground utilities are the number one beautification item common amongst successful business district revitalization projects. Yes, they are expensive, but they are nearly always worthwhile. Properly done, electrical and communications network reliability is increased and businesses see reductions in service loss resulting in fewer closed business days.
Trash Receptacles: There can be trash receptacles if the are located near a business that will take the responsibility of keeping the trash picked up. The National Park system has the Leave No Trace pack it in, pack it out philosophy because bees, animals and wind would negatively impact collection areas. No trashcans except in downtown areas and with businesses. Curb cuts are needed for motorized wheel chairs, manual wheel chairs, baby strollers, shopping carts, etc. Add more curb cuts.
Doggie Poop stations with bags along the greenways.
Comments - Building facades to continue on South Pollard; Classic lighting on South Pollard St & Washington Ave
Bicycle racks - at destinations

The question is what & when any of this will occur.
Businesses need to be encouraged to use landscaping.
Sidewalks - Washington Ave - top of hill Pollard Street is to congested - to narrow for parking on both sides of the street.

Question 12: Please use this space to provide comments or concerns regarding cultural, environmental and/or historical resources along the study corridors.
Once of my concerns is the type of business that will take possession of the corner of Washington Av. and S. Pollard St. This is such a visible location for Vinton and would be an ideal location for development of a walking mall/park-like setting for specialty retail shops, internet cafe or a nice restaurant. South Pollard could really use a "face lift". Traveling from Washington up S. Pollard there are no attractive buildings until you reach the Vinton Admin. Building.
Clear parking designations for the Greenway walking trails need to be posted. Some have mistaken business areas for the parking areas and this has caused difficulty. On trash pick up days, the cans along the wayside sometimes are strewn in the driveways or on the curbs after the county pickup. People who are at home during the day are able to quickly retrieve the trashcans. Those who are away from home find that the driveway may be blocked or the can in the gutter. It is just a situation; each pickup day is different. Pollard Street in Vinton is a trial to drive through regardless the time of the day. The area around the post office is always congested. Parking on Pollard makes it difficulty for moving traffic also.
I live on Temple Drive right off Hardy Road near the Bedford County line and have lived in the same home since 1969. Wideing of Hardy Road with sidewalks and better drainage system on Temple Drive would greatly benefit this study corridor.
Rezone Washington Av. to all business. At this time there are to many different zones. This prevents different types of business' to locate in selected areas of Washington Av.
make the study area hometown usa look with the natural beauty of the area combined. make it family friendly, and attract professional people.
I like the small town feel and look of Vinton. The traffic isn't real bad. The 25 mile speed zone on Washington ave right their at the Pollard/Washington ave section causes some congestion. I like the small businesses on Virginia Ave and don't plants and factory on the main roads coming into Vinton. It takes away from the town and sets a lower standard. It seems like places where they are located are high crime areas. I think more bus routes will be important because the economy is hurting and will get worse. I don't think we need a 6 road on Virginia Ave. Traffic is not that bad.
I feel the town center should shift away from where they are today. It is so congested by the Post Office area and everything looks so "ratty" in the downtown area. As I said, the Post Office is a nightmare!!! They should tear down some of those downtown buildings or fix them up. Perhaps make a big Family Park near the Farmer's Market -that would look great and with all the Festivals and parades, plus enhancing the Farmer's Market would be a big plus for Vinton. In addition, the BYPASS Rd. area would extremely benefit from shopping in that area. For those that live down Hardy Rd. or Rt. 24. it is quite a hike (and lots of gas and travel time) to get anywhere from that area. Many of the lake residents work in Roanoke and they pass that way everyday. I believe that those folks that travel in that corridor, would definitely shop there.
Let's keep the small town atmosphere. Improve things that will promote great shops in a small town

Question 12: Please use this space to provide comments or concerns regarding cultural, environmental and/or historical resources along the study corridors.
What I would like to see in Vinton is its potential to be recognized. I don't want to loose the small town feel of Vinton. I would also like to see more landscaping done and maintained throughout the Town to soften the look of the corridors. Eventhough Vinton has long been known as a bedroom community to Roanoke, I would like the asthetics of the Town to be taken into account when looking at the Corridor Plan. There are too many areas that resemble a rundown industrial town. Let's keep the quaintness of our small town feel, while tapping into what this town lacks and what would benefit the Town of Vinton in the short AND long run. So many people drive through Vinton on a daily basis. I would like to see the corridors encourage those drivers to stop and see what Vinton has to offer. I would also like the corridors to show the potential Vinton has to small business owners. If you could do all that I would be happy.
virginia ave. is so busy . some of the homes are such an eye sore. yards not kept up we need to fix this problem.
Beautification has to be a top priority to our community. Hanging baskets (including all targeted areas in this study. Bricks were a grand edition to the downtown area and offered more of a downtown look. We all have to consider going "green". It must be among the top priorities. Remember, we were the first community to commit to mandatory recycling and the Roanoke County Greenway must be continued. Many thanks
Other than my previous comments concerning the widening of Hardy road, the other thing that really needs to be done is that parking on either side of South Pollard street should be eliminated. It is nearly impossible to see oncoming traffic if you are trying to cross or turn from Jackson ave onto Pollard street. Also speaking from the emergency response aspect, Many times due to the parking along Pollard, we can barely get the firetrucks or ambulances through, having to stop and wait for traffic to clear, as there is simply no way for the cars to get over to make room. I know that this is a touchy subject with the downtown businesses, but something really needs to be done before someone gets killed in our downtown area. I would suggest moving the post office and building a nice looking parking garage on that site.
More attention to tying the town to the Blueridge Parkway. Creating that main st. downtown feel along Washington Ave tied into Pollard greenway connection from Walnut entrance to town to Moutain View and extended to Goode Park
Downtown revitalization.
Environmental. We are very concerned about the large amount of trash along the Hardy Road and Turner Branch Road, where we live. Trash is very off-putting to both residents and visitors. Trash lowers property values. There are several derelect buildings/trailers along the Hardy Road that are both dangerous and ugly. This is a BEAUTIFUL area but the trash and the derelect buildings spoil the aesthetics.

Question 12: Please use this space to provide comments or concerns regarding cultural, environmental and/or historical resources along the study corridors.
If anything cost more, dont raise my taxes. I saw today that my taxes pay 3 men to change one sign, what a waste. I would love to see some aesthetic changes done but at a minimal. Vinton is wonderful the way that it is. Roanoke Citys "traffic calming" project is a joke and I hope that nothing in this reguard is planned for Vinton.
When driving, it is hard to miss all of the litter along the sides of the road, I would really like to see something done to help this problem. I think it really makes the town look dirty, and doesn't represent the quality of the people living in Vinton.
Downtown Vinton needs to retain a historical feel.
It would be nice to have shops in downtown Vinton. We live in Mt. Pleasant and teach at Byrd. We find that, if we need anything other than groceries, we have to leave work, go home, and then go to Roanoke. I would like the opportunity to support Vinton.
need to make vinton an employment destination for the rest of the valley with office parks, and light industrial
The Roanoke River Gorge is a close by environmental and recreational resource that is not very accessible now. Suggest completing the Roanoke River Greenway and the connecting Wolf Creek Greenway.
Vinton has been leading the way in the Valley in regards to bike lanes. Keep up the good work! Any city that I travel to in the US that has bike lanes is vibrant. It will attract people to move here.
promotion of the vinton history museum. more wbhs related signage along all entry/exits of the corridor and wasgington ave.
I would like to encourage a business friendly community. In the commercial areas it is appropriate and necessary for businesses to be able to promote their business through the use of signage that is large enough for the commuting traffic to read. Commercial areas don't need to look like a city park. If you want businesses to move into the area they must not feel that they have a high number of do's and don'ts that cause undue stress on their viability.
It would be nice to see improvement all the way out Hardy to the BRP. Perhaps even a foot path or bike lanes that connect from the parkway into Vinton. I like the natural appearence out Hardy road and it is one of the reasons we bought out that way, but it is very difficult to access nature respources from the south side of Hardy and beyond.
Please give us more connections to greenways. (links) As a runner, biker and walker, it's so dangerous out there. i live in SW County but drive over to other area to run. please connect more areas!
Reuse downtown buildings with other uses that encourage high people traffic.

Question 12: Please use this space to provide comments or concerns regarding cultural, environmental and/or historical resources along the study corridors.
It would be nice to have one or two restaurants with outdoor eating that would be pet-friendly.
I believe we need 1-4 clean-up days annually. I believe we need more cultural events to attact people to the Vinton area.
Be a Blue Ridge Parkway town. Focus on improving outdoor recreation and unique stores and restaurants.
We do not necessarily want to tear down things that are historical. But we should look to improve them.
Connect cemetery, schools, war memorial, libraries, Glade Creek, Tinker Creek, Blue Ridge Parkway, Lancerlot Fitness Center, Downtown Vinton to the corridors to encourage more walking and bicycle use.
Make all contractors live up to the code Find restriction and enforce it

Question 13: Please list any improvements to community facilities and/or services that you feel are needed along the study corridors.

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
Excellent now	Needs to be expanded	connect to other greenways	needs improvement ; has lowest test scores in county	nees improvment, has lowest test scores in county	Needs better signage	As before inproved access to Post office.	paved trail
Update facade on existing fire dept building	Excellent now	Excellent	parking	expansion -- new buildings	Better signage would be nice, noting it is a school	outstanding job currently	Excellents
the facilities are state of the art, Manning should be addressed	Better enforcement	Didnt even know we had. Publicize maybe or make it more known	expansion	Both of these schools are really overcrowded and need to be expanded	Badly needs expansion, children eat lunch on the floor	extend to connect into larger system and down to Roanoke River; wayfinding	Sidewalks need massive improvements
Need to be expanded (response capabilities and personnel)	I would like to see faster response from the County	How can we keep that area free of trash? Trash is always scattered about.	more active policing and needs additional space	Excellent facility! Wayfinding signage would be great.	Needs additional exit	Already fantastic	police presence
fire and ems services are lacking in the town of vinton	new building	connect to larger system and connect to Roanoke River; wayfinding	Time to spruce up, trim some trees, make it more noticable. Update facade	beautiful	Stoplight and/or longer turning lane	more trees / benches	Pave and comlete it.

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
They have problems getting through traffic sometimes	outstanding job currently	Already fantastic		Make greenspace more visitor friendly. Make like park like setting	Greenway connections in general	traffic patterns need work	
Working Opticom lights, in all directions. Light coming out of F/R stations that stop traffic on S. Pollard to allow emergency vehiciles to exit and give other traffic warning. Fire Warning lights	Certainly up to par	needs more trees / benches	Need additon	Way Finding	Additional community uses	Expansion	Connect it to the tinker creek greenway
24hr personnel - Fire and EMS around the clock	Don't see them very often	Connect it to the wasena greenway	new larger facility located downtown	Too much "improvement" done there already. I'd rather have grassy lawn than another war memorial erected at a war memorial.	town should show more school pride	parking for events (ie-football games, etc.	Greenway connections in general

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
Needs to be moved out of downtown and more central to the community	Same for PD as FD, FULLY working opticoms in all directions.	Greenway connections in general	outstanding job currently	outstanding job currently	A Signal light at the WBHS entrance would slow traffic	Connections to Wolf Creek Greenway	hardy rd corridor between cundiff and stop in looks rough in places a tree lined corridor would be very pleasant.
24 hour staffing for fire/rescue	Need to be moved out of downtown and more central to the coommunity	Better access points	Needs updating	More events should be here	integration with Roanoke City greenways and bicycle access to the public lake access point on Hardy Rd.	Overcrowded need to add-on or build new high school & middle school	connect with other greenways
pretty good	yes, more	connect it with others - Roanoke River and Wolf Creek	fewer books, more computers	wonderful!	Paved	ped safe/bike safe instructions and reward people who walk/bike to school	paving vinton's part
all carreer staffing	good	Keep the mud out of the section under Rt 24.	larger, more technology	Greenway connections in general	Connect the BR Parkway, Mnt. View, Tinker Creek Greenway. Make the surface hard pack so road bicyclists can use the facility to travel from Mnt. View to Hardy Road.	overpass to open morning/afternoon bottleneck	Security barrier/ fence to seperate homes and greenways

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
easier access to greenways	MORE PATROL FROM THE COUNTY POLICE	integration with Roanoke City greenways and bicycle access to the public lake access point on Hardy Rd.	Greenway connections in general	Alternate uses	needs doggie poop stations with bags for easy pickup	Need a longer turn lane	Same comment about connection to BRP from Hardy. The Church there would be a great parking area to go biking or hiking from! And if it connected into Vinton it could become a complete curcuit using the greenways to bring you back around.
	vpd should resp. to calls in the co. between town limits and bedford co. limits!	Paved	Better parking	awsome	Why not tie WBHS into the greenway properly?		Craig Rec Center needs to be in the "green ring" around Vinton. Use gas lines and electric lines to provide off road trails that connect to businesses and neighborhoods and schools.

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
	community outreach including door-to-door contact and survey; walked/bicycled beats, especially in the downtown area	Connect to the Wolf Creek Greenway and the Glade Creek Greenway to Library, schools, public meeting spaces	expand it great staff	Add Bike Racks, enhance entrance and exit	Stoplight and/or longer turning lane		The area under Washington Avenue needs lots of attention.
	New Building	extentions	enlarge	Wonderful - the gem of Vinton - thank you for the improvement	Greenway connections in general		Connect to other Greenways
	educate police: bicycles are vehicles that interact w/automobiles	Connect to Roanoke River Greenway	Needs expanded and more community space.	Needs trees! Remove electric box right in front of building	Additional community uses		Curb cuts
	No need to have 2-3 police cars for every traffic stop	Go farther	Add bike racks to Library, War Memorial, Senior Center	Needs to be utilized more during the week	keep the bank out front mowed regularly. grat school		directional signs

Fire/Rescue Services	Police Services	Tinker Creek Geenway	Vinton Library	Vinton War Memorial	W.E. Cundiff Elementary School	William Byrd Middle/High Schools	Wolf Creek Greenway
		directional signs	New Building	bike racks at VWM and sr. citizen bldg too	Walking Trails, Sports Fields		more access
			Build addition	Beautiful - need more people to use it	Promote walking and biking. Have two sessions of running club so more students can participate.		Benches, playground equipment, shelter (picnic)
			Drive up - drop off box	Lower prices	Encourage through incentives, walking and biking to school		
			Needs to be upgraded or rebuilt		one class per room/expansion		
			bike rack		Crosswalks		
			more parking		ped safe/bike safe instructions and reward people who walk/bike to school		
			Needs to be larger				
			needs to be enlarged				

Question 14: Please use this space to provide additional comments or concerns regarding the study corridors.
Vinton has a great opportunity to be downtown Roanoke County. The Town has a sweet, walkable downtown area that is incredibly underutilized. Parking is not the problem so don't try to solve it by insisting on building more parking lots! There is plenty of parking. It was recommended years ago during the comprehensive planning process that the Town invest in more attractive entrance signage and wayfinding signage. That has never happened but would help capture lake traffic. The Town needs to be willing to purchase strategic properties in the downtown area in order to control what happens on those properties. The Blue Ridge Parkway, the River, Tinker Creek Greenway and the Wolf Creek Greenway are wonderful assets to the Vinton area. We should be making sure these amenties are linked - that someone can safely ride a bike or walk from the River to Wolf Creek Greenway, etc. We should be encouraging connections between where people live and where they recreate, shop and use services such as schools and libraries. The Town and County need to be willing to aggressively deal with eyesores and problem locations that affect the beauty and marketability of the Town and it's entrance corridors.
area is full of closed businesses; vinton needs to address this by trying to take advantage of any possible new businesses. This looks like a depressed area when you drive thru and see the 20 or so closed businesses. vinton needs more than antique shops, tatoo parlors, beauty shops
I am very exciting about this meeting and sincerely hope that strategies will be developed by county, town and community leaders to help this area offer an attractive and welcoming environment for businesses and visitors. Vinton is a "diamond in the rough" and has so much to offer. Anything that can be done to relay the charm and sense of community that Vinton offers would be beneficial to residents, existing businesses and to potential businesses.
Vinton needs to encourage professional businesses to come to our area. We would like to see our children able to stay in the area when they graduate from college. There need to be more professional jobs in the area for this to happen.
town of vinton looks old, no new developements, where are new jobs coming from, why did vinton turn down walgreens, on a main road, it would have created good jobs. No professional people moving into the town of vinton.; slowly turning into something like s.e., roanoke. why is vinton anti growth?
nothing to do in vinton, no quality restaurants, too many apartments, duplexes, no quality jobs--- need to make some changes
There is a desperate need for a traffic light at the intersection of Spruce and Hardy. The congestion and tremendous amount of traffic make it unusually hard to get in and out of Timberidge by the gas station. The traffic light just above the Wachovia Bank has been on a blink mode for a few weekends. GREAT!! The light should stay that way on weekends because it moves the traffic well away from the busy business sections of Hardy near Oakey's. The last thing we want is for Hardy Road to look like Williamson Road! Wall-to-wall cement and half open/closed businesses look awful. The WalMart idea is a bad one. Look what has happened to Ruddell Road as a result of the "short cut" to 460: Kroger, WalMart, etc. The road is a terror to drive on and the drive is nonstop. There should be regular radaring of the Ruddell at the end near Berkley due to the amount of traffic and the hazard of fire from people sitting in their cars and smoking as they are awaiting to "take turns" at that terrible intersection. The Berkeley Road (Roanoke City) is too narrow and people speed on it DAILY. More police need to monitor the park, too.
See prior comments.
At this time there has been to much time & expense studying. It is time to move on with the previous study and inputs.

Question 14: Please use this space to provide additional comments or concerns regarding the study corridors.
I would really just like to see more bus stops and completely redoing the sidewalks to get the wheelchairs off of the roads. I understand they can't go on the sidewalks, they are terrible. At the same time it is so dangerous for them to be on the road it is a hard to believe they have not been hit by a car already. I have almost hit them several times because you can't see them.
n/a
lots of truck traffic on Hardy to Vinton Business Center
I think widening, cleaning up and landscaping the Hardy Road is vital to our community because it connects Vinton and Roanoke to Smith Mountain Lake. This would attract new businesses and private residents to the area, as well as improving the lives of those of us who already live in this beautiful area.
I simply feel that the overall quality of the roads and sidewalks in Vinton need to be improved. Also, as stated earlier I think that there needs to be a major effort to clean up all the litter on the road, as it makes the town look very dirty.
Please look at moving parking off of South Pollard Street (Downtown) and maybe adding a parking garage.
I have lived in 9 states, the roanoke valley is my favorite place, a well kept secret, get the word out to attract newcomers from other areas
Most of the corridors are poorly suited for cycling because of the lack of a shoulder or bike lane combined with high speed and high volume of traffic.
I would like to see Walnut Avenue's shoulders paved evenly with the road. This would allow bike lanes on the wide section near downtown Vinton. I would also like to see the bike lane on Hardy Road continued.
be sure to read my comments!
I'm not sure if Berkley Road is included in the survey, but it is narrow, heavily traveled, and dangerous for bicyclists. King St which it intersects with will be improved, funneling more traffic to Berkley.
The light timing needs to be more efficient at Hardy Rd and Bypass Rd, S Pollard and Walnut St. Most of the time you are sitting there waiting on nothing.
Open Space. No Median work with trees.
Something also needs down about the intersection at Feather road. There is limited site distance, heavy volume and speeding.

Question 14: Please use this space to provide additional comments or concerns regarding the study corridors.
cARE SHOULD BE TAKEN BY THE GOVERNMENT TO PROVIDE NECESSARY BASIC SERVICES AND NEEDS AND NOT SPEND TAX MONEY RECKLESSLY. TRY TO PAY AS WE GO AND NOT HAVE TO BORROW MONEY IF AT ALL POSSIBLE. FISCAL RESPONSIBILITY IS HIGH PRIORTY IN BAD AND GOOD ECONOMIC CYCLES. WE DON'T WANT TO MAKE MORE MISTAKES LIKE OBLIGATING TAXPAYERS TO PAY $38 MILLION PLUS INTEREST FOR A GYM AND SWIMMING POOL (NEW REC. CENTER) THAT WAS NOT NEEDED. (HOW CAN A GYM AND SIWMMING POOL COST $38 MILLION).
Vinton Village has the charm and people to make it a destination. Encourage a relationship with the Blue Ridge Parkway. Bicycling and walking friendly connectivity can improve air quality, reduce traffic congestion and provide Vinton Proud attitude. Connect services to people. Yea Vinton!
Building corridors is the first step. Encouraging their use and helping those who use them understand their are rules to follow while using them is important. Simple things like walking on the correct side (facing traffic). Riding your bike on the right side (with traffic). Not walking your dog on a 20' leash. Etc. Posting on these rules would be beneficail to all the users. Just go to the Greenway on a warm day near Wasena Park and see not obeying the rules works.
Truck traffic routed into residential streets, particularly Augusta Ave. Town of Vinton Public Works vehicles using Augusta Ave instead of Virginia Aven. No enforcement of laws on speeding, littering, parking, noise, failure to stop at "stop signs", illegal U-turns, etc.
Hardy Rd needs more trees for shade Bike lanes extended to McDonald Farm and Bay Rock Marina Connect Tinker & Wolf Creek Grways South Pollard Street - put share road signs Walnut Ave needs bike lanes and sidewalks to connect to Rke city and proposed Glade Creek Grway VA Ave - add bike lanes or urban shoulders to this road so bicycling citizens who ride to work or do business have room to ride. Mt. View - extend bike lane to Herman L. Horne so citizens can walk & ride bikes to school safely
I think the roadways are fine - only problem is sidewalk space for shoppers is limited. Alot of people who do not drive walk in wet grass carrying groceries, etc.
Need to study another road into William Byrd School on the back side
The post office is terribly conjested most of the day perhaps move the PO to another location - don't ask me where

Question 14: Please use this space to provide additional comments or concerns regarding the study corridors.
1. Start schools at Wm. Byrd at 9:00 instead 8:30. This will not add to the congestion of 7:00 and 8:00 workers. 2. As already stated, add traffic light at Wash. Ave. and Spring Grove entrance. 3. Have half of the school buses come from Mt. View Road into Spring Grove and enter at back of the middle school. Remove 12 buses off Wash. Ave. would help the congestion quite a bit. As a retiree, I stay in until after 8:30 (make appt. after this time)

Question 15: Please use this space to provide feedback regarding this survey.
If the contents are read and carefully considered, the survey will have been worth the time. If not, then you will not have considered the taxpayers' perspectives. That means the survey did not accomplish for its citizens what it could have :)
please allow signage for churches and other groups
I appreciate this survey. I do hope a lot of people took advantage of this opportunity to share what they think. I grew up in Vinton and still work in Vinton today. It is important to me that these things are taken seriously and are implemented accordingly.
I appreciate the opportunity to have visited your presentation at the Vinton War Memorial and the courtesy of the represenatives attending.
I found the survey to be enlightening and useful to me as a citizen.
I'm really happy to be able to participate in this forum, and if anyone would like to speak with me feel free to contact me either via email at ahise@aol.com or by phone 588-3381 Thanks Jimmy Hise
well done
It would be nice to have the material from the community meetings put online where it can be accessed by those who are unable to attend the community meetings.
I think it's a good idea to see what the people who live in the area think. Hopefully it will lead to action though, instead of endless meetings to determine what needs to be done.
Thank you!
Very well done and long over due.
The questions about problems with the corridors were car-centric and didn't address cycling issues.
Excellent use of technology to get citizen input!
Thanks for doing the survey!
continuing thru Vinton to Roanoke City retail shops and restuarants.
THIS SURVEY IS A GOOD IDEA. THANK YOU.
Thank you for allowing me to participate.

Question 15: Please use this space to provide feedback regarding this survey.
Thanks for allowing those of use who would use these improvements voice our opinion.
Good idea.
Too long to do online
infrastructure. One would think states would consider this before passing laws that will limit growth.
I answered the survey but I know the town or the county will not do anything. It is all talk, talk, promises - NO ACTION! These problems have been discussed for years and there has been no follow-up!
We need a non-motorized connector from the Craig Ave Rec Ctr to Niagara Rd so people can easily access the rec center Lake Drive Plaza Shopping Center would benefit greatly if there was a connector from Tinker Creek to Craig Ave Rec Ctr to Lake Dr shopping ctr to W E Cundiff Elem School on Hardy Rd Rt 24 needs to allow bike access to Hardy Rd bike lanes through the bypass intersection one way to do this could be to build sidewalks for mixed use and put in curb cuts to allow allow easy on/off access Thanks for doing this survey. I hope my input will help to improve the study corridors because I really enjoy using them.
A Bob Evans style restaurant would be nice. I am starting to look like a cheeseburger. The smaller restaurants around are too limited on open hours. I am not fond of part-time establishments. The CVS Drug Store prices are ridiculous. Non pharmacy items are unreal. Walgreens would provide competition which is good. In most instances I think the town is a fine place to live and I have since 1947.
The lighting on Clearview is inadequate The light coming from Clearview is long
I think it was good to have this survey. I feel citizens should have an input. No one wants to have their property torn up if other alternatives can be reached.

Community Meeting
Vinton Area Corridors Plan
1/29/09 @ 10am - 1pm
Vinton War Memorial

#	NAME	ADDRESS	Business/Residence?	PHONE #	EMAIL ADDRESS
1	Everett W Noell	2601 Linden wood Dr		890-2091	
2	Carolyn D. Fidler	404 Cedar Ave.	Residence	343-7868	CDFidler@verizon.net
3	Karen Lynch	Bypass Rd	Business	982-8811	KLynch@memberonefcu.com
4	Walter Darnell	1035 Wash. Ave.	RESIDENCE	344-7488	
5	Staley & Carolyn Pennington	801 Olney Rd, Vinton	Resident	345-1450	
6	Donna Cole Carter Bank & Trust	1111 Washington Ave	Business	342 8580	
7	Martin Farmer	558 Deer Ridge	Vinton Museum	890-2931	
8	Anita Setzer	1894 Mt. View Dr	Res.	345-1950	mothersgirlneat@msn.com
9	Deborah Goodwin	202 4th St Roanoke VA	Bus.	983-9135	dgoodwin@memberonefcu.com
10	Tom Frazier	1320 Washington Ave Vinton VA	Bus	343-5685	tsfraz@verizon.net
11	BILL HAYDEN	324 E. WASHINGTON VINTON	Bus	981-0293	BHAYDEN@HAYDEN-INSURANCE.COM
12	JEFF JANNEY	115 Sedgefield Dr. Vinton	Bus	982-7085	
13	Ali Khan	323 Virginia Ave	Bus	982-7120	Khana@precisionfabrics.com
14	Freda Hubert	PO Box 1212 Vinton	Bus/Res.	342-0683	
15	James C. Martin	435 Maplewood Dr.	Res	890-1323	Chessicat@Cox.net
16	VICTORIA LESLIE	137 GUS NICKS BLVD	BOTH	344-2621	vleslie@rubiconplanning.com
17	Chick Graves	2606 Lindenwood Dr	Res	890-2548	
18	William Booth	1007 BLANDFORD Ave	Resident	345-4265	wmebooth2@cox.net
19	ANNETTE PATTERSON	1114 Washington Ave	Business	345-1292	AISUESSEL1999@Juno.com
20	Anthony Conner	917 E. Washington Ave	Business	767-6669	AWConner@FT.NewYorkLife.Com
21	Caleb Mann	508 Gus Nicks Blvd. Ste 2402	Business	342-6266	wmann@farmeragent.com
22	Judy Clemmer	2185 Mt View Rd, Vinton	Home	342-7700	info@vintonchamber.com
23	Mary Beth Layman	1028 Almond Dr. Vinton, Va.	Resident	343-4013	laymanmb@aol.com
24	Norman L Mall	110 Oxford Sq Vinton VA	Business	314-3581	

Vinton Chamber of Commerce 343-1364

Community Meeting
Vinton Area Corridors Plan
1/29/09 @ 10am - 1pm
Vinton War Memorial

#	NAME	ADDRESS	Business/Residence?	PHONE #	EMAIL ADDRESS
25	Tony Montuori	708 Hardy Rd	Business.	5217983	
26	Brad Grose	407 Aragona Dr. Vinton	Bus/Res.	982-0379	Service@DaminsonElectronics.com
27	[illegible]	P.O. Box 667, Vinton, Va	Business	843-5718	~~Ginger~~ GMcGhee@cox.net.
28	[illegible]	2527 [illegible] Ave. Vinton, Va.	—	890-3366	—
29	Jeff Terry	300 Virginia Ave	~~[illegible]~~ Bus	982-2920	jkddc@earthlink.net
30	R R Lawrence	511 Huntington BLVD, NE RKE	Bus	9830645	—
31	Chris Lawrence	311 S. Pollard St / Vinton	Govt	9830607	clawrence@vintonva.gov
32	Elmer Hodges	2452 Wolf Court, Vinton	Res.	890-8183	
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Community Meeting
Vinton Area Corridors Plan
1/29/09 @ 4pm - 7pm
Vinton War Memorial

#	NAME	ADDRESS	Business/Residence?	PHONE #	EMAIL ADDRESS
1	BOBENCHAIN	912 GATES LN VINTON	9828146 H		OBENCH45
2	McKannay	804 Third Street	Business	983-0647	mkenn-ly@vintonva.gov
3	David Schmidt	1453 WOLF CREEK DR.	Govt	890-5813	
4	Steve Lowe/Ace	509, 511, 517, 519, 521	Bus	312-7477	SLOAN1953@AOL.COM
5	Liz Belcher	1206 Kessler Mill Rd	Bus	387-6060	lbelcher@roanokecountyva.gov
6	Susan Jessee	3911 Falling Creek Dr	Business VINTON CHIROPRACTIC 982 2920		Goaliemo35@earthlink.net
7	Pat Patterson	4224 TWIN MTN. CT.	Res.	890-7511	PWPATTERSON@COX.NET
8	" "	1114 Washington Ave	Bus.	815-6105	" " "
9	Jeff HAYDEN	1017 Jeanette Ave	Res	343-3277	JKH7@Cox.net
10	Pete Echols	931 Meadow ST	Res	344-1060	JECHOLS@Cranwell MooreLaw.Com
11	DENNIS MORGAN	331 Bowman ST	RES	330-3792	
12	Lola Reynolds	118 E Virginia ave Vinton	Res	345-6666	
13	Deborah S. Barron	410 S. Pollard St Vinton	Bus	344-7114	bakersbazaarva@gmail.com
14	G W Minnett	12009 Starnette Ln RV		890-4672	
15	Kathryn Sowers	1214 Jeanette Ave, Vinton	Res	342-8611	kacky3@verizon.net
16	N.C. BROWN	1036 E. Wash. Ave			
17	BRUCE MAY	1106 E. WASH. AVE	BUSINESS	342-3707	
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I. Overview

A. Meeting Details

1. Date: Thursday, January 29, 2009
2. Times: 10:00 AM – 1:00 PM & 4:00 – 7:00 PM
3. Location: North Ballroom - Vinton War Memorial
4. Citizen Attendance: 45

II. Modified Public Comments, Questions and Concerns

A. Aesthetics & Matching Grant/Downtown Façade Programs Station

1. Attractive lighting is needed along the corridors.
2. Street trees are needed along Virginia Avenue and Washington Avenue.
3. Incorporate traffic calming measures and enhance the looks of the major intersections - Bypass, Pollard, and Virginia Avenue.
4. Green space and pedestrian amenities, such as benches, are needed along the corridors.
5. Create a main street feel with common signage in the Town of Vinton.
6. The boundaries of the Downtown Façade Program need to be expanded along the study corridors. Consider giving tax break (e.g. 5 years) for business owners that perform improvements, instead of giving 50% matching grant. Business owners pay for the improvements, but in return do not pay taxes.
7. The Town of Vinton Zoning Ordinance should allow more sign area (square feet) for multiple tenant buildings and office complexes.
8. Maintain landscaping in the medians along the study corridors, but do not let the landscaping block business signs.
9. There is too much pavement fronting the study corridors. Do not allow parking areas in front of buildings.
10. Incorporate measures to slow down the speed of traffic along the study corridors, not necessarily traffic calming.
11. An additional lane should be added to Washington Avenue.
12. Unify the street names of the study corridors to alleviate confusion. For example, make Hardy Road and Virginia Avenue change names at their intersection with Bypass Road, not a block west of the intersection.

B. Community Facilities Station

1. The old William Byrd High School should be used as a job generating center (e.g. sewing business) so people will have jobs during the tough economic conditions.
2. The change of use process is cumbersome, especially for residential to commercial conversions. Consider amending this process as it isn't efficient for government staff or

businesses owners. It causes delays in opening businesses, as well as costs the business owner more money.

3. Do not demolish the old William Byrd High School. Involve the community and/or former students in the process.
4. The Vinton area needs more parks, baseball fields and community centers for children.

C. Land Use, Zoning & Development Station

1. Do not allow a gas station on the Vinton Motor properties.
2. More sit-down restaurants are needed in the Vinton area.
3. The Town of Vinton should use the Vinton Motors properties to encourage business that will preserve the "Hometown/Small Town" atmosphere.

D. Transportation & Infrastructure Station

1. It is difficult to take a left turn out of Lindenwood onto Washington Avenue in the mornings and afternoons during the weekdays due to the school traffic at William Byrd Middle and High Schools. Consider adding signs or a stoplight to prevent the intersection from being blocked.
2. Drivers are using Maplewood as a cut-through from Feather Road. One possible solution is to add speed bumps on Maplewood.
3. Create a "main street feel" on Washington Avenue at the Bypass Intersection, preferably with bricked crosswalks.
4. The study corridors need more attractive lighting and beautification measures.
5. Bury overhead lines!
6. Encourage consistent, attractive signage along the study corridors.
7. The intersection of Mountain View Road and Washington Avenue needs a stop light. The majority of cars going west on Washington Avenue run the red light. It only a matter of time before someone gets killed turning out of Mountain View Road. There is more traffic congestion with the morning work commuters, but generally there is a consistent amount of traffic congestion at this intersection at all times.
8. Take the existing trees out of the medians of Virginia Avenue and Hardy Road. Add a turning lane for access to the businesses.
9. A larger round-a-bout is needed at the intersection of Bypass Road and Hardy Road..
10. A smaller round-a-bout is needed at the intersection of 8th Street and Walnut Avenue.
11. Add sidewalks on Virginia Avenue and Hardy Road to have continuous sidewalks. The sidewalks should be paid for by the Town of Vinton, but maintained by business owners
12. Progressive traffic signalization is needed along the study corridors for more efficient traffic flow.
13. Improve traffic congestion in Downtown Vinton by relocating the Post Office which should help alleviate issues with the lack of parking.

14. Consider beginning school at 9:00 AM instead of 8:30 AM to ease traffic congestion (citizen comments that she has lived on Washington Avenue for 39 years).
15. An entrance is needed from William Byrd Middle and High Schools onto Spring Grove/Mountain View Road. Twenty-three (23) school buses would be divided into two entrances, versus the one existing entrance, to ease traffic congestion on Washington Avenue.
16. Vacant lots for sale should be considered for turning lanes into schools.
17. School traffic is worse in the morning than in the afternoon.
18. An additional lane does not need to be added along Washington Avenue.
19. A traffic light needs to be added at the intersection of Spring Grove and Washington Avenue.
20. Consider alleviating the confusion with the road name changes along West and East Virginia Avenue, as well as Hardy Road. Clearer distinctions are needed for directional and addressing purposes.
21. Sidewalks are needed along Hardy Road connecting Montgomery Village and Crofton subdivisions to the Wolf Creek Greenway.
22. Directional and wayfinding signage is needed for Downtown Vinton along the Blue Ridge Parkway for food, gas, lodging, etc.
23. An access point is needed on Hardy Road for the Blue Ridge Parkway.
24. Encourage sign consistency along the study corridors.
25. The portion of Mountain View Road that lies in the Town of Vinton needs improvements similar to what has been done in the portion of Mountain View Road in Roanoke County.
26. Trees need to be planting along these four-lane roads to make them more aesthetically pleasing and cooler.
27. Add sidewalks and/or bike lanes connecting Blair Road to Vinyard Park at Berkley's Bottom.

Vinton Area Corridors Plan
Community Meeting
6:30 p.m., Thursday, June 18, 2009
Vinton War Memorial

#	NAME	ADDRESS	PHONE #	EMAIL ADDRESS
1	Phillip VanDeusen	1225 Washington Ave Vinton	344-7281	phillip@cityofvinton.com
2	Brad Grose	407 Aragona Dr. Vinton	343-1059	Service@DominionElectronics.com
3	Chris Lawrence	1640 Meadows Dr. Vinton	982-7598	clawrence@vintonva.gov
4	Mike ALTIZER	3108 Valley Stream Rd	293-0371	MWAltizer@cox.net
5	N.C. Brown	1036 E. Wash. Ave. Vinton	342-3739	
6	Mary Bennett	1035 E Washington Ave	344-7488	—
7	Ron Coleman	70 Frederick Circle Hardy	721-3449	
8	Richard Warner	739 Devonshire Dr Vinton	8904890	
9	Barbara Duerk	2601 Rosalind Ave. S.W.	343-1616	barbgary@cox.net
10	Carolyn Fidler	P.O. Box 43 Vinton VA	343-7868	COFidler@verizon.net
11	Matt Miller	PO Box 2569 Roanoke 24010	343 4417	MMiller@rvarc.org
12	Ann H. Huddleston	P.O. Box 504, Vinton, VA.	342-0390	annhud504@verizon.net
13	Janet Scheid	1453 Wolf Creek Dr. Vinton	387-6078	
14	Mick Michelsen	225 N. Maple	981-0356	CHATHAMMS@AOL.COM
15	Shara Meadows	105e Bypass Road Vinton	983-9104	Smeadows@memberoneFCU.com
16	DENNIS MACAN	351 BOWMAN ST		
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Document 10

Vinton Area Corridors Plan
Community Meeting
6:30 p.m., Thursday, June 18, 2009
Vinton War Memorial

#	NAME	ADDRESS	PHONE #	EMAIL ADDRESS
26	Jim + Judy Cunningham	2185 Mt Hope Rd, Vinton	342-7700	jimjudy678@verizon.net
27	Allen Kasey	105 Giles Ave, Vinton	345-2079	
28	MELINDA J. COX	ROANOKE CO.	772-2185	MCox@ROANOKECOUNTYVA.GOV
29	TAREK MONEIR	RKE CO.	772-2080	
30	Mark Ferris	1042 Va. Ave	761 5847	
31	Mary Zirkle	Bedford Co	586-7616	m.zirkle@co.bedford.va.us
32	Consuella Caudill	Town of Vinton	983 0607.	
33	Dona Lee Canterbury + Trust	1111 Washington Ave	342 8580	
34	Leon [illegible]	4741 Appalachian Rd, Roanoke, VA	343-5718	
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I. Overview

A. Meeting Details

1. Date: Thursday, June 18, 2009
2. Times: 6:30 - 7:00PM Open House; 7:00 - 8:30PM Formal Presentation
3. Location: South Ballroom - Vinton War Memorial
4. Citizen Attendance: 25

II. Modified Public Comments, Questions and Concerns

A. Aesthetics

1. The New York Pizza site needs to be more aesthetically appealing.
2. The Town needs to update their gateway entrance signs along the study corridors.
3. A citizen commented that he/she liked the signage ideas proposed at the meeting.

B. Land Use, Zoning & Development Station

1. The Future Land Use Designation of the frontage parcels located south along Hardy Road (Route 634) within Roanoke County need to remain Development and Neighborhood Conservation until Hardy Road is widened. The road cannot handle increased development and subsequent traffic volumes.
2. The Roanoke County Future Land Use Designation of the parcels located within the limits of the Wolf Creek Floodplain should be designated Conservation.

C. Transportation & Infrastructure Station

1. The Tinker Creek Greenway should be connected to the Wolf Creek Greenway.
2. "Health healing loops" should be provided from the Lancerlot Sports Complex.
3. Are the Vinton Transportation Levels of Service (LOS) for the study corridors based off destination or thru traffic? If more "greenway" connections were available along the study corridors would trips traveled be reduced?
4. Support the Safe Routes to School Program to make a pedestrian-friendly Vinton Village.

GATEWAY SIGNAGE IDEAS

Existing Town Entrance Sign

-nice use of wood and stone for a natural look in keeping with the Blue Ridge Parkway

-could be larger to provide more visibility

-nice use of landscaping for additional color

Existing Roanoke County gateway sign located in median such as along Washington Avenue

Both Roanoke County and Town of Vinton gateway signs are needed along the Hardy Road corridor

Sample rendering of sign location along Hardy Road

Potential "Gateway" Style Sign to Mark Entrance to Town of Vinton

-marks a defined change from Southeast Roanoke into the Town of Vinton

-addition of landscaping to define entrance and add color

-camouflage of an existing unsightly railroad bridge

-addition of decorative stone faux pillars to keep in style with the Blue Ridge Parkway

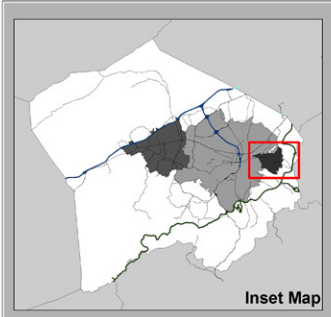
-use of the town's symbol, the Dogwood flower

Other Potential Sign Style Ideas:

-wayfinding signage

-coordinating entrance signs

Document 12



IMPROVEMENT OPPORTUNITIES:

- Areas for potential pedestrian crosswalks
- Opportunity for improved median landscaping
- Opportunity for new gateway signage
- Opportunity for town character enhancement, such as:
  -benches
  -decorative awnings & signage
  -decorative streetlights
  -planters
- Potential sidewalk improvements

GOOD EXAMPLES OF EXISTING DOWNTOWN CHARACTER

VINTAGE STYLE MURAL

CLOCK TOWER AND DECORATIVE SIDEWALK CORNERS

UNIQUE STORE FRONTS

GATEWAY SIGNAGE IDEAS

WAYS TO ADD STREETSCAPE CHARACTER

-DECORATIVE LIGHTING & BENCHES
-AWNINGS, BANNERS, AND UNIQUE SIGNS
-PLANTERS & LANDSCAPING
-DECORATIVE CROSSWALKS

Example:Vinton Post Office

EXAMPLE OF GOOD STREETSCAPE CHARACTER

SAMPLE PEDESTRIAN CROSSWALKS

SAMPLE MEDIAN LANDSCAPING

STREET TREES OR FLOWERS

SAMPLE MEDIAN LANDSCAPING

STREET TREES OR FLOWERS

EXAMPLES OF GOOD SIDEWALK DESIGN

INCLUDES PLANTING BUFFER BETWEEN WALKWAY AND STREET

Roanoke City

Bedford County

Document 13

Vinton Area Corridors Plan
Date: December 11, 2008

0 500 1,000 2,000 Feet

DRAFT

Vinton Area Wayfinding and Public Signage Study

Roanoke Valley Area Metropolitan Planning Organization

August 2009

"The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation."

"This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation."

Vinton Area Wayfinding and Public Signage

Table of Contents

Vinton Area Wayfinding and Public Signage Study

Background

Purpose and Study Area

Town of Vinton staff requested that the Roanoke Valley Area Metropolitan Planning Organization (MPO) conduct a Wayfinding Sign Study in early 2008. The primary goal of the study was designed to examine existing signage to points of interest in the Vinton area. A secondary element of the study was to note other public signage issues that were observed in the field. The field work would be conducted from the viewpoint of a visitor to the Town of Vinton. Staff conducted field work in 2009 to identify existing conditions. Map 1 displays the existing wayfinding signs in the study area.

Traffic Control Devices and Signage

Traffic control devices are defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority of a public agency having jurisdiction.

Traffic signs are devices placed along, beside, or above a highway, roadway, pathway, or other route to guide, warn, and regulate the flow of traffic, including motor vehicles, bicycles, pedestrians, equestrians, and other travelers.

According to federal guidelines, there are five requirements for effective traffic control devices:

- Fulfill a need
- Command attention
- Convey a clear and simple meaning
- Command respect from road users
- Give adequate time for proper response

Signs should be placed only where warranted by facts and engineering studies. Studies have shown that signs that are unwarranted or ineffective may distract road users from more important traffic control devices, may breed disrespect for all signs in the area, and unnecessarily use public agency and taxpayers' resources.

Signs should be placed as necessary for safety and proper regulation of traffic. However, the use of too many signs in a given location may reduce the

effectiveness of all the signs at that location*. (Manual of Traffic Signs, Richard C. Moeur*)

Sign Functions

Signs are defined by their function as follows:

A. Regulatory signs give notice of traffic laws or regulations.
B. Warning signs give notice of a situation that might not be readily apparent.
C. Guide signs show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information.

This study focused on “GUIDE” signage.

Signage Standards

The Manual on Uniform Traffic Control Devices (MUTCD) is the national standard for all traffic control devices installed on any street, highway, or bicycle facility open to public use. However, the application of these standards varies and is dependent on the agency or government body responsible for the roads maintenance. The Federal Highway Administration (FHWA) publishes the MUTCD.

The MUTCD is a national standard, intended to ensure that signing is consistent throughout the United States. The standards apply to items such as sign color, size, and lettering. Each state has adopted either the Federal MUTCD, or the Federal MUTCD modified with a state supplement. In the Commonwealth of Virginia, the MUTCD is accepted, but there is also an older state supplement; available only in hardcopy.

The MUTCD is developed and modified by FHWA through the Federal Register rulemaking process. As a part of this process, the National Committee on Uniform Traffic Control Devices (NCUTCD), a private non-profit organization, submits suggestions and recommendations to FHWA for consideration for inclusion in the MUTCD. The MUTCD is updated every few years.

As previously mentioned, the agency or government responsible for the road maintenance performs the application of the standards. While locally maintained roads are not subject to the standards, any road that receives federal construction or maintenance funds is subject to the MUTCD standards according to the Virginia Department of Transportation (VDOT).

Wayfinding and guide signs have historically been placed by local governments in a piecemeal fashion, and without consistent standards. Increasingly, communities are designing and adopting local wayfinding sign standards.

Wayfinding Signage Inventory and Field Observations

The fieldwork for this study was conducted in the early part of 2009. Vinton has an existing wayfinding sign system, and plans improvements as funding allows. The Town of Vinton does not have a wayfinding sign standard, guidelines or plan.

Map 1 shows the existing wayfinding signage. While staff inventoried the "Gateway" signs to the Town of Vinton, these are being addressed in another section of this study. Table 1 also displays an inventory of existing signs by destination.

Table 1. Wayfinding Signage Inventory

Signed Feature	Number of signs of corridors	Able to Find?
Historical Museum	6	no
MA Banks Park	1	yes
Craig Avenue Recreation Center	1	yes
Farmers Market	2	maybe
Municipal Pool	2	maybe
Gerhart Park	1	yes
Library	2	yes
Vinyard Park	2	yes
Business District from Washington Ave.	1	maybe
Downtown from Gus Nicks Blvd	1	yes
Business District from Virginia Ave.	2	yes
Downtown from Virginia	1	yes
Vinton Business Center	3	no
Vinton War Memorial	1	yes
Charles R. Hill Senior Center	0	no
Roland C Cook Elementary	1	yes
Herman L Horn Elementary	1	yes
Roanoke County Central Middle School	1	maybe
Wolf Creek Greenway (Washington)	2	yes
Wolf Creek Greenway (Hardy)	0	no
Vinton from Blue Ridge Parkway	2	yes
Birding and Wildlife Trail	2	yes
Blue Ridge Parkway	2	likely
Smith Mountain Lake	2	likely
W. E. Cundiff Elementary	1	yes
William Byrd Middle/High	2	yes

Wayfinding Signage Inventory by Destination

The following section details each destination in Vinton as currently signed.

Vinton Downtown

Local signage in the form of wooden wayfinding signs directs drivers to downtown. These wooded signs are placed on eastbound Virginia Avenue, and eastbound

Gus Nicks Boulevard. Several westbound locations also include signs to the "Business District". These plain green signs are not "branded" and visitors focused on a visit to Roanoke may misinterpret the sign. Additionally, the downtown area is not signed to westbound traffic on Washington Avenue. The downtown signage should be branded with a common name (downtown or business district) and should be Vinton specific in name or sign theme. At a minimum, the downtown signs should be placed in four locations, for both directions of traffic, on Washington and Virginia Avenues. (More specific details are provided in the recommendations section.)

Historical Museum

The Vinton Historical Museum has six signs throughout Vinton, more than any other destination. A majority of the signs direct vehicles onto Pollard Street, however, the museum is not located on Pollard Street. Visitors are unlikely to find the museum based on the signs alone. Additionally, the museum was found to be closed on several visits. It would also be useful to use a more descriptive name since most museums are historical. Perhaps "Vinton History Museum" or "Vinton Museum" may be more suitable for wayfinding signs.

Farmers Market

The Farmers Market is signed from Gus W. Nicks Boulevard and Virginia Avenue. It is not signed from westbound Washington Avenue. The facility is not signed from Pollard Street, but most visitors would assume that it is near the downtown area and would likely find the area. The Farmers Market sign is cluttered by other signs in both directions. Enhancing this area with better landscaping and sign placement would make the "gateway" to the market area more appealing.

Schools

There are six schools in the study area. Five schools have adequate signs for identification. Roanoke County Central Middle School has a sign on Highland Road, but the sign is difficult to see from Gus W. Nicks Boulevard. A sign that faces Gus W. Nicks Boulevard would be more desirable.

Parks and Recreation Facilities

The study area included signs to Goode Park, MA Banks Park, Craig Avenue Recreation Center, Vinyard Park, and Gerhart Park. Each park could easily be found with the existing signage. As will be mentioned in the recommendations section, many of these signs could benefit from a re-design to a town-specific wayfinding standard. Also of note was the entrance to Goode Park. The wooden sign placed by the Roanoke County Parks and Recreation, while attractive, is cramped by three other sign posts, a guardrail and large bush. This Park entrance could be improved by reducing the visual clutter and increasing the visibility of the main sign.

Municipal Pool

The Municipal Pool has adequate signage on Washington Avenue. It is important to note that the sign color and style differs from those of other recreation signs in the Town which have a brown background. However, first time visitors would be unable to find the pool from Meadow Street because there is no sign at the pool entrance. This may not be an issue for Town residents that already know the location. There are plans to close the pool, and if so, then all signs should be removed.

Vinton War Memorial

The Vinton War Memorial is situated and signed adequately. No changes are recommended.

Vinton Municipal Building

The municipal building did not have any wayfinding related signage. Additionally, the existing sign for the municipal building is difficult to see from the street.

C. R. Hill Senior Center

The Senior Center is located behind the Vinton War Memorial, but is not signed from the road. This may not be an issue if it is primarily used by local residents.

Library

The library has appropriate signs on Washington Avenue. If a wayfinding system is designed, the signs could be changed to a town-wide uniform standard as needed.

Vinton Business Center

The Vinton Business Center has small signs on Hardy Avenue at three appropriate locations. It is not clear if the signs are large enough to meet MUTCD standards which call for 6” lettering. The Town is aware that the Business Center entrance has no signage. It is possible to drive right past the entrance.

Virginia Birding and Wildlife Trail

Wolf Creek Greenway is designated as part of Virginia's Birding and Wildlife Trails. Signs direct visitors to Goode Park. The Park has a kiosk that could be better utilized. Up-to-date maps and interpretive information could be added to the kiosk for a better visitor experience.

Wolf Creek Greenway

The Wolf Creek Greenway has parking at Goode Park and two other unsigned areas. Parking is available adjacent to the Lynn Haven Baptist Church on Washington Avenue, but the existing sign is placed after the entrance to the parking area. One might infer that the parking

area is at the Shell gas station, which is the next entrance on the right. The sign should be placed to indicate the availability of greenway parking in the church parking lot. The second unsigned parking area is behind a business on Hardy Road. The lot is very difficult to find and is located behind the "Best Little Hair House in Town". Appropriate signs should be placed on Hardy Road, and at the back of the private parking behind the business. It is not clear that you have to drive down the road/greenway to get to the parking lot.

Town of Vinton and Other Destinations

The Town of Vinton is signed from I-581/Route 220 in the City of Roanoke, and from the Blue Ridge Parkway. Most visitors should be able to "find" the town based on this signage. Many visitors may be passing through Vinton on their way to other destinations. The Town made an effort to provide additional signs to the Blue Ridge Parkway and Smith Mountain Lake. There is also a sign in Roanoke County indicating a route to Booker T. Washington National Monument. The Town should consider if these outside destinations should be part of a new wayfinding system.

Other Public Sign Field Observations

While performing the sign inventory and driving other major roads in the area, staff noted other signage issues that should be addressed.

Parking Signs

Staff noted a large number of parking related signs, especially in downtown. Typically, parking signs are needed every 100-200 feet, or at distances that make them visible to parking vehicles. The Town of Vinton should coordinate with the Police Department, Town Attorney, Public Works, and Planning Departments to determine if all existing signage is required. The MUTCD provides guidance for such parking signs. In particular the guidelines state:

"To minimize the number of parking signs, blanket regulations that apply to a given district may, if legal, be posted at district boundary lines. As an alternate to the use of arrows to show designated restriction zones, word messages such as BEGIN, END, HERE TO CORNER, HERE TO ALLEY, THIS SIDE OF SIGN, or BETWEEN SIGNS may be used." (Source: Manual on Uniform Traffic Control Devices, 2003. Federal Highway Administration)

See below for examples of **No Parking** signs:

Source: www.outskirts.com

Sign Size/Font Size

According to the MUTCD standards: " *The principal legend on guide signs shall be in letters and numerals at least 150 mm (6 in) in height for all capital letters, or a combination of 150 mm (6 in) in height for upper-case letters with 113 mm (4.5 in) in height for lower-case letters. On low-volume roads, and on urban streets with speeds of 40 km/h (25 mph) or less, the principal legend shall be in letters at least 100 mm (4 in) in height. However, with an aging population, consideration should be given to making all type at least 6 inches in height.*"

Overall sign size may require compromises. For example, the City of Roanoke uses a smaller font on their wayfinding signs to reduce sign size.

Sign Colors

The MUTCD standards provide clear guidelines on the use of color in sign design (see below). While local governments may have limited resources, compromises should not be made on regulatory signs that may affect road safety.

Mis-matched sign colors. All regulatory signage should meet MUTCD color criteria.

Sign Color Standards:

1. Black—regulation
2. Blue—road user services guidance, tourist information, and evacuation route
3. Brown—recreational and cultural interest area guidance
4. Coral—unassigned
5. Fluorescent Pink—incident management
6. Fluorescent Yellow-Green—pedestrian warning, bicycle warning, playground warning, school bus and school warning
7. Green—indicated movements permitted, direction guidance
8. Light Blue—unassigned
9. Orange—temporary traffic control
10. Purple—unassigned
11. Red—stop or prohibition
12. White—regulation
13. Yellow—warning

(Source: Manual on Uniform Traffic Control Devices, 2003. Federal Highway Administration)

Sign Placement

Signs should be placed in accordance with MUTCD standards whenever possible. This is in regards to heights, approach distances and proximity to other signs and obstructions. The Figure below illustrates some examples from the MUTCD of sign installation standards.

While desirable to have signs combined on a single signpost in some instances, this example illustrates a locally installed speed limit sign that is the incorrect height. Such regulatory signs in an urban area with sidewalk should be placed seven feet off the ground **(this has since been corrected)**. The sign in the foreground is a better example of combining signs on a single signpost to avoid clutter. This regulatory sign has since been relocated.

Good and poor examples of combining signs on a single signpost. The speed limit sign should be placed 7 feet off the ground. ***This has now been corrected.***

A series of five signs that are placed in a single line of sight. Such conflicts should be avoided through better sign placement.

As previously mentioned, sign "clutter" is a problem in many urban areas. There is a fine line between giving enough information and giving too much information. Drivers can read only so much at any given speed. However, it is desirable to combine certain types of signs on a single signpost, eliminate unneccesary public signs, and have appropriate regulation on private signs.

Sign placement is also a key to avoiding clutter. Consideration of sight distances, proximaty to other signs, and sign design should all be considered carefully and in accordance with MUTCD guidelines.

Street Sign and Stop Sign Coordination

The Town of Vinton maintains their own street signs. There should be an attempt to co-locate street signs and stop signs on the same post when feasible. The co-location of signs saves resources and reduces sign clutter.

Street sign and stop sign on separate posts. Street sign obscured.

Street sign and stop sign on single post

Overhead Street Signs

Major intersections (those with signals) in the study area could benefit greatly by overhead street signs as simulated in this photo. The Town has plans to add such signs, and this would be of great benefit especially to visitors and others not familiar with Vinton's major streets. It was also noted that Bypass Road was not identified at the intersection with Hardy.

Unnecessary Signs

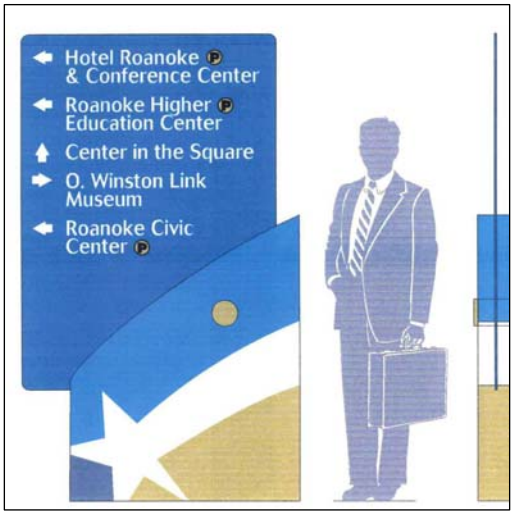
Signs should serve a specific purpose, provide information, regulate traffic, or provide warnings. While educational signs can serve a useful purpose, they are not advised for urban traffic conditions that already have many distractions. These types of signs also require maintenance resources which must be considered.

Vegetation

Vegetation sometimes obscures signs. While requiring extra resources, efforts should be made to keep signs, especially regulatory signs, visible.

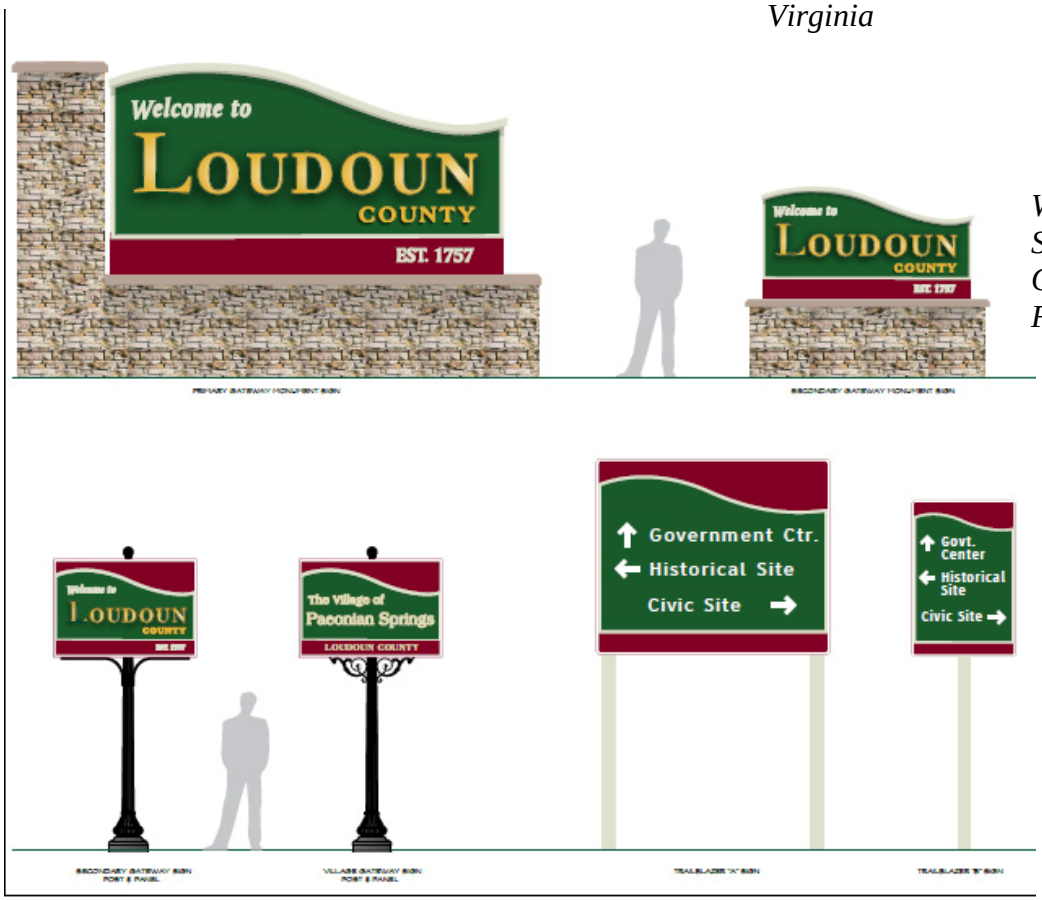
Local Wayfinding and Guide Sign Examples

The Town of Vinton does not have a standardized wayfinding system. The Town should develop a branded or themed sign system that provides visitors with relevant and clear information on destinations in Vinton. Examples are provided below.



Wayfinding sign form City of Roanoke, Virginia

Wayfinding Sign, City of Staunton, Virginia



Wayfinding Sign System, Loudon County, Virginia. Fraser and Associates.

Sample Vinton Wayfinding Sign System

Large Signs:

Eastbound Virginia Avenue and Westbound Virginia Avenue at Pollard St.

Large Signs:

Westbound Washington Avenue and Westbound Gus Nicks Boulevard at Pollard Street

Medium Signs:

Westbound Washington Avenue near Marshall Avenue and Eastbound Walnut Avenue

Small Signs: *For single purpose use-two examples shown*

The example wayfinding system above is for illustrative purposes only. A more comprehensive design and location plan should be developed with community input. Map 2 also shows the locations of the major signs in the example sign system. Smaller, single use signs could then be placed where appropriate.

Table 2: Single Use Sign Inventory for Example Wayfinding System

Single Use Signs	Number	Main Corridor	Notes
MA Banks Park	3	2-Virginia Avenue	1 for Franklin/Pollard
Craig Avenue Recreation Center	3	2-Virginia Avenue	1 for Franklin/Pollard
Blue Ridge Parkway	3	various	could add on major signs
Vinton Historical Museum	2	Pollard Street	
Farmers Market	2	Pollard Street	
Gerhart Park	2	Gus Nicks Blvd.	
Library	0	Washington Avenue	existing ok
Vinyard Park	2	Washington Avenue	
Vinton Business Center	2	Bypass/Hardy	
Charles R. Hill Senior Center	2	Washington Avenue	or single large sign
Roland C Cook School	2	Pollard Street	
Herman L Horn Elementary	2	Washington Avenue	
Roanoke County Central Middle School	2	Gus Nicks Blvd.	or single large sign
Wolf Creek Greenway (Washington)	2	Washington Avenue	include parking signs at church
Wolf Creek Greenway (Hardy)	3	one behind business	
Birding and Wildlife Trail	0	Washington Avenue	existing ok
W.E. Cundiff Elementary	2	Bypass/Hardy	
William Byrd Middle/High	2	Washington Avenue	

General Recommendations

1. This study lists many site specific sign improvements that could be addressed by the Town of Vinton. These recommendations are made in the **Sign Inventory and Field Observations** section of this study, and most of these recommendations focus on reducing sign "clutter" and improving sign standards.
2. The Town of Vinton should establish and follow standards for the design and placement of regulatory, guide, and warning signs. This is easily accomplished by accepting the FHWA MUTCD standards as discussed in this report.
3. The Town of Vinton should develop a local wayfinding system for key attractions and destinations. The wayfinding system should address the following:
    a. List of destinations.
    b. Number and location of signs.
    c. Sign designs. (Examples are given in the previous section). Signs should have similar theme and brand to match new Town of Vinton Gateway signs.
    d. Sign placement in the field.
    e. Removal of existing redundant signs.
    f. Placement of overhead street-name-signs at major intersections.

    An example Wayfinding System is provided, but further work is recommended.
4. Reduce sign clutter by combining signs on a single post when feasible and in accordance to MUTCD standards. Develop a formal policy for combining street and stop signs when possible. Eliminate unnecessary signs that don't provide a specific purpose. Review existing sign placements for sight distances and aesthetic values. Consider updating private sign ordinances.
5. Establish a committee to review parking related signs and reduce the number of parking signs while striking a balance with enforcement issues.

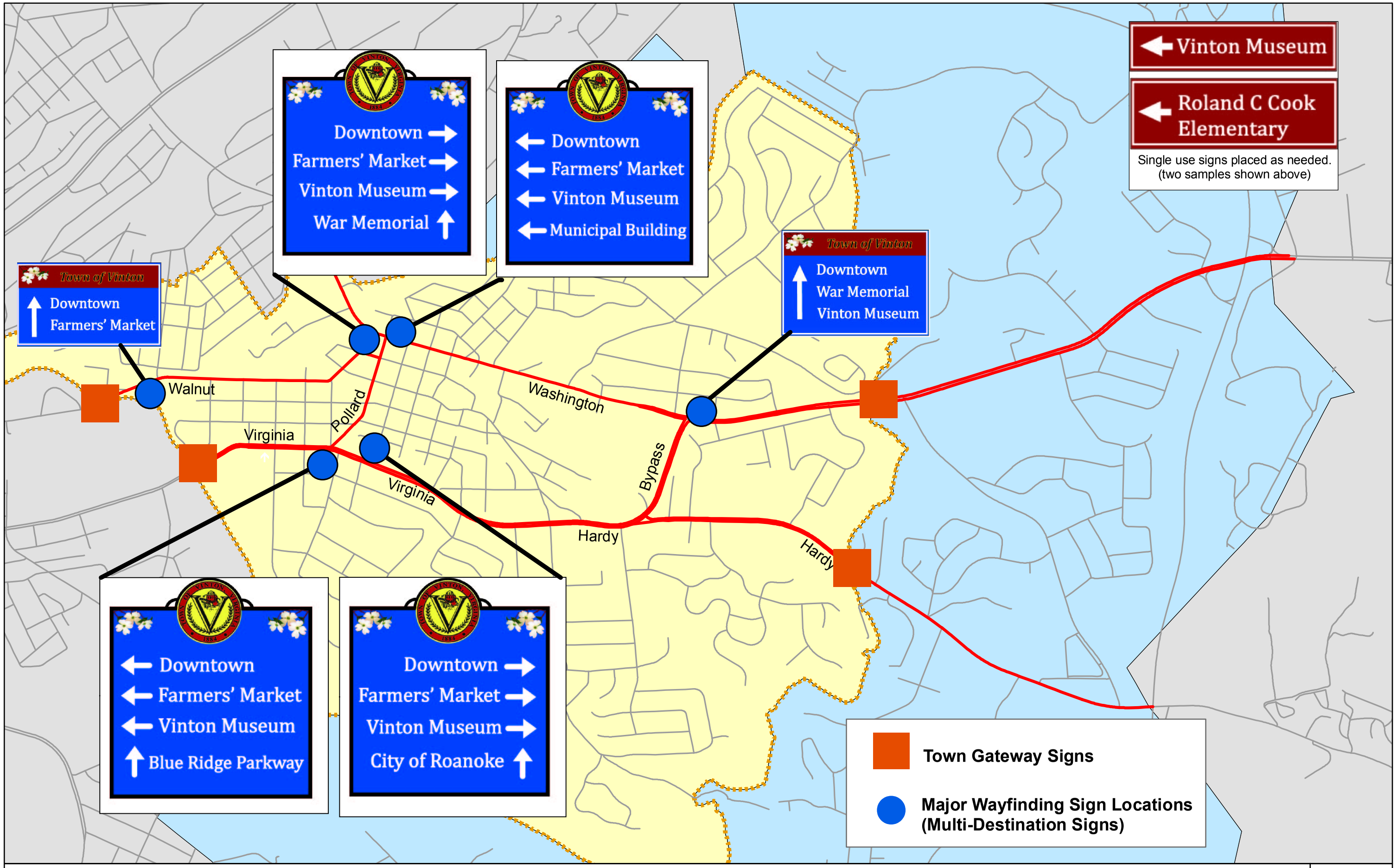
Existing Wayfinding Signage

Map 1 August 14, 2009

0 0.5 1 Miles

N W E S

Roanoke Valley Alleghany Regional Commission



Example Major Wayfinding Sign System

Map 2: August 14, 2009

0 0.5 1 Miles

N W E S

Roanoke Valley Alleghany Regional Commission

1. Introduction

Bicycling and walking are fundamental travel modes and integral components of an efficient transportation network. Appropriate bicycle and pedestrian accommodations provide the public, including the disabled community, with access to the transportation network; connectivity with other modes of transportation; and independent mobility regardless of age, physical constraints, or income. Effective bicycle and pedestrian accommodations enhance the quality of life and health, strengthen communities, increase safety for all highway users, reduce congestion, and can benefit the environment. Bicycling and walking are successfully accommodated when travel by these modes is efficient, safe, and comfortable for the public. A strategic approach will consistently incorporate the consideration and provision of bicycling and walking accommodations into the decision-making process for Virginia's transportation network.

2. Purpose

This policy provides the framework through which the Virginia Department of Transportation will accommodate bicyclists and pedestrians, including pedestrians with disabilities, along with motorized transportation modes in the planning, funding, design, construction, operation, and maintenance of Virginia's transportation network to achieve a safe, effective, and balanced multimodal transportation system.

For the purposes of this policy, an accommodation is defined as any facility, design feature, operational change, or maintenance activity that improves the environment in which bicyclists and pedestrians travel. Examples of such accommodations include the provision of bike lanes, sidewalks, and signs; the installation of curb extensions for traffic calming; and the addition of paved shoulders.

3. Project Development

The Virginia Department of Transportation (VDOT) will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking. Factors that support the need to provide bicycle and pedestrian accommodations include, but are not limited to, the following:

- project is identified in an adopted transportation or related plan
- project accommodates existing and future bicycle and pedestrian use
- project improves or maintains safety for all users
- project provides a connection to public transportation services and facilities
- project serves areas or population groups with limited transportation options
- project provides a connection to bicycling and walking trip generators such as employment, education, retail, recreation, and residential centers and public facilities
- project is identified in a Safe Routes to School program or provides a connection to a school
- project provides a regional connection or is of regional or state significance
- project provides a link to other bicycle and pedestrian accommodations

- project provides a connection to traverse natural or man-made barriers
- project provides a tourism or economic development opportunity

Project development for bicycle and pedestrian accommodations will follow VDOT's project programming and scheduling process and concurrent engineering process. VDOT will encourage the participation of localities in concurrent engineering activities that guide the project development.

3.1 Accommodations Built as Independent Construction Projects

Bicycle and pedestrian accommodations can be developed through projects that are independent of highway construction, either within the highway right-of-way or on an independent right-of-way. Independent construction projects can be utilized to retrofit accommodations along existing roadways, improve existing accommodations to better serve users, and install facilities to provide continuity and accessibility within the bicycle and pedestrian network. These projects will follow the same procedures as those for other construction projects for planning, funding, design, and construction. Localities and metropolitan planning organizations will be instrumental in identifying and prioritizing these independent construction projects.

3.2 Access-Controlled Corridors

Access-controlled corridors can create barriers to bicycle and pedestrian travel. Bicycling and walking may be accommodated within or adjacent to access-controlled corridors through the provision of facilities on parallel roadways or physically separated parallel facilities within the right-of-way. Crossings of such corridors must be provided to establish or maintain connectivity of bicycle and pedestrian accommodations.

3.3 Additional Improvement Opportunities

Bicycle and pedestrian accommodations will be considered in other types of projects. Non-construction activities can be used to improve accommodations for bicycling and walking. In addition, any project that affects or could affect the usability of an existing bicycle or pedestrian accommodation within the highway system must be consistent with state and federal laws.

3.3.1 Operation and Maintenance Activities

Bicycling and walking should be considered in operational improvements, including hazard elimination projects and signal installation. Independent operational improvements for bicycling and walking, such as the installation of pedestrian signals, should be coordinated with local transportation and safety offices. The maintenance program will consider bicycling and walking so that completed activities will not hinder the movement of those choosing to use these travel modes. The maintenance program may produce facility changes that will enhance the environment for bicycling and walking, such as the addition of paved shoulders.

3.3.2 Long Distance Bicycle Routes

Long distance bicycle routes facilitate travel for bicyclists through the use of shared lanes, bike lanes, and shared use paths, as well as signage. All projects along a long distance route meeting the criteria for an American Association of State Highway and Transportation Officials

(AASHTO) or *Manual on Uniform Traffic Control Devices* (MUTCD) approved numbered bicycle route system should provide the necessary design features to facilitate bicycle travel. Independent construction projects and other activities can be utilized to make improvements for existing numbered bicycle routes. Consideration should be given to facilitating the development of other types of long distance routes.

3.3.3 Tourism and Economic Development

Bicycling and walking accommodations can serve as unique transportation links between historic, cultural, scenic, and recreational sites, providing support to tourism activities and resulting economic development. Projects along existing or planned tourism and recreation corridors should include bicycle and pedestrian accommodations. In addition, the development of independent projects to serve this type of tourism and economic development function should be considered and coordinated with economic development organizations at local, regional, and state levels, as well as with other related agencies. Projects must also address the need to provide safety and connectivity for existing and planned recreational trails, such as the Appalachian Trail, that intersect with the state's highway system.

3.4 Exceptions to the Provision of Accommodations

Bicycle and pedestrian accommodations should be provided except where one or more of the following conditions exist:

- scarcity of population, travel, and attractors, both existing and future, indicate an absence of need for such accommodations
- environmental or social impacts outweigh the need for these accommodations
- safety would be compromised
- total cost of bicycle and pedestrian accommodations to the appropriate system (i.e., interstate, primary, secondary, or urban system) would be excessively disproportionate to the need for the facility
- purpose and scope of the specific project do not facilitate the provision of such accommodations (e.g., projects for the Rural Rustic Road Program)
- bicycle and pedestrian travel is prohibited by state or federal laws

3.5 Decision Process

The project manager and local representatives will, based on the factors listed previously in this section, develop a recommendation on how and whether to accommodate bicyclists and pedestrians in a construction project prior to the public hearing. The district administrator should confirm this recommendation prior to the public hearing. Public involvement comments will be reviewed and incorporated into project development prior to the preparation of the design approval recommendation. When a locality is not in agreement with VDOT's position on how bicyclists and pedestrians will or will not be accommodated in a construction project, the locality can introduce a formal appeal by means of a resolution adopted by the local governing body. The resolution must be submitted to the district administrator to be reviewed and considered prior to the submission of the design approval recommendation to the chief engineer for program development. Local resolutions must be forwarded to the chief engineer for program development for consideration during the project design approval or to the Commonwealth

Transportation Board for consideration during location and design approval, if needed for a project. The resolution and supporting information related to the recommendation must be included in the project documentation.

The decisions made by VDOT and localities for the provision of bicycle and pedestrian travel must be consistent with state and federal laws regarding accommodations and access for bicycling and walking.

4. Discipline Participation in Project Development

VDOT will provide the leadership to implement this policy. Those involved in the planning, funding, design, construction, operation, and maintenance of the state's highways are responsible for effecting the guidance set forth in this policy. VDOT recognizes the need for interdisciplinary coordination to efficiently develop, operate, and maintain bicycle and pedestrian accommodations.

Procedures, guidelines, and best practices will be developed or revised to implement the provisions set forth in this policy. For example, objective criteria will be prepared to guide decisions on the restriction of bicycle and pedestrian use of access-controlled facilities. VDOT will work with localities, regional planning agencies, advisory committees, and other stakeholders to facilitate implementation and will offer training or other resource tools on planning, designing, operating, and maintaining bicycle and pedestrian accommodations.

4.1 Planning

VDOT will promote the inclusion of bicycle and pedestrian accommodations in transportation planning activities at local, regional, and statewide levels. These planning activities include, but are not limited to, corridor studies, small urban studies, regional plans, and the statewide multimodal long-range transportation plan. To carry out this task, VDOT will coordinate with local government agencies, regional planning agencies, and community stakeholder groups. In addition, VDOT will coordinate with the Virginia Department of Rail and Public Transportation (VDRPT) and local and regional transit providers to identify needs for bicycle and pedestrian access to public transportation services and facilities.

4.2 Funding

Highway construction funds can be used to build bicycle and pedestrian accommodations either concurrently with highway construction projects or as independent transportation projects. Both types of bicycle and pedestrian accommodation projects will be funded in the same manner as other highway construction projects for each system (i.e., interstate, primary, secondary, or urban). VDOT's participation in the development and construction of an independent project that is not associated with the interstate, primary, secondary, or urban systems will be determined through a negotiated agreement with the locality or localities involved.

Other state and federal funding sources eligible for the development of bicycle and pedestrian accommodations may be used, following program requirements established for these sources.

These sources include, but are not limited to, programs for highway safety, enhancement, air quality, congestion relief, and special access.

VDOT may enter into agreements with localities or other entities in order to pursue alternate funding to develop bicycle and pedestrian accommodations, so long as the agreements are consistent with state and federal laws.

4.3 Design and Construction

VDOT will work with localities to select and design accommodations, taking into consideration community needs, safety, and unique environmental and aesthetic characteristics as they relate to specific projects. The selection of the specific accommodations to be used for a project will be based on the application of appropriate planning, design, and engineering principles. The accommodations will be designed and built, or installed, using guidance from VDOT and AASHTO publications, the MUTCD, and the *Americans with Disabilities Act Accessibility Guidelines (ADAAG).* Methods for providing flexibility within safe design parameters, such as context sensitive solutions and design, will be considered.

During the preparation of an environmental impact statement (EIS), VDOT will consider the current and anticipated future use of the affected facilities by bicyclists and pedestrians, the potential impacts of the alternatives on bicycle and pedestrian travel, and proposed measures, if any, to avoid or reduce adverse impacts to the use of these facilities by bicyclists and pedestrians.

During project design VDOT will coordinate with VDRPT to address bicyclist and pedestrian access to existing and planned transit connections.

Requests for exceptions to design criteria must be submitted in accordance with VDOT's design exception review process. The approval of exceptions will be decided by the Federal Highway Administration or VDOT's Chief Engineer for Program Development.

VDOT will ensure that accommodations for bicycling and walking are built in accordance with design plans and VDOT's construction standards and specifications.

4.4 Operations

VDOT will consider methods of accommodating bicycling and walking along existing roads through operational changes, such as traffic calming and crosswalk marking, where appropriate and feasible.

VDOT will work with VDRPT and local and regional transit providers to identify the need for ancillary facilities, such as shelters and bike racks on buses, that support bicycling and walking to transit connections.

VDOT will enforce the requirements for the continuance of bicycle and pedestrian traffic in work zones, especially in areas at or leading to transit stops, and in facility replacements in accordance with the MUTCD, *VDOT Work Area Protection Manual*, and *VDOT Land Use*

Permit Manual when construction, utility, or maintenance work, either by VDOT or other entities, affects bicycle and pedestrian accommodations.

VDOT will continue to research and implement technologies that could be used to improve the safety and mobility of bicyclists and pedestrians in Virginia's transportation network, such as signal detection systems for bicycles and in-pavement crosswalk lights.

4.5 Maintenance

VDOT will maintain bicycle and pedestrian accommodations as necessary to keep the accommodations usable and accessible in accordance with state and federal laws and VDOT's asset management policy. Maintenance of bike lanes and paved shoulders will include repair, replacement, and clearance of debris. As these facilities are an integral part of the pavement structure, snow and ice control will be performed on these facilities.

For sidewalks, shared use paths, and bicycle paths built within department right-of-way, built to department standards, and accepted for maintenance, VDOT will maintain these bicycle and pedestrian accommodations through replacement and repair. VDOT will not provide snow or ice removal for sidewalks and shared use paths. The execution of agreements between VDOT and localities for maintenance of such facilities shall not be precluded under this policy.

5. Effective Date

This policy becomes effect upon its adoption by the Commonwealth Transportation Board on March 18, 2004, and will apply to projects that reach the scoping phase after its adoption.

This policy shall supersede all current department policies and procedures related to bicycle and pedestrian accommodations. VDOT will develop or revise procedures, guidelines, and best practices to support and implement the provisions set forth in this policy, and future departmental policies and procedural documents shall comply with the provisions set forth in this policy.

VDOT Tips for Safe Bicycling

- Be a responsible bicyclist - obey all traffic control devices and use proper hand signals.
- Always ride with the flow of traffic.
- Dress safely - wear a helmet, wear bright colored clothing, and secure loose pant legs.
- Ride defensively - anticipate the actions of other road users and watch for road hazards.
- Pass vehicles with extreme care - turning vehicles may not see you.
- Be aware of motor vehicle blind spots whether while riding or when stopped at an intersection.
- Maximize your visibility at night - wear reflective clothing and apply reflective tape to your bicycle.
- Walk your bicycle when you get into traffic situations beyond your cycling abilities.
- Exercise great caution when riding in bus traffic - watch out for buses pulling to and from curbs and passengers getting on and off buses.
- Park your bicycle so you do not block sidewalks, handicap and building accesses, or emergency drives.
- Lock your bicycle - secure both wheels and the frame to a stationary object using a sturdy lock.
- Register or license your bicycle if required or provided by your community.

Source: Virginia Department of Transportation, http://www.virginiadot.org/programs/bk-laws.asp#Tips

EXISTING POST OFFICE

POTENTIAL IMPROVEMENTS

SUGGESTIONS FOR STREETSCAPE IMPROVEMENTS/DOWNTOWN CHARACTER ENHANCEMENT:

-Decorative signage
-Benches
-Decorative street lights
-Pedestrian crosswalks
-Landscaping
-Reduction of clutter

Document 17

Conceptual Renderings of Façade Improvements to Downtown Vinton


VINTON BUSINESS CENTER
VINTON BUSINESS CENTER


VINTON
BUSINESS
CENTER
VINTON
BUSINESS
CENTER

TOWN OF VINTON

311 SOUTH POLLARD STREET
VINTON, VIRGINIA 24179

PHONE (540) 983-0607
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Office of the Town Manager

September 14, 2009

NEWS RELEASE
FOR IMMEDIATE RELEASE
FOR MORE INFORMATION, CONTACT: Mike Kennedy, Public Works Director
(540) 983-0647

Town Of Vinton Virginia, Walnut Avenue Speed Limit Change

Beginning on Monday 28 September 2009 the speed limit on the segment of Walnut Avenue from Third Street to the Roanoke City Line will be reduced from 35 miles per hour to 25 miles per hour. This speed limit reduction will be made in both the eastbound and westbound directions. Signs warning motorists of an impending change to the posted speed limit were installed along the road segment on 11 September.

This change is being made as a public safety measure since Walnut Avenue is not designed for a 35 mile per hour speed. Travel lane width, shoulders, clearances, and access points are all considered in setting speed limits. Also, the remainder of the Walnut Avenue corridor is posted at 25 miles per hour and the speed limit is 25 miles per hour on Wise Avenue in adjacent Roanoke City.

This reduction in speed limit was reviewed by the Town's Highway Safety Commission, which supported the change. The Vinton Town Council endorsed the Commission's recommendation. Additionally, consultation with Virginia Department of Transportation engineers confirmed that 25 miles per hour is the appropriate, safe speed limit for this segment of Walnut Avenue.

Motorists are advised to be alert, to drive with care, and to observe the new posted speed limit when it becomes effective Monday 28 September 2009.

VINTON AREA CORRIDORS PLAN: Schedule of Implementation Strategies

IMPLEMENTATION STRATEGY	RESPONSIBLE PARTY(IES)	TIMETABLE		
		TIER 1	TIER 2	TIER 3
		0-5 yrs	6-10 yrs	10+ yrs
Commercial Matching Grant Program				
Review the Program's criteria and determine appropriate revisions	RC, TOV	■		
Expand the boundaries of the program along Washington Avenue, Virginia Avenue and Hardy Road	RC, TOV	■	■	
Downtown Façade Program				
Review the Program's criteria and determine appropriate revisions	TOV, RC	■		
Expand the boundaries of the program in accordance with the Downtown Revitalization study area	TOV	■		
Entrance/Study Corridors				
Develop and adopt an Entrance Corridor Overlay District	RC, TOV	■		
Improve and install gateway signs and landscaping at jurisdictional lines	RC, TOV	■		
Develop Design Guidelines for study corridors	RC, TOV	■		
Greenways				
Construct segment of Wolf Creek Greenway to Roanoke River	RC, TOV	■	■	
Construct trails in the Vinton Business Center and evaluate connections to Blue Ridge Parkway	RC, TOV, BRP	■	■	
Historic Resources				
Conduct assessment to identify structures of historical significance within the Town of Vinton and Roanoke County	RC, TOV, DHR	■		
Explore development of a Historical Overlay District in the Town of Vinton	TOV	■		
Maintenance Programs				
Ensure the maintenance of landscaping and other streetscape improvements throughout the study area	B, PO, RC, TOV, VDOT	■	■	■
Pedestrian Amenities				
Improve the pedestrian accommodations along the study corridors	RC, TOV, VDOT	■	■	
Evaluate need for new pedestrian accommodations along the study corridors		■	■	
Streetscape Improvements				
Construct and install streetscape improvements (sidewalks, lighting, landscaping, signage, street furniture, etc.) along the study corridors	B, PO, RC, TOV, VDOT	■	■	■
Implement Adopt-A-Highway and Adopt-A-Spot Programs	RC, TOV,VDOT	■		
Transportation Improvements				
Incorporate bicycle lanes along study corridors where feasible	RC, TOV, VDOT	■	■	■
Extend existing bicycle lanes on Mountain View Road to Washington Avenue	TOV		■	■
Expand transit to East Roanoke County, when & where feasible	RC	■	■	
Improve existing transit routes and amenities in the Town of Vinton	TOV	■	■	
Conduct access management study along study corridors	RC, TOV, VDOT	■		
Evaluate parking needs in Downtown Vinton	TOV	■		
Hardy Road Six-Year Road Widening Improvement Project	RC, VDOT		■	■
Walnut Avenue Six-Year Improvement Project, Phase I (Low Water Bridge)	TOV, VDOT	■		
Walnut Avenue Six-Year Improvement Project, Phase II (8th St. Intersection)	TOV, VDOT		■	
Walnut Avenue Six-Year Improvement Project, Phase III (5th and 1st Streets)	TOV,VDOT			■
Extend east bound turn lane into William Byrd Middle and High School on Washington Avenue (Route 24)	RC, VDOT	■		

IMPLEMENTATION STRATEGY	RESPONSIBLE PARTY(IES)	TIMETABLE		
		TIER 1	TIER 2	TIER 3
		0-5 yrs	6-10 yrs	10+
Evaluate intersection of Feather Road and Washington Avenue for safety improvements	RC, VDOT	■	■	
Wayfinding Signage				
Implement recommendations in *Vinton Area Wayfinding and Public Signage Study*	RC, TOV	■		
Viewshed Conservation				
Identify critical viewsheds from and within the study area	RC, TOV, BRP	■		
Encourage conservation easements on private lands and acquire scenic easements through grant funding to protect critical viewsheds	RC, TOV, PO, BRP	■	■	■
Community Facilities				
Determine need for expansion, renovation, or reconstruction of the Vinton Library	RC, TOV	■	■	■
Conduct feasibility study to identify alternative uses for the Old William Byrd High School	RC, TOV	■		
Take appropriate measures to address capacity and conditions of water, sewer and stormwater infrastructure within the Town of Vinton and East Roanoke County for future development and redevelopment	RC, TOV, VDOT	■	■	■
Renovate the Vinton Farmers' Market for year-round use	TOV	■		
Evaluate potential safety improvements related to access and parking issues at the Vinton Post Office	TOV	■		
Economic Development				
Expand the Economic Opportunity Areas, as identified in the Roanoke County and Town of Vinton Comprehensive Plans, along Hardy Road, Virginia Avenue and Washington Avenue	RC, TOV	■	■	
To ensure economic feasibility of the Vinton Business Center, reevaluate the allowable land uses approved in the Master Plan	RC, TOV	■		
Construct an identification sign at the entrance of the Vinton Business Center	RC, TOV	■		
Community Development & Downtown Revitalization				
Implementation of the Virginia Department of Housing and Community Development Block Grant	TOV, DHCD	■	■	
Expand the Central Business Zoning District to properties included within the Downtown Revitalization study area	TOV	■		
Take appropriate measures to qualify the Town of Vinton as a Main Street Community	TOV	■	■	
Conduct feasibility study for the Vinton Motors Properties located at the intersection of South Pollard Street and Washington Avenue	TOV, VHDA	■		
Evaluate the redevelopment potential of the River Park Shopping Center for a planned commercial development	TOV	■	■	

Acronyms:

B – Businesses
BRP – Blue Ridge Parkway/National Park Service
DHCD – Virginia Department of Housing and Community Development
DHR – Virginia Department of Historic Resources
PO – Property Owners
RC – Roanoke County
TOV – Town of Vinton
VDOT – Virginia Department of Transportation
VHDA – Virginia Housing Development Authority

Roanoke County Comprehensive Plan
Future Land Use Guide

Future Land Use is one component of Roanoke County Comprehensive Plan. The Future Land Use Guide is a policy framework for future land use decisions within the County. Used in conjunction with the appropriate future land use map, this Guide serves as a reference for citizens on the most desirable location for future land use activities throughout the County.

Future Land Use Designations should be used by Roanoke County citizens and property owners when evaluating alternative uses for their land and will be used by Roanoke County staff, Planning Commission and Board of Supervisors in the evaluation of requested land use amendments.

Future Land Use Designations

The following designations are used to identify areas around the county where similar land use activities occur. The types of land uses that are desirable within each designation are also described.

This section also includes **land use determinants** - factors that are used to evaluate requested changes to the future land use maps. The careful examination of these factors will determine which land use designation in which a piece of land should be.

Conservation

A future land use area of particular environmental sensitivity due to topography, existence of unique land characteristics, conservation/open space/greenway easements, soil types or location with respect to other State or Federally preserved lands. Typical resources would include wetlands, ridgelines, mountainsides, scenic views from the Blue Ridge Parkway and Appalachian Trail, identified greenway corridors, productive agricultural lands, historical and cultural resources and threatened or endangered species habitats.

Land Use Types

Agricultural Production - The production of crops, plants, vines, trees, livestock, poultry and eggs and associated services such as soil and crop preparation, landscape and horticultural care.

Forest and Wood Products - Tree farms, forest nurseries and reforestation services.

Parks - Large regional park facilities that are designed and developed to preserve the environmentally sensitive nature of the land.

Public Lands - Includes land that is owned by a public entity but is not an official park. Examples would be Haven's Wildlife Management Area, Spring Hollow Reservoir,

Carvin's Cove watershed, Appalachian Trail, Blue Ridge Parkway, Forest Service lands and publicly owned land on Green Ridge Mountain.

Conservation Easements - Includes private lands that are protected by a conservation easement (includes scenic, agricultural, greenway and open space easements) held either by a private land trust or a State agency.

Rural Residential - Very limited, low density single-family homes generally averaging a gross density of one unit per 10 acres. Cluster developments are encouraged.

Land Use Determinants

Existing Land Use Pattern - Locations where unique and important natural, agricultural, historical and cultural resources exist that deserve to have the highest level of protection.

Resource Protection - Locations where valuable and irreplaceable resources such as open space, public water supply impoundments, rivers, streams, lakes, productive agricultural land, woodlands, critical slopes, ridgelines, historical and archeological sites and unique natural areas exist.

Access - Locations that are accessible by existing improved or unimproved rural roads.

Rural Sector - Locations not served by urban services.

Rural Preserve

A future land use area of mostly undeveloped, outlying lands. These rural regions are generally stable and require a high degree of protection to preserve agricultural, forestal, recreational, and remote rural residential areas.

Land Use Types

Agricultural Production - The production of crops, plants, vines, trees, livestock, poultry and eggs.

Agricultural Services - Services that support agricultural production such as soil and crop preparation, veterinary services and landscape and horticultural care.

Forest and Wood Products - Tree farms, forest nurseries and reforestation services.

Parks and Outdoor Recreation Facilities - Large regional parks and other recreation facilities that are designed to preserve environmentally sensitive lands and protect them from more intense land uses.

Rural Residential - Single-family residential generally averaging a gross density of one unit per three acres. Cluster developments are encouraged.

Rural Institutional - Limited intensity uses such as religious assembly facilities and clubs serving the local rural population base.

Mining and Extraction Operations - Those uses that locate according to the availability of natural resources. There are strict limitations on these industries in the Rural Preserve designation due to potentially harmful effects on housing, farming and resource protection and conservation areas.

Land Use Determinants

Existing Land Use Pattern - Locations where agricultural, recreational, and forestal uses are predominant and are encouraged to expand.

Existing Zoning - Locations where agricultural zoning is in effect.

Rural Residential And Institutional Areas - Locations where limited, very low density residential and institutional uses are allowed.

Resource Protection - Locations where valuable and irreplaceable resources such as open space, public water supply impoundments, rivers, streams, lakes, productive agricultural land, woodlands, critical slopes, ridgelines, historical and archeological sites and unique natural areas exist.

Access - Locations that are accessible by existing improved or unimproved rural roads and, to a lesser extent, rural arterial highways.

Rural Sector - Locations outside the urban service area.

Rural Village

A future land use area where limited development activity has historically occurred and where suburban or urban development patterns are discouraged. These rural community and farming areas are generally in between the intense suburban development patterns already established in the County and the designated Conservation and Rural Preserve areas.

Land Use Types

Rural Housing - Low-density single-family residential generally averaging one unit per acre. Cluster developments are encouraged.

Rural Community Centers - Nonresidential uses which serve rural residents such as outdoor recreation and park facilities, religious assembly facilities, schools, fire and rescue stations and clubs.

Agricultural Production and Services - Livestock, orchards and crop productions, landscape and horticultural services, veterinary services, farm labor and farm management services. Generally including all activities that support land based uses.

Forest and Wood Products - Includes the operation of timber tracts, tree farms, forest nurseries and the gathering of forest products. Excludes sawmills and large-scale timber cutting operations.

Small Scale Commercial - Limited commercial operations that serve the local, rural community. Included would be personal services and retail convenience stores.

Rural Parks and Outdoor Recreation - Parks and recreational facilities that are designed to preserve the environmentally sensitive character of the rural landscape.

Land Use Determinants

Existing Land Use Pattern - Locations where very low density residential, institutional and limited agricultural uses have developed.

Existing Zoning - Locations where rural residential and agricultural zoning have been established.

Rural Residential Expansion Areas - Locations where small scale, very low density rural residential housing is desirable.

Agricultural - Locations where existing agricultural uses and activities are present.

Access - Locations served by an existing improved rural road and, to a lesser extent, rural arterial highways.

Rural Sector - Locations outside the urban service area.

Village Center

A future land use area which serves as the commercial and institutional focal point of surrounding rural residential and farming establishments. Here, the highest level of rural land use activities may occur. By nature, the majority of commercial and institutional activities in Village Center areas are designed, scaled and marketed to best serve the product and service needs of the residents from the surrounding rural areas.

Land Use Types

Agricultural Production and Services - Services which support the surrounding agricultural community.

Parks and Outdoor Recreation - Small-scale facilities that serve the rural neighborhoods or are used for community purposes. These recreation facilities should be linked to the residential areas by greenways, bike trails and pedestrian paths.

Eco-tourism - Facilities that serve a niche market and are often outdoor, sports oriented. Designed in an environmentally sensitive way to protect the valuable natural resources of the rural areas.

Residential - Development at relatively high rural densities, generally not exceeding 6 units per acre and including single-family and two-family housing.

Rural Community Centers - Includes institutional uses such as schools, religious assembly facilities, clubs and meeting rooms that serve the needs of the surrounding rural village residents.

Convenience Retail - Establishments that provide retail goods and services to the surrounding rural village residents.

Rural Highway Retail - Small-scale, rural establishments that provide retail goods and services to the passing motorists. These uses should be clustered in a village design that complements the rural surroundings.

Land Use Determinants

Existing Land Use Pattern - Locations where commercial, institutional and low- to middle-density residential uses have developed and that are generally surrounded by rural residential settlements.

Existing Zoning - Locations where commercial zoning has been established.

Access - Locations that are usually situated at a crossroad and are served by a rural arterial.

Rural Sector - Locations outside the urban service area.

Neighborhood Conservation

A future land use area where established single-family neighborhoods are delineated and the conservation of the existing development pattern is encouraged.

Land Use Types

Single-Family Residential - Attached and detached housing at a reasonable density that is not significantly higher than the existing neighborhood. Infill lots or community re-development should be designed to be sensitive to the surrounding neighborhood but can be at reasonably higher density. New single-family residential developments should

incorporate greenways and bike and pedestrian trails. Cluster developments are encouraged.

Neighborhood Institutional Centers - Uses that serve the neighborhood residents including parks, schools, religious assembly facilities, recreational and park facilities, community meeting areas and clubs. These facilities should be linked to the residential areas by greenways, bike trails and pedestrian paths.

Neighborhood Commercial - Low impact services to serve the local neighborhood that are consistent with the Community Plan design guidelines.

Land Use Determinants

Existing Land Use Pattern - Locations where limited density residential subdivisions have been platted and developed.

Existing Zoning - Locations where limited density residential zoning has been established.

Expansion Areas - Locations where the expansion of the existing development pattern is logical.

Infill Development - Locations where infill areas complement the surrounding development pattern.

Access - Locations served by a local street system.

Urban Sector - Locations served by urban services.

Development

A future land use area where most new neighborhood development will occur, including large-scale planned developments which mix residential with retail and office uses. Innovation in housing design and environmental sensitivity in site development is a key objective. Clustered developments are encouraged as is the use of greenways and bike and pedestrian trails.

Land Use Types

Conventional Residential - Single-family developments in conventional lots. Includes attached, detached and zero-lot line housing options. Greenways and bike and pedestrian trails are encouraged.

Cluster Residential - Single family developments with similar gross density of conventional subdivisions but individual lot sizes may be reduced to accommodate the clustering of housing while allocating common open space. Includes attached, detached

and zero-lot line housing options. Greenways and bike and pedestrian trails are encouraged.

Multi-family - Developments of 6-12 units per acre. Clustering is encouraged as are greenways and bike and pedestrian trails.
Planned Residential Development - Mixed housing types at a gross density range of 4-8 units per acre. Includes conventional housing, cluster housing, zero lot-line housing, townhouses and garden apartments. Greenways and bike and pedestrian trails are encouraged.

Planned Community Development - Planned residential development mixed with office parks, neighborhood shopping centers and supporting retail development. The majority of the development is residential with a maximum limit set on the retail land. Greenways and bike and pedestrian trails are encouraged.

Community Activity Centers - Facilities which serve the neighboring residents including parks, schools, religious assembly facilities, parks and recreational facilities and community clubs and meeting areas. These activity centers should be linked to residential areas by greenways, bike and pedestrian trails.

Land Use Determinants

Public Facilities Capacity - Locations where public facilities are adequate to handle the increased population concentration. This includes schools, parks and recreation facilities and fire and rescue facilities.

Utility Availability - Locations where water and sewer services exist or are scheduled to serve the area.

Environmental Capacity - Locations where natural land features, including topography, provide optimum opportunity for urban residential development.

Access - Locations which have or can provide direct access to a major street.

Urban Sector - Locations served by urban services.

Transition

A future land use area that encourages the orderly development of highway frontage parcels. Transition areas generally serve as developed buffers between highways and nearby or adjacent lower intensity development. Intense retail and highway oriented commercial uses are discouraged in transition areas, which are more suitable for office, institutional and small-scale, coordinated retail uses.

Land Use Types

Office and Institutional - Planned office parks and independent facilities in park-like surroundings are encouraged. A high degree of architectural design and environmentally sensitive site design is encouraged.

Retail - Small-scale planned and clustered retail uses.

Multifamily Residential - Garden apartments at a density of 12 to 24 units per acre.

Single-Family Attached Residential - Planned townhouse communities of 6 or more units per acre.

Parks - Public and private recreational facilities. These facilities should be linked to residential areas by greenways, bike and pedestrian trails.

Land Use Determinants

Existing Land Use Pattern - Locations where limited commercial uses exist.

Existing Zoning - Locations where commercial zoning exists.

Access - Locations where properties have direct frontage and access to an arterial or major collector street.

Surrounding Land Use - Locations which serve as a logical buffer strip between conflicting land use patterns.

Orientation - Locations which are physically oriented toward the major street.

Urban Sector - Locations served by urban services.

Core

A future land use area where high intensity urban development is encouraged. Land uses within core areas may parallel the central business districts of Roanoke, Salem and Vinton. Core areas may also be appropriate for larger-scale highway-oriented retail uses and regionally-based shopping facilities. Due to limited availability, areas designated as Core are not appropriate for tax-exempt facilities.

Land Use Types

General Retail Shops and Personal Services - Planned shopping centers and clustered retail uses are encouraged. These centers should incorporate greenways, bike and pedestrian trails into their designs and link them to surrounding neighborhoods.

Office and Institutional Uses - Planned developments are encouraged.

Limited Industrial Uses - Planned uses in areas designated as economic opportunity areas.

Land Use Determinants

Existing Land Use Pattern - Locations where commercial uses have been developed or will likely be developed.

Existing Zoning - Locations where commercial zoning exists.

Access - Locations served by an arterial street system.

Population Center - Locations within close proximity to the projected population concentrations.

Urban Sector - Locations served by urban services.

Principal Industrial

A future land use area where a variety of industry types are encouraged to locate. Principal Industrial areas are existing and planned regional employment centers and are distributed throughout the county, convenient to major residential areas and suitable highway access. Due to limited availability, areas designated as Principal Industrial are not appropriate for tax-exempt facilities.

Land Use Types

Agricultural - Industries which involve the manufacturing, storage, marketing and wholesaling of agricultural products. These industries may also be located outside of the Principal Industrial areas, within the rural designations, where agricultural skills may be found.

Small Industries and Custom Manufacturing - These industries typically serve a local market and may involve the on-site production of goods by hand manufacturing.

Mining and Extraction - These facilities locate according to the availability of natural resources.

Industrial - Conventional freestanding industrial uses, warehouses, wholesalers, storage yards.

Industrial Parks - Large tracts of land that are subdivided, developed and designed according to a unified plan. These parks are employment centers and may include mixed land uses including supporting retail services. These types of industries are encouraged to develop in Principal Industrial areas. Planned industrial parks should incorporate

greenways, bike and pedestrian paths into their designs and link these features to surrounding neighborhoods where appropriate.

Land Use Determinants

Existing Land Use Pattern - Locations where industry has historically developed.

Existing Zoning - Locations zoned industrial.

Economic Opportunity Areas - Locations identified by Roanoke County as an economic opportunity area.

Employment Centers - Locations where labor-intensive industries exist.

Topography - Locations that can be developed in an environmentally sensitive manner and that are outside of the designated floodplain.

Resource Protection - Locations that can be developed in such a way as not to threaten valuable natural resources.

Water And Sewer Service And Supply - Locations where water and sewer service exist or can be provided in the near future.

Access - Locations served by an adequate public street system that does not direct traffic through existing residential neighborhoods.

Transportation Centers - Locations within close proximity to rail, airport and major street systems.

Urban Sector - Locations served by, or in close proximity to urban services.

Suburban Village

A future land use area that represents the focus of surrounding, generally lower intensity commercial, institutional and residential growth for a broad mixture of surrounding development. New neighborhood development occurs in close proximity to institutional, office and retail uses. Cluster developments and greenways are encouraged in conjunction with formerly rural land uses focusing on environmental and building and site design innovation.

Land Use Types

Agricultural Production and Services - Services supporting the remaining agricultural community such as farm management, horticultural and veterinary services.

Parks and Outdoor Recreation/Ecotourism - Public and private recreation from small-scale community based facilities to regional attractions with greenway linkages as

appropriate. Also encouraged are ecotourism businesses that supply a niche market, usually outdoor oriented.

Residential - Suburban densities (up to six units per acre) of single and two-family housing, attached, detached, zero-lot line, cluster, low density multi-family, townhouses and garden apartments.

Community Activity Centers - Public and private facilities serving surrounding residents including schools, religious assembly centers, community clubs and meetings areas with linkages to residential areas by greenways, bike and pedestrian paths wherever possible.

Commercial - Convenience retail establishments supplying limited goods and services to village residents. Planned small-scale or cluster retail such as local target area shopping centers with specialty businesses and personal services. Also found are small highway retail establishments providing goods and services to passing motorists. Such facilities should be designed to complement the suburban surroundings.

Land Use Determinants

Existing Land Use Pattern - Locations where low- to middle-density residential, institutional and commercial uses are established, connected to existing, sometimes transitional rural residential, agricultural and open space uses.

Rural/Suburban Sector - Locations on the fringe of the urban service area.

Access - Locations served by an arterial highway and a well-define secondary street.

Environmental Capacity - Locations where physical land characteristics, especially topography, have and continue to provide the opportunity for suburban development.

Utility Availability - Locations where public water and sewer are in close proximity to the urban service area and expansion of these services is likely.

Economic Opportunity

A future land use area that would guide a mix of commercial, tourist-related and limited industrial uses related specifically to destination resort facilities. Economic Opportunity areas are applied to lands owned or leased by the Virginia Recreational Facilities Authority or Virginia Living Histories, Inc., and adjacent lands that could potentially be expansion areas for the facilities. The designation discourages uses that may conflict with or detract from the resort activities.

Land Use Types

Family Destination Resort - Various agricultural, civic, office, commercial, and limited industrial uses as defined in the Explore Park zoning district, and associated with the operation of resort facilities. A high degree of architectural design and creative site design is encouraged.

Existing Land Use and Zoning - For lands designated Economic Opportunity that are outside the resort property, uses permitted in the existing zoning districts are encouraged until such time that rezoning to Explore Park zoning district is sought. Rezoning to other zoning districts should be carefully examined for compatibility with the resort activities.

Land Use Determinants

Existing Land Use Pattern - Locations where Explore Park development has occurred or is planned.

Existing Zoning - Locations where Explore Park zoning exists.

Expansion Areas - Locations where the Explore Park zoning could potentially expand.

Access - Locations served by the Blue Ridge Parkway/Roanoke River Parkway for visitor access, and Rutrough Road and surrounding connecting public streets for public safety and delivery service access.

Topography - Locations that can be developed in an environmentally sensitive manner and that are outside of the designated floodplain.

Urban Services - Locations where public water and sanitary sewer exist or are planned.

University

A future land use area that would guide a mix of educational, institutional, limited commercial, recreational, and open space uses related to a college or university campus. University areas are applied to lands owned by Hollins University and integral/contiguous to the central campus. Other lands owned by the University may be included in other future land use designations that are more appropriate to their existing or future land uses. Proposed land uses adjacent or in close proximity to the University designated areas should be encouraged to compliment the Hollins University architectural and land design themes, and university activities.

Land Use Types

University Campus - Various agricultural, open space, recreational, civic, office, and limited commercial uses associated with the operation of a college or university. A high degree of architectural design and creative site design is encouraged. Historic structures should be preserved and used as a design theme for future development.

Special Events And Recreation - Various school-sponsored and community-based sports and recreational opportunities.

Land Use Determinants

Existing Land Use Pattern - Locations where Hollins University development has occurred or is planned.

Existing Zoning - Locations where existing zoning permits educational facilities

Surrounding Land Use - Locations where surrounding land uses are complimentary to, and compatible with a university campus.

Historic Areas - The central core of Hollins University contains (number) buildings on the National Register of Historic Places, and several other structures that could be designated on the Historic Register.

Access - Locations served by an arterial street system.

Topography - Locations that can be developed in an environmentally sensitive manner and that are outside of the designated floodplain.

Urban Services - Locations where public water and sanitary sewer exist or are planned.

Special Events - Locations that have adequate physical facilities for various school and community special events.

CHAPTER V

Land Use and Transportation Plan

THE LAND USE AND TRANSPORTATION PLAN

The Future Land Use and Transportation Plan, illustrated on the following page, depicts a generalized land use concept for the Vinton Planning Area. The purpose of the plan is to encourage an orderly, harmonious arrangement of land that will meet the present and future needs of the Town. The Plan is essentially an expansion of the existing land use pattern that has developed in and around the Town for over 100 years. Based on anticipated needs, land is identified for various forms of development.

Components of the Land Use and Transportation Plan strongly influence each other. For this reason they are shown together on the map. In addition, recommendations for community facilities are indicated in generalized fashion for the Plan. The Future Land Use Plan has been prepared for a 20-year period (2004-2024), with an emphasis on the immediate decade ahead. The Plan is intended to be flexible, and is to be construed broadly rather than precisely as might be implied by the detailed mapping. Conditions and circumstances will inevitably change, and future land use decisions should adapt accordingly.

Recommended Land Use Categories

The categories prescribed by the Plan are organized under four (4) major land use types. These include the following:

RESIDENTIAL
Low-Density Residential
Medium-Density Residential
High-Density Residential

COMMERCIAL
General Commercial
Residential Business
Retail/Service Commercial

INDUSTRIAL
Light Industrial
Heavy Industrial

PUBLIC/OPEN SPACE USES
Community Facilities
Conservation/Open Space
Parks and Recreation

It should be noted that land use categories are used in the Land Use Plan as well as the Zoning Ordinance. Categories in the Land Use Plan are more general indications of what the community would like to see in the future. Zoning categories are more detailed and site-specific, and have the power of law. The categories set forth in the Land Use Plan, however, are used as a guide for future rezoning and review of rezoning requests.

Residential Uses

Three (3) types of residential areas are proposed based on housing type and density. These include low, medium, and high-density areas.

1. **Low-Density Residential (1-5 du/acre)**
   Neighborhoods or areas intended for detached, single-family development only. A maximum density of four (4) dwelling units per acre is generally permitted. Within this category, the zoning ordinance should specify density requirements associated with the availability of public utilities. Higher density types of residential use are not encouraged.

2. **Medium-Density Residential (up to 8 du/acre)**
   Neighborhoods or areas which allow a greater density and variation of housing types. Permitted uses include one and two-family dwellings, townhouses, small group homes (maximum 8 persons), and other similar living arrangements. A maximum of eight dwelling units per acre is generally permitted. Public water and sewer must be available to serve medium density areas.

3. **High-Density Residential (up to 20 du/acre)**
   Areas set aside for high-density residential uses, including apartment buildings, assisted-living facilities (elderly/nursing homes) and other large-scale forms of group housing or multi-family development. Permits development of multi-family housing up to twenty units per acre.

Designated Areas of Residential Use

The general extent and location of the three residential districts are indicated on the Future Land Use Map. The primary goal of the Land Use Plan is to maintain existing patterns of residential development throughout the Vinton planning area while protecting the older traditional neighborhoods within the Town. A second strategy is to concentrate residential development in compact growth areas sited in or near the Town's infrastructure. This will help minimize costs for public services and preserve open space.

Low-Density Residential Use

Low-density residential use is designated for established single-family areas, as well as nearby vacant areas where similar development is expected to occur. Existing low-density areas are generally situated on larger lots (over ¼ acre) within several distinct suburban neighborhoods and subdivisions. In order to maintain stable homeownership and property values, these low-density areas should accommodate detached, single-family development only.

Within the corporate limits, opportunities for new large-lot development are confined primarily to continued build-out of subdivisions and vacant areas around the southeastern areas of Town. However this area has slopes in excess of 15% and the development cost to build houses on the land would be expensive as would public infrastructure. The Town should also ensure that existing built-up areas are adequately served before major service extensions are approved for subdivisions at the Town's borders.

Medium-Density Residential Use

The Plan designates medium-density residential use in some of the older neighborhoods. Smaller lot sizes in these areas generally prevail, as well as a pedestrian-oriented environment. The older neighborhoods contain a diverse housing stock and include homes of modest size as well as larger homes. Some of these older neighborhoods are in transition and experiencing a slight to moderate decline. Potential impacts on the surrounding neighborhoods should be carefully weighed before medium-density residential uses are approved.

High-Density Residential Use

The plan directs high-density residential uses to established multi-family areas in and around the Town. As a general rule, apartments and other large-scale group housing are best sited on arterial roads near major commercial centers. In these locations, high-volume circulation needs can be met without disrupting lower-density neighborhoods.

Commercial Uses

The Land Use Plan establishes three (3) principal types of commercial designations for the Vinton planning area. A detailed description of each designation is found below.

1. **General Commercial**
   Areas intended for general commercial development including retail stores, services, lodging/restaurants, offices, and shopping centers. General Commercial areas should be located on collector or arterial roads, have sufficient parking, and be adequately served by public utilities and services.

2. **Residential/Business**
   A mixed-use category to serve as a transition zone between residential areas and more intense commercial uses. This designation is intended to control the transition from residential use to office and low-intensity business use. Appropriate uses include, but are not limited to, childcare centers, medical, legal/financial, real estate, personal services, and other types of low-impact business uses. Conventional retail uses are discouraged. Businesses should generate a low volume of traffic, be controlled in terms of times of operation and be generally non-intrusive to neighboring residences.

3. **Retail/Service Commercial**
   The purpose of this category is to provide for an appropriate dynamic variety of uses in the downtown and proposed new town center for commercial, financial, professional, governmental, and cultural activities. This category is intended to promote an attractive, convenient, and relatively compact arrangement of uses and buildings with a strong pedestrian orientation. Signage and outdoor storage should be adequately controlled to promote an attractive and stable urban environment.

Designated Areas of Commercial Use

The general extent of areas designated for commercial use are indicated on the Future Land Use Map. The pattern of commercial uses in and around Vinton are well established, with three basic types occurring:

1. The traditional downtown
2. Urban business corridors and neighborhood centers
3. Suburban corridors and shopping centers

The Land Use Plan recognizes the different needs of each commercial setting, particularly with regard to parking, setbacks, signage, and land use requirements.

Downtown

The downtown area has been brought to the forefront throughout the planning process. Revitalization will enable downtown Vinton to best compete with newer business areas by capitalizing on its own unique attributes. These include historic storefronts, strong office/professional presence, and an attractive pedestrian environment. In order to better reinforce and build these assets, a historic district is recommended that overlays most of the downtown area to help encourage revitalization. This will preserve the urban character and scale of downtown.

It should be recognized that the downtown area is unlikely to recapture the high traffic, high volume retail activity now centered along the main commercial corridors. New large-scale commercial development should be directed to vacant land and infill sites near the community's existing shopping centers and commercial corridors. With the exception of several small infill sites, there is limited space for commercial expansion in most central areas of Vinton. Consequently, the Town must continue to promote the continued viability of its older commercial centers through emphasis on small business development, historic preservation, and other revitalization activities.

Corridors

Urban corridors in Vinton include Virginia Avenue/Route 24, Washington Avenue, Walnut Avenue, and on a smaller scale Hardy Road. Vinton's commercial centers excluding the downtown area are located along these roadways and serve to meet the community's general and neighborhood commercial needs. These corridor merchants, like those of the downtown district, must adapt and identify new market approaches. In the near term, this could include continued emphasis on serving convenience needs of adjoining neighborhoods and thru-traffic, while also exploring new business opportunities and venues. Possible new approaches could include infill office development, home occupations, and specialty service and retail development suited to an urban thoroughfare.

Industrial Uses

Industrial uses are a catalyst for other types of development. The Future Land Use Plan establishes two designations for industrial development:

1. **Light Industrial**
   Areas intended for clean, low-intensity types of industry that are sited in urban locations, adequately buffered from existing neighborhoods and near arterial roads. Includes warehousing, wholesaling, light manufacturing, and processing operations, as well as associated office development and support facilities.

2. **Heavy Industrial**
   Areas intended for a wide variety of industrial operations, including the production, processing, packaging or treatment of manufactured products and materials. These sites are sufficiently separated from existing population centers and can accommodate heavier types of industrial use. It is the intention of this category to preserve these lands for industrial use only and to exclude new residential or commercial development except for certain appropriate adjuncts to industrial operations.

Designated Areas of Industrial Use

General industrial development is centered in two primary locations: off Walnut Avenue and along Third Street. There are currently two (2) industries off Walnut Avenue along the railway, Southern States and Vinton Scrap Metal. Third Street contains approximately ten (10) industries along its industrial corridor with only a few developable sites remaining.

Public and Open Space Uses

Public and open space uses are classified into the following three (3) categories:

1. **Community Facilities**
   Areas which serve the functional, civic, and institutional needs of the Town and surrounding area; including schools, cemeteries, churches, fraternal organizations and clubs, and other municipal buildings and lands. Parks and open space areas dedicated primarily to active or passive recreational use, including both public and private facilities.

   The community facilities throughout Vinton are well distributed and adequately serve the public, with municipal functions being concentrated in the downtown area. Opportunities to further consolidate and reorganize the Town's municipal offices should continue to be explored over the next decade. In general, downtown or centralized locations should receive the greatest consideration.

2. **Greenways, Parks and Recreation**

Several additional parks are proposed for Vinton over the next twenty years. These are discussed in detail in the Economic and Community Development Plan. Proposed parks include:

1. Dogwood Green
2. Hampton Park
3. Industrial Park
4. New Town Park
5. Walnut Park
6. 3rd Street Park
7. Midway Tot Lot

These facilities will provide Vinton residents with gathering points throughout the Town for social and recreational purposes. The proposed greenways will interconnect these facilities to provide a seamless walking trail which can be found in the Economic and Community Development Plan.

3. **Conservation/Open Space (floodplains, steep slopes)**

Areas deemed generally unsuitable for conventional urban development due to the presence of 100-year floodplains, major stream corridors, and steep slopes (over 15% relief). This category includes environmentally sensitive areas where careful site planning and design is needed in order to mitigate potential for flood damage and soil erosion. Recommended uses include recreational activities, and facilities necessary for rendering public utility service. New development within the 100-year floodplain is discouraged.

Conservation areas include major stream and drainage corridors characterized by deeply incised landforms concentrated in the southeastern portion of Town. This area should be protected to preserve Vinton's last undeveloped ridgelines and to protect adjacent areas from excessive stormwater runoff.

ORDINANCE NO. 897

AT A PUBLIC HEARING OF THE VINTON TOWN COUNCIL HELD ON TUESDAY, FEBRUARY 16, 2010, AT 7:00 P.M., IN THE COUNCIL CHAMBERS OF THE VINTON MUNICIPAL BUILDING, 311 SOUTH POLLARD STREET, VINTON, VIRGINIA.

AN ORDINANCE to amend **Vinton Comprehensive Plan Ordinance No. 806** adopted on September 7, 2004, with amendments, and adopting by reference the **"Vinton Area Corridors Plan"**.

WHEREAS, pursuant to Section 15.2-2223 of the Code of Virginia, as amended, the Town of Vinton is required to "prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction", and

WHEREAS, the Town of Vinton's 2004-2024 Comprehensive Plan has a vision that incorporates the following central themes: 1. Gateway Entrance/Corridors Improvements, 2. Housing and Neighborhood Preservation, 3. Greenways/Parks and Recreation/Youth Centers, 4. Economic Development, and 5. Downtown Redevelopment, and

WHEREAS, in the fall 2008, the Vinton Town Council authorized a joint planning effort of Roanoke County Planning staff, Town of Vinton Planning staff, and the Roanoke Valley Alleghany Regional Commission for the study of six major corridors serving the Town of Vinton and East Roanoke County: Bypass Road, Hardy Road, South Pollard Street, Virginia Avenue, Walnut Avenue, and Washington Avenue, and

WHEREAS, during the planning process, two community meetings were held on January 29, and June 18, 2009, and

WHEREAS, the Vinton Planning Commission and Roanoke County Planning Commission conducted four work sessions and a joint staff-led tour of the Vinton study corridors to familiarize the Planning Commissioners with potential issues and opportunities during staff's inventory of the existing conditions, and

WHEREAS, during the joint public hearing of the Vinton Planning Commission and Roanoke County Planning Commission, held on December 7, 2009, both commissions recommended that each corresponding elected body, Vinton Town Council and Roanoke County Board of Supervisors, adopt the "Vinton Area Corridors Plan", and

WHEREAS, a work session was held on February 2, 2010, and a public hearing was held on February 16, 2010, before the Town Council, and the Town Council concurred with the Planning Commission's recommendation, and

THEREFORE, BE IT ORDAINED by the Council of the Town of Vinton, Virginia that the Vinton Comprehensive Plan be amended to adopt by reference the "Vinton Area Corridors Plan", as recommended by the Vinton Planning Commission and Roanoke County Planning

Commission.
Adopted on motion by Council Member Fidler, and seconded by Council Member Altice, with the following votes recorded:

AYES: Altice, Fidler, Hare, Nance and Mayor Grose

NAYS: None

APPROVED:

Bradley E. Grose, Mayor

ATTEST:

Darleen R. Bailey, Town Clerk

AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER ON TUESDAY, FEBRUARY 23, 2010

RESOLUTION 022310-9 APPROVING AND ADOPTING AN AMENDMENT TO THE COMPREHENSIVE PLAN FOR ROANOKE COUNTY, VIRGINIA, INCORPORATING THE VINTON AREA CORRIDORS PLAN

WHEREAS, on December 7, 2009, the Planning Commission held a public hearing on an amendment to the Comprehensive Plan incorporating the Vinton Area Corridors Plan, after advertisement and notice as required by Section 15.2-2204 of the Code of Virginia; and

WHEREAS, on February 23, 2010, the Board of Supervisors held a public hearing on an amendment to the Comprehensive Plan incorporating the Vinton Area Corridors Plan, after advertisement and notice as required by Section 15.2-2204 of the Code of Virginia; and

WHEREAS, Roanoke County, Virginia, has a long and successful history of community planning that has emphasized citizen involvement and participation; and

WHEREAS, Section 15.2-2223 of the Code of Virginia requires that the Planning Commission of every jurisdiction shall prepare and recommend a comprehensive plan for the physical development of their jurisdiction; and

WHEREAS, Section 15.2-2229 of the Code of Virginia provides for amendments to the comprehensive plan by the Planning Commission if so directed by the Board of Supervisors; and

WHEREAS, the Planning Commission has reviewed and recommended an amendment to the Comprehensive Plan for Roanoke County entitled “Vinton Area

Corridors Plan," and said plan has been prepared in accordance with Sections 15.2-2223, 2224, and 2229 of the Code of Virginia; and

NOW, THEREFORE, BE IT RESOVLED by the Board of Supervisors of Roanoke County, Virginia, as follows:

1. That the Comprehensive Plan is hereby amended by the adoption of the Vinton Area Corridors Plan, with future land use Scenario 4.

2. That this Resolution is effective from and after February 23, 2010.

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

AYES: Supervisors Moore, Altizer, Flora, Elswick, Church

NAYS: None

A COPY TESTE:

Becky R. Meador

Becky R. Meador
Clerk to the Board of Supervisors

cc: Philip Thompson, Deputy Director of Community Development
Lindsay Blankenship, Planner II