OCTOBER 2009

Report of the McLean Pedestrian Task Force to Dranesville District Supervisor John Foust











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The views expressed herein are the opinions of the McLean Pedestrian Task Force. The McLean Pedestrian Task Force was created to study problems related to pedestrian and bicycle safety and to propose ways to make McLean safer and more attractive for pedestrians and bicyclists. This report reflects the work of the McLean Pedestrian Task Force. The information in this report is not endorsed by Fairfax County, the Board of Supervisors, or County Staff.

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EXECUTIVE SUMMARY

Major Findings:

The two main pedestrian problems that filtered to the surface were related to the overall perception of safety and comfort, especially regarding the speed of vehicular traffic in downtown McLean, and accessibility: missing and poorly maintained sidewalks and inadequate crossings for a wide range of pedestrians. Similarly, bicyclists note the absence of a safe, cohesive system for getting into and around downtown McLean.

Not surprisingly, the main areas where these problems are found are along the major corridors in McLean: Old Dominion Drive, Chain Bridge Road, and Dolley Madison Boulevard.

The McLean Pedestrian Task Force identified the following critical needs:

- 1. Numerous sidewalks and curb cuts have to be completed and repaired in a unified manner to provide safe and comfortable access for pedestrians in downtown McLean.
- 2. Mid-block crosswalks on major downtown McLean roadways such as Old Dominion Drive and Chain Bridge Road have to be implemented to provide safe crossings for pedestrians.

- 3. The central intersection of Old Dominion Drive, Chain Bridge Road and Elm Street has to be overhauled to provide understandable crossing lights, crosswalks, lighting and sidewalk completion.
- 4. Speed limits in downtown McLean should be a uniform 25 mph and should be more effectively enforced.
- 5. Bike trails and lanes into and around downtown McLean need to be provided.
- 6. Current ideas in streetscape design and signage should be implemented in a consistent, cohesive fashion to realize safety goals and enhance the pedestrian and bicycling experience in McLean.

Next steps:

Many participants in the year long process to generate this report fear that it will gather dust on a shelf somewhere. The Task Force recommends that the Dranesville District Supervisor appoint an on-going advisory group either through the McLean Planning Committee (MPC) or the McLean Revitalization Corporation (MRC) charged with working with Fairfax County Staff (and private entities, where public-private partnerships are warranted) and monitoring the progress in implementing the recommendations of the Task Force. Or, the Supervisor could appoint a separate advisory group charged exclusively to implement the recommendations of this report.

FOREWORD

The impetus for this report is the current, dismal situation for pedestrians and bicyclists in downtown McLean. Radiating out from the central intersection of Old Dominion Drive and Chain Bridge Road, pedestrians and bicyclists encounter challenges at every stretch of the way in this car-oriented community.

McLean grew up as a retail destination for the surrounding residential subdivisions. Over time, downtown McLean evolved into a mix of office buildings with over 3 million square feet of space, a variety of shopping centers and several townhouse, apartment and condominium developments. In brief, there are more feet on the street now than there were in the 1960's and '70's!

In today's downtown McLean, try crossing Chain Bridge Road at Old Dominion Drive for the first time. Confused by the walk light buttons? You're not the only one. Ride a bike from Cooper Middle School to downtown McLean and see how safe you feel. Stand at the intersection of Old Dominion and Dolley Madison as you walk to McLean Central Park and feel how exposed you are. Do you feel safe waiting there as the cars go by at speeds approaching 50 miles per hour? (The speed limit is 35 MPH.) I doubt it. Yet, there are more and more pedestrians and bicyclists on the streets of McLean than ever before. We think it's because of a desire for healthier activity, because there are more places to visit in downtown McLean, and because there are simply more residents in downtown McLean.

In any event, we have to make McLean a safer place to walk and bike. We owe it to ourselves, our kids and our parents. Research cited by the National Highway Traffic Safety Administration estimates that if a car going 20 mph hits a pedestrian, the survival rate for the pedestrian is 95 percent. The pedestrian fatality percentage rises to about 40 percent for vehicles traveling 30 mph, about 80 percent for vehicles traveling 40 mph, and nearly 100 percent for speeds over 50 mph. You may have noticed that there are more young teens walking, riding and skate-boarding around in downtown McLean, and you have probably seen one or more elderly persons trying to get to the grocery store.

This report from the Pedestrian Task Force has recommendations on how to make McLean safer and more accessible to pedestrians and bicycle riders. We realize that many of the recommendations will require money, maybe even a lot in some circumstances, but on the other hand, many of the recommendations require little or no money. For example, lowering and standardizing the speed limits on Old Dominion Drive in downtown McLean is a simple, cheap and effective way to begin.

So let's get started.

Doug Potts

Chairman

INTRODUCTION

McLean, Virginia is a desirable community in which to live. It offers many small-town amenities in its downtown area, great schools, established tree-lined neighborhoods, and easy access into the nation's capital. Residents have expressed interest in making the downtown, the arterials leading into it, and nearby neighborhoods safer and more accessible for pedestrians and bicyclists.

Dranesville District Supervisor John W. Foust appointed the Pedestrian Task Force in the late summer of 2008 to study and make recommendations on how to make McLean more accessible for pedestrians and bicyclists. The Task Force has been meeting monthly since September of 2008 and, after organizing itself into four Work Groups (Pedestrian Safety, Sidewalk Connectivity, Bicycle Safety, and Design Options), has surveyed nearly every relevant street within its scope and studied many potential ways to address problems. Problems and preliminary suggestions for solutions were presented at a public meeting on July 14, 2009, and input received from the public (via the meeting and emails) helped shape the final recommendations.

What makes a community inviting for pedestrians and bicyclists? McLean already boasts an array of commercial establishments and community fixtures that meet residents' needs for shopping, dining, and recreational endeavors. While such

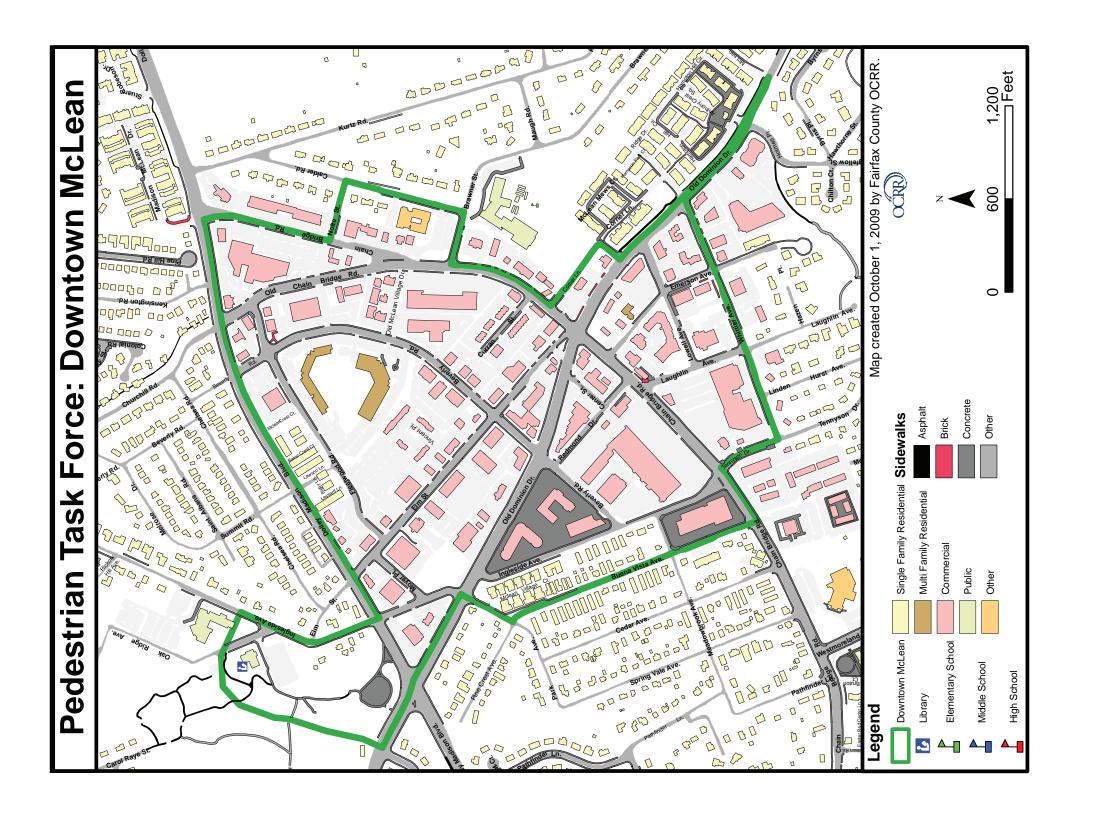
amenities create an essential draw, important characteristics such as the following enable a pedestrian- and bicycle-friendly community to flourish:

- Reasonable speeds for vehicular traffic
- Buffering features between pedestrians or cyclists and traffic
- Safe crossings (i.e., well-marked and highly visible, adequate time allowed, reasonable crossing distance)
- Appropriate lighting for pedestrians
- Amenities such as benches and bike racks
- Attractive streetscapes that help create a "sense of place"

For the purposes of this report, "downtown" includes the traditionally defined Community Business Center (CBC), the amenities of the McLean Community Center, the Dolley Madison Library, and McLean Central Park, as well as neighborhood streets that were surveyed for street safety conditions. Please see Map 1.

Priority projects are highlighted in bold ink.

Projects for which funding has been approved by the Fairfax County Board of Supervisors are highlighted in italicized print.



CHAPTER 1

Pedestrian and Bicycle Safety and Access in Downtown McLean

Our Vision for the Future

- A McLean that is safe and inviting for pedestrians of all types: those who live and work in downtown, residents who have strolled in from nearby neighborhoods, the elderly, the young, and the physically disabled
- A downtown area that welcomes bicyclists with on-road and trail facilities and other amenities such as bike racks

Introduction

With those goals in mind, almost all of the streets in the downtown area were evaluated using the following criteria:

- Traffic speeds: Are the posted speeds appropriate? Are the posted speeds observed?
- Placement and visibility of crosswalks: Where are more crosswalks needed? Are the existing ones visible?
- Crossing distances: Are medians and pedestrian refuges needed in places to reduce crossing distances?
- Crosswalk signals: Are more needed? Are they properly aligned and timed where they exist?
- Lighting: Where is more lighting needed at night for pedestrians and bicyclists?
- Signage: Is there appropriate signage to alert drivers of pedestrian and bicycling presence?
- Safety of sidewalks: Where are they missing? Where do they need better maintenance?
- Bicycle accommodations: Where are they needed? What types are appropriate?

Many of our recommendations naturally cluster along the corridors with the highest concentrations of commercial

establishments, which also generate substantial pedestrian and vehicular traffic volume. These corridors are Old Dominion Drive and Chain Bridge Road. The central downtown intersection of these two roads and Elm Street (referred to throughout this report as the "central intersection") is a major point of concern since it has a high daily traffic count with numerous pedestrians and bicyclists using the intersection during the day. The third corridor, Dolley Madison/Route 123, is the major thoroughfare between Washington, DC and Tysons Corner; it carries a tremendous volume of vehicular traffic and separates downtown McLean from the McLean Community Center and public library. In a public survey, respondents to a question about desired locations for VDOT/county pedestrian and bicycle improvements validated the task force's findings. Other secondary routes deemed important to pedestrians and bicyclists are featured in this chapter, and recommendations for all streets surveyed for pedestrian safety are found in Appendix A.

Downtown McLean

Lo	cation	Problem Identification	Proposed solutions	Comments/Photos
Four major entry points	into McLean	McLean lacks welcoming signage at major entry points that establishes McLean as a pedestrianand bicycle-friendly community	 Install uniform, attractive gateway signage that welcomes all to a "pedestrian and bicycle-friendly McLean" at the following locations: In median on Chain Bridge Road at Dolley Madison In median on Old Dominion at Dolley Madison In median on Chain Bridge Road at Spring Vale Avenue Build landscaped median on Old Dominion at McLean Drive and install there or place at Pimmit Run 	"Gateways and entries typically include signs, which establish the ground rules (e.g., 20 mph zone) and may give the name of the town or neighborhood, and should include roadway modifications which require drivers to begin driving in the manner appropriate within the area." Figure 1: An example of welcoming gateway signage
Major pedestrian	routes	Lighting for pedestrians is poor and where found, is usually provided by private establishments	Upgrade lighting at central intersection and along Old Dominion, Chain Bridge Road, and Dolley Madison, then prioritize other lighting needs	Refer to the Fairfax County Comprehensive Plan, 2007 Edition, McLean Open Space Design Standards for recommended lights

Location	Problem Identification	Proposed Solutions	Comments/Photos
Universal	Disregard of pedestrians by many motorists and improper conduct by pedestrians and bicyclists According to Virginia code: The driver of any vehicle shall yield the right-of-way to pedestrians crossing at a clearly marked crosswalk. No pedestrian shall enter or cross an intersection in disregard of approaching traffic. ii	Improve pedestrian, bicyclist, and motorist behavior through:	Figure 2: A common experience in the central intersection
	Accessibility is hampered by missing, poorly designed and/or poorly maintained curb cuts throughout downtown	Install and repair curb cuts according to current standards along the main routes of Old Dominion, Chain Bridge, and Elm Street then develop a priority list for other downtown streets.	

Figure 3: Curb cuts such as these need repair!

Location	Problem Identification	Proposed Solutions	Comments/Photos
and Chain Bridge Road	Signals do not adequately support pedestrian crossings • Positioning of signal boxes is difficult to understand • Timing is inadequate and inappropriate (signals are not responsive to pedestrians pushing the button, so pedestrians often have to wait for the next light cycle) • Some "WALK" signals seem to be broken	Upgrade signage for better understanding by users Alter timing to support pedestrian crossings and make signals more responsive to pedestrians pushing button Add on-demand pedestrian-only cycle to signal sequence When light turns green, ensure that "WALK" signal automatically shows on both sides of the intersection Ensure that timing of the countdown is synchronized for each side of the street Make signals audible	Twenty-two percent of pedestrian fatalities and 44% of pedestrian injuries occur at intersections. "Crash data consistently show that crashes with pedestrians occur far more often with turning vehicles than with straight-through traffic." """
and Chain	Crosswalks are not very visible at this prominent intersection Poor design, given volume of traffic Poorly maintained (faded)	Install brick-colored, imprinted surface at all five crossings, like those located at Laughlin Avenue and Lowell Avenue	

Location	Problem Identification	Proposed Solutions	Comments/Photos
Central Intersection of Old Dominion Drive and Chain Bridge Road	On south side of Elm Street and Chain Bridge Road, pedestrians are stranded in triangular island because the sidewalk ends and there is no marked crosswalk from the island across Old Dominion Drive or Elm Street	Build sidewalks on both sides of island Add crosswalks from island across intersections or extend island to existing crosswalk	Figure 5: A sidewalk to nowhere in the central intersection of downtown McLean

Location	Problem Identification	Proposed Solutions	Comments/Photos
	Posted speed limits vary (35 and 30 within downtown) Posted speeds are not observed Crossings need to be upgraded at several intersections:	Make speed limit a uniform 25 m.p.h Consider other traffic calming measures discussed on pages 36-37	"The fatality rate for a pedestrian hit by a car at 25 mph is 5%. The fatality rate rises to 80% when vehicle speed is increased to 40 mph." ^{iv}
Old Dominion Drive	 Beverly Road and Old Dominion Drive Ingleside Avenue/Park Avenue and Old Dominion Dolley Madison and Old Dominion Drive 	Ladder design crosswalk Ladder design crosswalk Wider median for pedestrian refuge On-demand pedestrian-only cycle in signal sequence Ladder design crosswalk at on all four sides Make signals audible	Figure 6: An example of a good crosswalk
	Whittier Avenue and Old Dominion Drive	Ladder design crosswalks Pedestrian signals on four corners Reduce curb radii on corners on west side of Old Dominion or add corner island on northwest corner	A wide curb radius typically results in high-speed turning movements by motorists, and reducing curb radii forces vehicles to slow upon turning. Tighter turning radii are most important where street intersections are not at right angles.

Location	Problem	Proposed Solutions	Comments/Photos
	Holmes Place and Old Dominion Drive: Currently a very dangerous intersection crossing is barely visible and motorists enter downtown at high speeds such as 40 MPH or more. (Posted speed limit is 35 mph)	Install pedestrian-activated flashing lights in pavement Lower speed limit to 25 mph at bridge over Pimmit Run Ladder design crosswalk	
	Mid-block crossings are needed on long blocks		Figure 7: Flashing lights in roadway get a driver's attention
ive	Between Beverly and Ingleside/Park across Old Dominion Drive	Ladder design with hip-high "Yield to Pedestrian" signs and pedestrian cut in median	" the presence of a raised median (or raised crossing island) was associated with a significantly lower pedestrian crash rate at multi-lane sites with both
סר	Center Street and Old Dominion Drive	Ladder design with hip-high "Yield to Pedestrian" signs	marked and unmarked crosswalks." ^{vi}
Old Dominion Drive	Accessibility is severely compromised by missing sidewalk segments :		
d blo	 Between Lowell and Whittier in front of Café Oggi on west side of Old Dominion 	Install sidewalk consistent with overall design hierarchy	
	 In front of Tony's Building near Corner Lane 	Consider making a future bike lane with dual pedestrian use at this narrow point in roadway	
	Accessibility is limited in other places by poorly maintained sidewalks and other obstructions	Please see Appendix A for details	
			Figure 8: Sidewalk encroachment in front of Café Oggi on Old Dominion Drive. Oops, no sidewalk, all asphalt!

Location	Problem	Proposed Solutions	Comments/Photos
Old Dominion Drive	Bicycle access and amenities are completely lacking	Consider narrowing traffic lanes to install well-marked bike lanes Add bike racks at Greenberry's and Balducci's	Figure 9: Basic, inverted-U bike racks
Chain Bridge Road	Traffic moves well above posted speed limit of 25 mph Crossings need to be upgraded at several intersections: • Laughlin and Chain Bridge Road • Tennyson Drive/Ingleside Avenue and Chain Bridge Road • Westmoreland and Chain Bridge Road • Brawner and Chain Bridge Road	Consider traffic calming measures discussed on pages 43-44 Ladder design crosswalk Install count-down pedestrian signals at all four corners Ladder design crosswalk Pedestrian signals needed at all corners On-demand pedestrian-only cycle in signal sequence Alter timing of signal cycle to be more responsive to pedestrians	Figure 10: Good example of an audible and visual countdown signal

Location	Problem Identification	Proposed Solutions	Comments/Photos
	 Old Chain Bridge Road and Chain Bridge Road: There is no crosswalk on south side of intersection on Old Chain Bridge Road, the sidewalk ends abruptly in the triangular island, and there is no crosswalk across Chain Bridge Road to sidewalk in front of Rocco's 	Add crosswalk and signal on north side of intersection at Old Chain Bridge Road Add crosswalk from island across Chain Bridge Road Complete sidewalk in triangular island	Figure 11: One is left stranded in the pedestrian island at Chain
D			Bridge Road and Old Chain Bridge Road
idge Roa	 Dolley Madison and Chain Bridge Road 	On-demand pedestrian-only cycle in signal sequence to protect pedestrians from cars turning left onto Dolley Madison	
Chain Bridge Road	Mid-block crossings are needed on long blocks:	Ladder design crosswalk	
	 Between Laughlin and Tennyson/Ingleside 	Ladder design with hip-high "Yield to Pedestrian" signs	
			Figure 12: A good example of a mid-block crosswalk
	 Between Old Chain Bridge and Dolley Madison—there is one crosswalk, but it is 	Ladder design with hip-high "Yield to Pedestrian" signs	Mid-block events were the second major grouping of crash types and accounted for 26.5 percent of all crashes
	poorly marked and lacks curb cuts on both sides	Curb cuts need to be added	vii

Location	Problem Identification	Proposed Solutions
	Accessibility is severely compromised by missing sidewalk segments: • East and west sides of Chain Bridge Road, between split from Old Chain Bridge and Nolte	Remove parking slabs at Virginia Commerce Bank on south side and replace with sidewalk Install continuous sidewalk on west side with proper curb cuts to Nolte
Chain Bridge Road	 In front of Salona Village Shopping Center; situation further complicated by ditch along Nolte and no pedestrian access to Salona parking lot 	Cover ditch on Nolte; add proper curb cuts and access to parking lot (or sidewalk, should one be built)
Chai	Accessibility is limited in several places by poorly maintained sidewalks and other obstructions	Please see Appendix A for details
	Bicycle access and amenities are lacking	Consider adding well-marked bike lanes
		Install bike racks at Safeway, Langley Shopping Center, park at McLean Baptist Church, Old Firehouse, Palladium, McLean Hardware, Giant



Comments/Photos

Figure 13: Parked cars obstruct pedestrians in front of the Virginia Commerce Bank on Chain Bridge Road



Figure 14: At Nolte Street and Chain Bridge Road, there's no sidewalk on Chain Bridge Road and no accessibility into parking lot

Location	Problem	Proposed Solutions	Comments/Photos
	Dolley Madison is a major thoroughfare between the District and Tysons Corner, and traffic moves well above posted speed limit of 35 mph.	Consider traffic calming measures discussed on pages 36-37	
	Crossings need to be upgraded:		
	 Churchill Road/Old Chain Bridge Road and Dolley Madison Boulevard 	Install audible and countdown signals across Dolley Madison Boulevard	
evard		Ladder design crosswalk	
Boule	Dolley Madison Boulevard and Elm Street: Currently very dangerous because	Pedestrian-activated flashing lights in crosswalk	
Dolley Madison Boulevard	curb cuts are lacking, and south-bound drivers crest the hill just before the crossing at high speeds	Provide better warning to south-bound drivers of pedestrian crossing ahead	Figure 1: Dolley Madison and Elm: A very dangerous crosswalk gets off to a bad start with no curb cut
W Ma	crossing at high speeds	Ladder design sidewalk with proper curb cuts	
Dolle	Accessibility is severely compromised by missing sidewalk segments:		
	On south side of Dolley Madison Boulevard at Chain Bridge Road	Between Sun Trust Bank and bus stop, install sidewalk with curb cut	
	 On south side of Dolley Madison between Elm Street and Beverly Drive 	Install sidewalks	
	Accessibility is limited in several places by poorly maintained sidewalks and other obstructions	Please see Appendix A for details	

Location	Problem Identification	Proposed Solutions	Comments/Photos
Elm Street	Elm Street is an important secondary route for commercial and local traffic. Access is severely limited in many places: • Near the intersection with Chain Bridge Road on north side of Elm Street near "old" McDonalds, there is no sidewalk and passage is obstructed by a newspaper stand and a dumpster • On south side of Elm, few sidewalks exist between Chain Bridge Road and Beverly Road	eet is an important secondary route for critical and local traffic. Access is severely in many places: Near the intersection with Chain Bridge Road on north side of Elm Street near "old" McDonalds, there is no sidewalk and passage is obstructed by a newspaper stand and a dumpster On south side of Elm, few sidewalks exist between Chain Bridge Road and Beverly Build sidewalk consistent with overall design hierarchy Build sidewalk consistent with overall design hierarchy	Sidewalks should be wide enough to comfortably accommodate three people walking
ш	Bolted mail boxes severely obstruct pedestrian use of the sidewalk in front of Post Office. Accessibility is limited in other places by poorly maintained sidewalks and other obstructions	Reposition mailboxes Please see Appendix A	Figure 16: At US post office on Elm Street, mailboxes obstruct the sidewalk

Location	Problem Identification	Proposed Solutions	Comments/Photos
Beverly Drive	An important secondary route, Beverly Drive is a link between high-density residential dwellings on the north end and commercial activities on the south end. It also provides bike access from Dolley Madison. Crosswalks are poorly marked or missing: Old McLean Village Drive to bus stop Sidewalk segments are missing in key spots on west side of road: In front of Verizon facility, near Ingleside Near Medicine Chest, between Redmond Drive and Old Dominion At driveway for Cardinal Bank Building Best option for bicycle access from Dolley Madison, but contains no markings for bike safety	Ladder or horizontal bar design crosswalks, as determined by pedestrian volume Install sidewalks consistent with overall design hierarchy Install sidewalks consistent with overall design hierarchy Install sidewalks consistent with overall design hierarchy Add chevrons/lanes on both sides with signage	Figure 17: At Beverly Drive and Old Dominion Drive, pedestrians are forced into Beverly Drive where sidewalk abruptly ends
Other important intersections	Crosswalks are missing or poorly marked at other high-volume pedestrian intersections • Fleetwood and Old Chain Bridge Road • Emerson and Lowell • Emerson and Whittier	Ladder or horizontal bar design crosswalks, as determined by pedestrian volume	

Location	Problem Identification	Proposed Solutions	Comments/Photos
}	Some secondary roads in downtown could be better marked to accommodate cyclists:		
	Old Chain Bridge Road	Narrow center turn lane	
improvements		Add chevrons/lanes on both sides of the street	
Ē	• Fleetwood Road	Add center line and chevrons/lanes on both sides	Figure 18: A good example of chevrons to accommodate bicyclists

CHAPTER 2

Bicycle Safety and Access on Routes Into and Around Downtown McLean

Our Vision for the Future

- A bicycle-friendly downtown McLean that is complemented by safe bicycling routes from neighboring communities within a 3-mile radius
- A McLean that bicycles to and from West Falls Church and the new Tysons Corner Metro Stations
- A community in which motorists and bicyclists observe the rules of proper conduct

Introduction

With those goals in mind, routes into and around downtown McLean were evaluated for their importance as collector routes, that is, corridors that facilitate bicycle travel between a great number of neighborhoods and downtown McLean.

The current situation for bicycling in and around McLean can only be described as "challenging." Traffic moves quickly, and there are few bike lanes and designated bike routes. The streets, in many places, are narrow, and the shoulders and sidewalks are irregular. Trails are intermittent, and where they exist, are poorly maintained and begin and end without warning. Additionally, there is little or no designated bike parking.

This chapter focuses on the routes into downtown McLean that can be upgraded to more safely accommodate people who bicycle for various reasons. Many of our recommendations pertain to the roadways themselves, but the long-term (though expensive) goal of adding continuous trails along such routes as Dolley Madison is a high priority. They are the safest option for young and/or inexperienced bicyclists and pedestrians of all sorts to access downtown. In a survey conducted at the public meeting held to discuss preliminary task force findings, eighty-seven percent of respondents said they would consider riding their bikes instead of driving into McLean if there were safe bike routes entering downtown from their neighborhoods.

Purpose of Bicycle Tripsviii

Reasons for Bicycling	Percent	Reasons for Bicycling	Percent
Recreation	26.0%	To visit a friend or relative	10.1%
Exercise or health reasons	23.6%	Commuting to school/work	5.0%
To go home	14.2%	Bicycle ride	2.3%
Personal errands	13.9%	Other	4.9%

Accessing Downtown McLean by Bicycle

Location Problem Proposed solution Comments/Photos	
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Bike routes that lead directly into downtown:

Dolley Madison is the main thoroughfare through McLean. It is characterized by many dangerous stretches on both sides of the road and no coherent bike option

 Trails are intermittent, poorly maintained, and begin and end without warning Complete as much of the trail as possible from the GW Parkway to Old Dominion, per the Fairfax County Trails Plan

Shoulders vary in width and are non-existent in many places

On south side, build a trail in the Salona Parkland that has been donated to Fairfax County between Buchanan to Kurtz per the Fairfax County Trails Plan

 Shoulders (where they exist) are often characterized by sharp drop-offs From the GW Parkway to Tysons Corner, pave the shoulder on both sides and widen where necessary to create a bike lane, per the Fairfax County Trails Plan



Figure 19: Trails are overgrown on Dolley Madison Boulevard

The number of bicycle-motor vehicle crashes is much lower when bicyclists ride along paved highway shoulders than when bicyclists and motorists share travel lanes. ix



Figure 20: Sharp drop-offs on shoulders along Dolley Madison Boulevard are dangerous for bicyclists

Location	Problem	Proposed Solution	Comments/Photos
Dolley Madison/Rt. 123	 Narrows dangerously at north end between GW Parkway and North Glebe Road 	Widen from George Washington Parkway down to North Glebe Road to create an uphill bike lane	
Dc Madis 123	Difficult to access Clemyjontri Park	Finish proposed trail from Dolley Madison Boulevard to the back of Clemyjontri Park	
	Formerly a railroad line, Old Dominion is a narrow, tree- County and Georgetown Pike. It also provides access to Arlington, so it carries a heavy traffic load.		
o N	Road varies in width north of downtown	Add bike lanes between Dolley Madison Boulevard and Balls Hill Road	
Old Dominion Drive		Widen and add bike lanes between Balls Hill Road and Georgetown Pike	
d Domi	Road is narrow south of downtown	Widen and add lanes from downtown to Arlington	
ö	Trail between Linway Terrace and downtown is in a	Re-pave trail	

state of disrepair

Figure 21: Old Dominion Drive looking north from Kirby Road

Location	Problem	Proposed Solution	Comments/Photos
land	Bike lane ends suddenly near Rosemont Drive, forcing motorists and cyclists into close proximity	Widen between Rosemont Drive and Chain Bridge Road and add bike lanes	
Westmoreland	Bike lane ends suddenly at Somerville Drive, forcing motorists and cyclists into close proximity	Widen between Somerville Drive and Youngblood Street, and add bike lanes	
>	Roadway to Arlington is currently unmarked for bicyclists and therefore, dangerous	Add lanes from Kirby Road to Arlington County, as the street is wide enough already in most places	Figure 1: Bike lane ends abruptly at Westmoreland and Rosemont where Westmoreland narrows drastically
Churchill	Currently, it is too narrow and curvy to travel safely on a bicycle	Widen and add bike lanes from Dolley Madison Boulevard to Dead Run	
ა -		Beyond Dead Run, merely add bike lanes	
Kurtz Lane	A good option for entering downtown, but it is currently unmarked for bicyclists	Add chevrons/lanes on Kurtz Road and continue on Calder Road and Brawner Street	
_ <u>_</u>		Add "Bike Route" signage	

Bike routes that aid bicycle flow around and towards downtown, though they don't enter it directly:

ville d	5	Narrow in places and unmarked for cyclists along its	Widen from Windy Hill Road to Bridle Path Lane
Lewinsv	Koa	length	Add lanes from Spring Hill Road to Dolley Madison Boulevard

Location	Problem	Proposed Solution	Comments/Photos
Great Falls Street	Narrow and dangerous for cyclists, but an important route between McLean and City of Falls Church	Widen and add lanes from Dolley Madison Boulevard to City of Falls Church line	
Georgetown Pike	Narrow in places and unmarked for bicyclists Trail between Langley High School and Ridge Drive in a state of disrepair	Widen and add bike lanes on western side from Chain Bridge Road to Dolley Madison Boulevard Widen and add lanes between Old Dominion Drive and River Bend Road Repair trail to the same quality as the recently repaved one in front of Langley High School	Figure 23: Upgrade old trail which joins new trail in front of Langley High School
Balls Hill Road	Dangerously narrow and unmarked for bicyclists	Widen and add lanes from Lewinsville Road to Georgetown Pike	
Haycock Road	Haycock Road is an important connection between West Falls Church metro and McLean	Widen and add lanes from Westmoreland Street to West Falls Church Metro Upgrade current trail on north side of road and connect it across the Haycock Elementary School grounds to Westmoreland Street	

Location	Problem	Proposed Solution	Comments/Photos
Miscellaneous Trails	Between Evermay and Lynwood Hill neighborhoods, the current trail has steps Between Brawner Lane and Corner Lane there is no bicycle access	Grade and pave the trail to provide bicycle access between the neighborhoods Approach Fairfax County Public Schools to determine if a trail can be paved behind the Franklin Sherman Elementary School fields where an exercise path with exercise stations is currently planned	
			Figure 24: Please grade and pave to accommodate a wider

Miscellaneous spot improvements

	Signage is needed on these roads/stretches:	Add "Share the Road" signage	
S	River Bend Road	The state the flour signage	
s places	Beech Mill Road		
Various	 Tennyson Drive between Longfellow Street and Chain Bridge Road Add "Bike Route" signage 	Add "Bike Route" signage	SHARE THE ROAD
	 Longfellow Street/Holmes Place between Old Chesterbrook Road and Old Dominion Drive 		Figure 25: This says it all!

variety of users!

Location	Problem	Proposed Solution	Comments/Photos
Places	Bike rack improvements are needed at the following locations:		
Various Places	Balls Hill Government Center: Rack is currently obstructed by trash cans	Re-locate bike rack so that it is more easily accessible	
	Clemyjontri Park	Add inverted "U" bike rack	
Fairfax County Schools	Most lack bike paths on grounds	Request that Fairfax County Public Schools include walking/bike trails in front and around schools	
Fairfax Sch		Implement "Safe Routes to School" plans	
Various future locations	Concern that speed humps will be an impediment to bicyclists	Ensure that speed humps feature a gap in the hump for a bicycle (as in Arlington County)	

CHAPTER 3

Safe Pedestrian Access to Downtown from Community Anchors

Our Vision for the Future

- A McLean that has a vibrant pedestrian life
- A McLean that provides safe, attractive access to downtown from community anchors and the neighborhoods that feed into them
- A greater awareness among residents of the existing walkability of the community

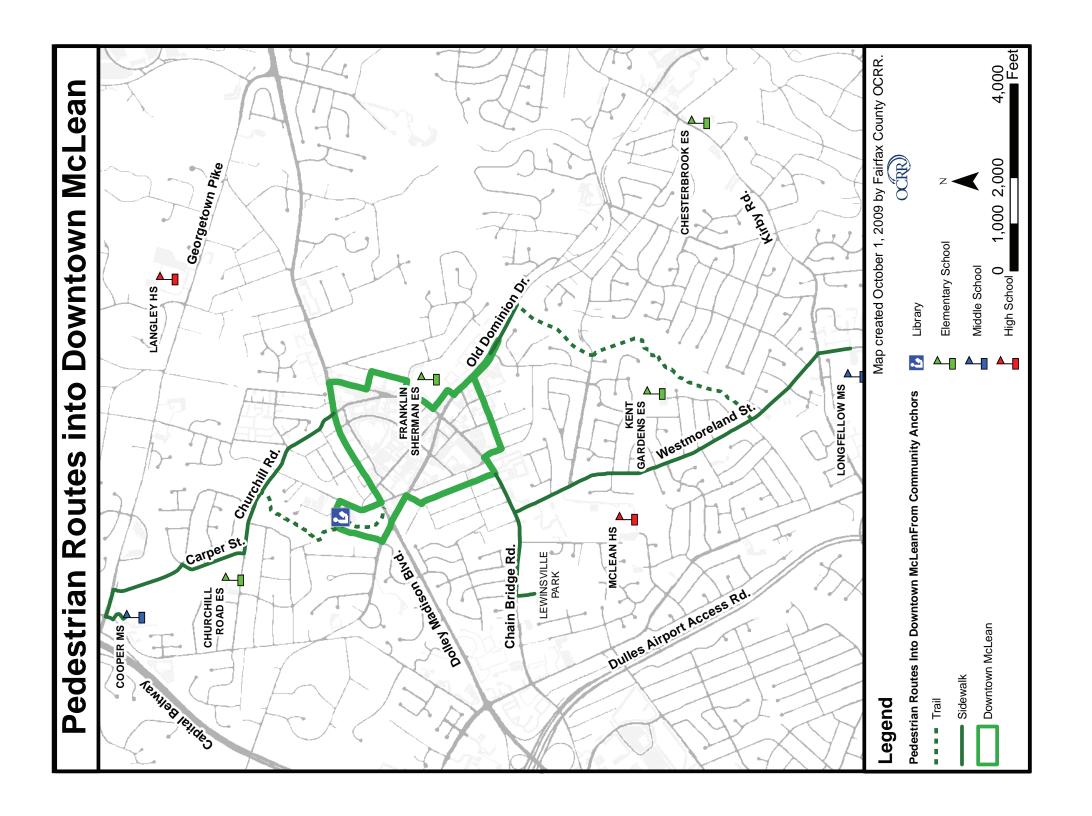
Introduction

With these goals in mind, the arterials from three community anchors were evaluated to determine where lengths were missing or in poor condition. Cooper Middle School, Longfellow Middle School, and Lewinsville Park were defined as the community anchors. From the two middle schools, trails along two of McLean's tributaries to the Potomac River, Dead Run and Pimmit Run, provide alternate access to the downtown area.

Our general conclusions were that the links from the anchors are currently passable but need improved connectivity and repair in discrete spots and more advertising of the access that exists from outlying neighborhoods. When asked in a survey conducted at a public meeting at which the preliminary findings of the task force were unveiled, 63% of respondents strongly disagreed or disagreed that there was a well-maintained pedestrian route from their neighborhood into downtown McLean.

The table^x below identifies the reasons people choose to walk:

Purpose	Percentage (weighted)
Commuting to work or school	6.18
Recreation	10.30
Exercise/for my health	60.35
Personal errands (to the store, post	19.42
office, walking the dog, and so on)	
Required for my job	3.75



Accessing Downtown McLean By Foot from Community Anchors

	Route Description	Problem	Proposed Solutions	Comments/Photos
Cooper Middle School	Primary route: East briefly along Georgetown Pike/Rt. 193 and then south to Dead Run Drive into the Broyhill-Langley Estates, where the sidewalks are wide, ramped, and in excellent condition. South onto Carper Street to Churchill Road. East on Churchill Road until the bridge over Dead Run, at which point the wide sidewalk turns into a narrower asphalt path. Continue on Churchill Road to Rt. 123.	Path is very narrow Path is poorly maintained	Widen and re-pave Provide better maintenance	Figure 26: Path along Churchill Road is narrow and overgrown
	Pike/Rt. 193 and then south to Dead Run Drive.	Crossing on Churchill Road at Dead Run is poorly marked, given the volume of vehicular traffic	Install hip-high "Yield to Pedestrian" sign	

crosswalk

Figure 28: Dangerous crossing over Pimmit Run on Old Chesterbrook Road

	Route Description	Problem	Proposed Solution	Comments/Photos
Lewinsville Park	East on Chain Bridge Road into downtown	Asphalt driveways and segments are narrower than concrete sidewalk and in poor condition Sidewalk has weeds between segments Crosswalk from Lewinsville Park entrance to Wasp Lane is not visible enough, given the volume of vehicular traffic	Replace asphalt with concrete and make a uniform width Clean up sidewalk Add hip-high "Yield to Pedestrian" sign, and/or overhead signage, and/or an ondemand signal	

CHAPTER 4

Design Options for Increasing Safety and Walkability

Our Vision for the Future

- Improved and consistently implemented urban design strategies and pedestrian-oriented amenities that contribute to a safe and inviting pedestrian environment
- The use of design strategies to address the issues identified in the preceding chapters

Introduction

Design plays a very important part of our everyday interaction with life. While often overlooked, design—or lack thereof—of the urban landscape plays an important role in the pedestrian, bicyclist, and motorist experience. In our review of the literature and case examples from other localities, we discovered that good design significantly enhances the pedestrian experience and supports pedestrian safety. When asked to rank five attributes that would improve the walkability of downtown McLean, "a more inviting pedestrian environment—such as scattered benches, a unified sidewalk design, and a greater sense of place" garnered the most responses; almost half of the respondents ranked this statement as their first or second choice. We have some proposals in this chapter that we think will go a long way toward enhancing the pedestrian realm of downtown McLean.

A design hierarchy—or strategy--for implementing design elements to emphasize places where there is already a high volume of pedestrian activity, the street is symbolically important, or the area is undergoing reinvestment or being upgraded to encourage more pedestrian activity, is needed. The treatment of sidewalks, crosswalks and other pedestrian and bicycle amenities should be addressed so that safety features for pedestrians and bicyclists vis-à-vis motorists are the fundamental priority, and unified aesthetic considerations are employed in these prioritized areas to support safety objectives, give the targeted areas greater prominence, and McLean a greater "sense of place." Consistent application of a design hierarchy—one improvement at a time--would lead to a more walkable and bike-friendly McLean.

Several documents provide guidance for design standards and should be consulted vis-à-vis recommendations identified in this document. They include:

- Fairfax County Comprehensive Plan, 2007 Edition, McLean Planning District
- Fairfax County Comprehensive Plan, 2007 Edition, McLean Open Space Design Standards
- McLean...A Vision for the Future...NOW! PlaceMakers Design Group Inc. 1997.

Gateways

Erect gateway signage on the main arterials where they enter the downtown that identify McLean as a "Pedestrian- and Bicycle-Friendly Community." Gateway signs should be clear, consistently designed, decorative, and informative: they convey expectations of reduced speed and a manner of driving that is appropriate within the downtown area. Used in combination with planted medians, bulbouts, other means that visually reduce road width, and even contrasting surface material, gateways can lead to speed reductions up to 9 mph, according to a study of gateway treatments in villages and small towns in the UK. XI

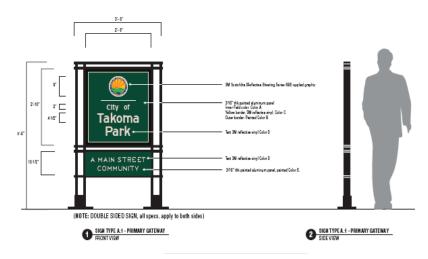


Figure 29: This good example shows the scale of gateway signage

Sidewalks

Sidewalks are one of the most visually prominent elements of the public realm and as such are often given special treatment to promote place making and a sense of identity.

Surface: McLean Design Standards call for brick and concrete sidewalks using brick inserts surrounded by a concrete strip. Using special pavers only as an accent is a relatively economical way to enhance character and

- Sidewalks should be wide enough to accommodate pedestrians comfortably
- Sidewalk designs should be implemented consistently
- Sidewalk design should incorporate elements that buffer pedestrians from traffic

add some design flair to pedestrian environments.

Concerns about maintenance and uneven surfaces underscore the fact that if pavers are used, they must be installed correctly and monitored frequently. In addition, patterns and configurations should be consistent. If consistently applied, pavement patterns can reinforce a street hierarchy, with special pavement used in the main streets or targeted for special development or pedestrian districts.

Some communities like Arlington have returned to concrete sidewalks because concrete is a smooth and durable surface that can be easily shaped and maintained. Textures and dyes can now be added to concrete to its surface more visually distinctive. Like pavers, concrete sidewalks must be carefully installed and monitored.

We recommend that the McLean Planning Committee and the McLean Revitalization Corporation undertake a review of the advantages and disadvantages of brick surfaces in terms of sustainability, design quality, safety and maintenance and also promote the need for consistency in application.

Buffering: Pedestrians are most comfortable when the sidewalk has some separation from vehicular traffic. We recommend that sidewalks be buffered by a strip up to four feet wide that will allow for lights, trees and/or benches. Where there is no room for the buffer, parking or bike trails may serve as acceptable alternatives.

Pedestrian Crossings

Crosswalks: The crosswalk is the most basic element of a pedestrian crossing. The fundamental attributes of a safe crosswalk are:

• **Visibility**: Crosswalks must be protected from traffic by a stop line for vehicles consisting of a 12- to 24-inch wide solid white line placed a minimum of 4 feet in advance of the crosswalk.

The styles of crosswalks used should be determined by an overall design hierarchy that factors in the types and volume of pedestrians, volume of traffic, as well as aesthetic considerations reflecting the degree of prominence the area commands.

- Horizontal bar design: The average crosswalk at intersections should be marked by two solid white lines not less than 6-feet wide, preferably at right angles to the sidewalk a minimum of 6-feet, but up to 10-feet apart.
- Ladder design: In high traffic areas, near schools and parks, where pedestrians with disabilities use pedestrian crossings, or where visibility is a problem, a ladder design is the most visible type of crosswalk marking for drivers. This consists of a series of solid 2-feet wide strips parallel to the direction of traffic, flanked by the two solid white lines of the average crosswalk. As an alternative, diagonal striping between the two solid white lines can also enhance visibility. This can be especially useful on main roads

- where there is no signal, but a high likelihood of pedestrian use.
- O Distinctive surface: A distinctive treatment of surface material in crosswalks can raise the visibility of pedestrians. A design hierarchy that calls for different treatment of crossings (e.g., for better visibility or aesthetics, or to provide tactile guidance for people with visual impairments), can employ a different texture than street asphalt such as stamped asphalt. Different colors can be painted on the asphalt (stamped or smooth) to further distinguish the crossings from the rest of the street, but in all cases the two parallel white lines should remain.
- Raised: Crosswalks that are raised above the surrounding pavement provide extra visibility for pedestrians and slow traffic by creating a natural speed hump.



Figure 30: Distinctive surfaces make crosswalks stand out from safety and aesthetic perspectives

- Adequate sight distance: Crosswalks should be straight, and on-street parking should cease a minimum of 20 feet away from the crosswalk. If there is a curve or deviation in the crosswalk, this change in direction should happen at a center island, where the pedestrian can reorient himself before continuing to cross.
- **Reasonable crossing distance**: The total distance to be crossed by a pedestrian should not exceed 60 feet, or 5 lanes of traffic. Crossing distance can be reduced by installing a pedestrian refuge, or center island, between the two directions of traffic to be crossed. Medians and pedestrian crossing islands greatly improve pedestrian safety at street crossings with high volumes of traffic and multiple traffic lanes. A study by the Federal Highway Administration found that at pedestrian crossings

without signals, a raised median or

reducing pedestrian-vehicle crashes. Within a raised median or island, the

path of the crosswalk should be level

with the pavement and have a

detectable warning surface to

accommodate all users.

island had the greatest impact on



Figure 31: Good elements for pedestrians: reduced crossing distance, cut in median, tactile warning strip in curb cut

• **Proper access**: Access to crossings should consist of two curb cuts at each corner, with a tactile warning strip and a landing area of a minimum of 4 feet. Be sure to coordinate with the drainage inlet location to avoid standing water or ice in winter. Place no pole, utility or other impediments in ramp return area.

Additional Measures to Ensure Safe Crossings at Crosswalks

Experts caution that crosswalks alone are unlikely to increase pedestrian safety without some of the additional measures outlined below.

Signage: Clearly visible signage instructing cars to "Yield to pedestrians in crosswalk" or clearly stating that "Pedestrians in crosswalk have right of way" is needed. Ideal placement is at side of road in advance of crossing at a height of 5 to 7 feet above pavement level, plus

one sign suspended overhead, approximately 17 feet above the pavement in the center of the traffic lane. Signs can be internally lit for better visibility. On side streets without sidewalks yet frequently used by pedestrians a "Share the Road" sign incorporating a striding pedestrian would help raise motorists' awareness of pedestrians.



Figure 32: Standard pedestrian right-of-way sign

As an alternative to overheard signage, hiphigh signs in the middle of crosswalks that state "Yield to Pedestrians" are recommended.

So that the effectiveness of signage is effective, care must be taken to avoid over-usage of signage.

Signals: The use of signals greatly increases pedestrian safety. Push-button activated pedestrian on-demand signals are recommended for areas where pedestrian crossings are intermittent, or where pedestrians need a longer cycle than that afforded by the normal traffic signal cycle or require an audible signal.

Signals must provide adequate crossing time. Crossing times for pedestrians vary, but slower speeds of no more than 3.5 feet per second should be accommodated. xii

Leading pedestrian intervals, in which pedestrian walk signals begin a few seconds before cars are given the green light, allow pedestrians to enter the crosswalk before it is full of traffic.

Audible signals benefit all pedestrians and make intersections safer. Automatic pedestrian detection devices are still in the research stage.

Key characteristics of good signals include:

Push buttons: It is important to make sure that pushbuttons are responsive to
pedestrians and very noticeable. We recommend that the buttons be silver and at
least 2" inches in diameter, with the direction clearly marked by an arrow directly
above the button.

They should be conveniently located no more than 42 inches above pedestrian travel ways, face toward pedestrians and meet all accessibility



Figure 33: The way it should be: Countdown signals with large, visible buttons

standards. If the intersection has a median, a button should be added to the median and both corners. If necessary, additional activators may be located prior to intersections, which can reduce pedestrian waiting time.

• **Countdown signals:** The addition of countdown signals to a crossing add clarity, let pedestrians judge whether time remaining allows a safe crossing, and reduce pedestrian/car collisions by 52%. If pedestrians have to wait more than 30 seconds for their signal, they may not wait. Timing should accommodate the

pedestrian and not give preference to fostering the continuous flow of vehicular traffic.

Mid-block Crossings

Mid-block crossings warrant special attention and should be considered where there is substantial conflict between pedestrian and vehicular traffic, at school crossings, or where a mid-block crossing can channel multiple pedestrian crossings into a single location. They may also be justified at key commercial locations with high pedestrian activity, where long blocks (500 feet) inhibit pedestrian movement, or at mid-block bus stop locations.

Use ladder design for best visibility and provide curb ramps directly aligned with the crossing at each side. As a caution, these should be used only where motorists' visibility is good, and at least 200 feet from nearest intersection crossing.



Figure 34: Even in the rain, drivers take notice of inroad flashing lights

Other high-visibility options that alert motorists at mid-block crossings may be considered such as:

- Special paving material and/or a raised crosswalk
- Signage and/or painted triangles on road that notify motorists
- Pedestrian-activated yellow flashing beacons
- o Flashing in-road lights
- o Hip-high "Yield to Pedestrian" signs in middle of crossing

Mid-block crossings often require crossing multiple lanes of traffic; the use of curb extensions, bulbouts and/or medians in conjunction with mid-block crosswalks can enhance the visibility of pedestrians and reduce their crossing distance.

Traffic Calming Strategies

The Institute of Traffic Engineers defines traffic calming as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users."

These measures include:

Bumpouts: Physical measures that narrow the roadway, even for short distance, slow traffic. Bump-outs are most commonly used on streets that have on-street parking. "Bumping out" the sidewalk into the turning lane reduces the radius of each curb, and slows vehicles that are turning. Bump-outs have the added benefit of reducing crossing distances for pedestrians.



Figure 35: Examples of bumpouts

• Narrowed traffic lanes: Reduced lane width slows motorists. Narrowing lanes in an existing roadway allows the road to accommodate more amenities, such as bike lanes. While the literature on the relationship between lane width and vehicular speed is inconclusive, the following observations have been reported:

"Relative to wide streets, narrow streets may calm traffic. Vehicle operating speeds decline somewhat as individual lanes and street sections are narrowed (but only to a point). Drivers also seem to behave less aggressively on narrow streets, running fewer traffic signals for example."

"More than 67 percent of highway agencies that have implemented narrower lanes reported no adverse traffic operational or safety problems." (One-third of agencies surveyed reported that long vehicles had greater difficulty turning corners and a higher incidence of side-swiping accidents.) xv

Reduced curb radii: Curb radii can be altered from a curve to a more nearly right angle configuration, using all non-essential vehicular turning space to add pedestrian space to the sidewalk in a location where pedestrians wait to cross. These measures also reduce the crossing distance for pedestrians. These, however, are difficult and expensive retrofits. They also reduce the flexibility of roadways and can block turning lanes.



Figure 36: Progression of reduced curb radii shows increasingly safer conditions for pedestrians

- Roundabouts: The replacement of intersections with roundabouts allows previous turning lanes to be used for bikes and/or medians. They slow traffic but reduce travel times (no waiting at light), can eliminate left turns out of parking lots and reduce injury-producing crashes by 80-90%.xvi They also lessen air pollution by reducing vehicle idling time.
- Slightly raised crosswalks:
 Raised crosswalks reduce
 vehicular speeds at
 pedestrian crossings by acting
 as a low speed hump.



Figure 37: Raised crosswalk with distinctive surface provides visibility and slows vehicles

A Few Parting Shots:

Other Design Features that Enhance the Pedestrian and Bicycle Experience

The following sections address features that are not necessarily fundamental to the goal of making McLean a safer environment for pedestrians and bicyclists, but that nonetheless enhance the experience of all users.

Signage and Wayfinding: Signage in downtown McLean should be legible and provide pedestrians and bicyclists with easy directions to move around. Wayfinding signs and/or maps of shops, destinations and pedestrian/bike paths should be installed at one or more key "centers" of the downtown district.



Figure 38: Orientation markers can provide bus schedules, historic information, and notices of cultural events

Amenities and Streetscapes: Public amenities should reinforce the perception that downtown McLean is geared toward people as well as cars and the idea that our main streets are not just commuter roads. A unified set of treatments for sidewalks, benches, trashcans, and lighting, etc., as specified in the McLean Design Standards, will identify downtown McLean as a distinct and desirable place.

Distinct features such as public art, fountains and street furnishings should provide visual interest which will encourage people to walk farther and circulate on foot throughout the district.

Placemaking features will encourage shoppers to make downtown McLean a destination and a gathering place where people stroll and animate the street with human activity.

Well-designed intersections are the cornerstone of healthy walkable communities and should give clear preference to the pedestrian.

Streetscape designs should be used to make pedestrians feel that they are safely separated from traffic and cars through planters and landscaping in utility strips.



Figure 39: Fountains add interest and provide a noise barrier to street sounds

Lighting must be adequate to protect and spotlight pedestrians at intersections and crosswalks. Attractive and adequate lighting for pedestrians throughout the downtown area will encourage evening activity.

Design and landscaping should be used to break up large expanses of parking lots. Large parking lots should be buffered from the sidewalks, but pathways should connect sidewalks to shopping areas providing visual interest and safe passage for pedestrians. The concept of a "pedestrian link" is reinforced by the Mclean Design Standards.

Separate treatment (color, texture) distinguishing sidewalks from parking lot entrances/driveways should be considered to draw attention to the presence and primacy of pedestrians.

Alleys and transition zones between parking areas and pedestrian zones deserve attention and can be greatly enhanced with quality architectural materials, landscaping and attractive lighting. Inviting alleys can also more effectively lead people to shopping areas off the main street.



Figure 40: Planters break up the walkway and add visual interest



Figure 41: Retrofitting street lights with signs and banners improves the pedestrian environment

Encouragement of Bicycle Use Through Design

It should be immediately apparent that downtown McLean is also bicycle -friendly and provides protection to and amenities for bicyclists (commuters and casual bikers).



Figure 42: Covered bike racks



Figure 43: Bicycle racks double as public art



Figure 44: Another fun example of bike racks

ENDNOTES

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[&]quot;The 2002 National Survey of Pedestrian and Bicyclist Attitudes and Behaviors." National Highway Transportation Safety Administration. 2002

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^{** &}quot;Relationship Between Lane Width and Speed: Review of Relevant Literature." Parsons Transportation Group for the Columbia Pike Street Space Planning Task Force (Arlington County, Virginia). September 2003.

xvi "Marina Pedestrian and Bicycle Master Plan: Discovering the Missing Pieces of the City of Marina (Draft)." City of Marina, California. August 30, 2003.

Appendix A:

Pedestrian Safety Needs in Downtown McLean

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The details of needed pedestrian safety improvements to the streets in the downtown area are given in the main table which follows. Some of these improvements are already being carried out, or are expected in calendar year 2009.

Scope of the Survey

Area Surveyed: See Map 3

Dominion to 123. Then northeast on 123 to Chain Bridge Road. Then southwest on Chain Bridge Road to Old Road, northwest on Buena Vista to Park. Then northeast on Park to Old Dominion. Then northwest on Old Boundary of Region I (Used for the definition of "inside" and "outside"): From Buena Vista at Chain Bridge Dominion.

Each side of a street is an inside or an outside, defined by whether a line perpendicular to that side, and pointing away from the street, points toward the interior of Region I or away from it. **Definition:**

Table Codes:

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
- Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
- Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
- Traffic signal needs pedestrian timer signal
 - Traffic signal needs to be audible

A-3

Walkabout Region

Region I

Street, Location	Traffic Signals	Crosswalks	Sidewalk Repairs	Missing Sidewalks	Sidewalk Obstacles
Old Dominion Drive, inside					
at Pimmit trail		1, 1a			
at Holmes Place		1, 1a			
at Hampton Ridge		1			
At Corner Lane		1, across Corner Ln			
Between Chain				7, in front of	4, tables,
Bridge and Corner				Corner Bistro	chairs, cars
Lane					
Central Intersection					
at Chain Br. and Elm	9, 5		2		
at Embassy			3		
Autowash, Goodyear			۲		
at goodyeal			7		
between Chain Br. and Beverly					4 – trees
at Beverly		1			
between Wachovia			2,3		
and Coldwell Banker					
at Wachovia					4
at Wachovia,			3		
Pulcinella, Moby					
Dick, orthodontist					
at Ingleside		1	2 - sewer		
at J. Gilbert			2, 3 - trees		
at 123	9, 5	1			
Old Dominion Drive,					
outside		7			
at Ingleside		1	(
at Long & Foster (6849)			7		
at Staybridge			2		
driveway					
at Beverly	9				
from Beverly to Center Street					4 –trees
at Center St		1			
[Note: Old Dominion needs a couple of pedestrian crossings between 123 and Beverly.]	eeds a couple of	pedestrian cross	l sings between 12	23 and Beverly.]	
Central Intersection					
at Lowell Ave		1			
at Whittier Ave	8,9	1			
Café Oggi to corner				7	

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
 - Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
- Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
 - Need sidewalk
- Traffic signal needs pedestrian timer signal
 - Traffic signal needs to be audible

	Irailic Signais	Crosswalks	Sidewalk Repairs	Missing Sidewalks	Sidewalk Obstacles
Chain Bridge Road, inside					
at Old Dominion and Elm	6	1, to Listrani's Island			
At Dominos,			3 – sidewalk		
Presidential Bank,			square missing		
Florist parking lot					
at Curran Street		1			
at AT&T, Salon			2 — metal plate,		
Michel			sewer		
Langley Shopping			2 – sewer		
Center near AT&T					
Langley at Brawner	6	1			
stoplight					
Langley at middle			2 – sewer		
at Old Chain Bridge	9, too far off	1			
Stoplight	sidewalk				
at McLean		1			4 - signposts
Immediate Care					
at Old Chain Bridge		1, east to			
Road, across from		sidewalk in			
Langley shopping		rront of Bird store			
A circle		7			
at Virginia Commerce	σ	T F	3	7	odelo paidrea – N
Bank	n	4	า	•	+ parking stabs need to be moved
at Sunoco station,			3		
south driveway					
at Chain Bridge			3		
at Wachovia near					2
123					7
Central Intersection					
at 7-11, Starbucks			3		
at Redmond		1			
at Laughlin	6	1			
at Ingleside	8,9	1			
at Westmoreland St.	9, 5	1			

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
 - Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox 1 1 1 1 3 3 3 7 7 7 9 9
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
 - Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
 - Need sidewalk
- Traffic signal needs pedestrian timer signal
 - Traffic signal needs to be audible

Street, Location	Traffic Signals	Crosswalks	Sidewalk Repairs	Missing Sidewalks	Sidewalk Obstacles
Chain Bridge Road, outside					
at Sun Trust				7	
In front of Salona Shopping Center		Need entrance from crosswalk to Salona		7, along street, or walkway from plaza sidewalk to existing crosswalks	
at Kellogg Collection				7	
at Nolte		1		7 – near crosswalk	
at Rocco's			3		
at Brawner	6	1 – repaint			
at Corner Lane		1			
Central Intersection	C	,			
at Old Dominion	y				
at Laughlin	6	1 1			
at Tennyson	8,9	1	2		
at Westmoreland	5, 9	1			
Old Chain Bridge Rd, inside					
at McLean			3		
Immediate Care					
Dolley Madison (123), inside					
at Ingleside		1			
at Elm		1, 1a			
from Elm to Beverly				7	
between Beverly and Churchill at Wachovia			2		
at Churchill	8, 9, 5	1			
between Churchill and Chain Br. Rd.			2, trees		
at Chain Bridge Rd.	8, 9, 5	1		7	
Dolley Madison, outside					
at Old Dominion	9				
Between Madison Mclean Dr. and Elm					4, grass; too narrow
At Churchill Rd.	8,9	1			
Between Churchill and Chain Bridge, at Kensington		1			
At Madison Mclean Dr/Chain Bridge intersection	5,9, pedestrians need protection from left-turning	1			
	vehicles				

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
- Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
- Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
 - Need sidewalk
- Traffic signal needs pedestrian timer signal
 - Traffic signal needs to be audible

Street, Location	Traffic Signals	Crosswalks	Sidewalk Repairs	Missing Sidewalks	Sidewalk Obstacles
Elm Street, inside					
at Beverly		1			
at McDonalds			3		
from Dominos to				2	4 – dumpster
cilalii bi . nu.					
Elm Street, outside					
Between Chain				7	4 - Bushes
Bridge and Beverly					
at Beverly		1			
at Fleetwood		1 - Three crosswalks			
at Post Office					4 – PO boxes
Beverly Road, inside					
at McLean House			3 – at sewer		
near Ashby driveway			2		
between Ashby and			2		
1356					
at 1356			2		
at driveway between			3		
Subway and Marvin					
windows					
at Old Dominion	9				
Beverly Rd, outside					
Behind Giant, in front				7	
of Verizon					
at Medicine Chest				7	
at Elm		2			
at Old McLean Village		1, to bus stop,			
Drive		Old Mclean Village			
at Fleetwood		1 - three crosswalks			
at driveway for				7	4 - Tree
building on Rt. 123					
at Rt. 123		1			
Buena Vista					
Meadowbrook to				2	
1425, and beyond					
Park					
20 C C C C C C C C C C C C C C C C C C C		7			
at Old Dominion		Т			

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
 - Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
 - Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
- Need sidewalk
- Traffic signal needs pedestrian timer signal
 - Traffic signal needs to be audible

	:	=	-		=
Street, Location	Traffic Signals	Crosswalks	Sidewalk	Missing Sidewalks	Sidewalk
Ingleside , inside					
at Chain Bridge Rd.	8.9				
[Note: One sidewalk from Meadowbrook to 1418 Ingleside, probably ok.]	om Meadowbroo	k to 1418 Ingles	ide, probably ok		
at Beverly		1		1	
at 1420 Beverly					2 – sewer
glass building across from 1408					4 – parking sign
at Old Dominion		1			
Moyer Place					
at Ingleside		1			
Fleetwood Road, inside					
at Old Chain Bridge		1			
near white (Waveworks)			2 – tree; raised sidewalk		
at Beverly			3 – curb		
approaching Elm					4 –fence and bush
Fleetwood Road, outside					
near Churchill			2		
at Churchill		1			
Corner Ln					
at Chain Bridge				7	
beside Sunoco				7 hoth cides	
ואחווב אוובבו				', Dotti sides	
Tennyson Dr (Chain	~		2		
Br. to Whittier Ave.))				
Whittier Ave, inside		1, all intersections	3, Tennyson to Laughlin		
Whittier Ave, outside		1	3	7 –starts at 6731	
Emerson Ave					
at Whittier		1		7	
at Lowell		1			
Westmoreland St.				7 – Old	
				Chesterbrook	
				to cnain Bridge	
				0	

- Crosswalk needs to be more visible
- Add pedestrian-activated flashing light
- Break in sidewalk or manhole cover out of alignment, resulting in an uneven sidewalk
- Sidewalk needs to be patched or replaced
- Interference with sidewalk: trees or bushes, fence, parking lot signposts, dumpster, or mailbox
- Consider a dedicated pedestrian cycle in the traffic signal cycle and/or no right turns at red lights
 - Pedestrian signals are needed, or traffic signal boxes/signs need to be rotated around the pole
- Need sidewalk
- Traffic signal needs pedestrian timer signal
- Traffic signal needs to be audible

Appendix B

Results of the July 14, 2009 Survey of Pedestrian and Bicycle Safety in McLean

At a public meeting held at the McLean Community Center on July 14, 2009, attendees were asked to complete a survey on pedestrian and bicycle safety in McLean. There were 38 responses with answers to individual survey questions ranging from 31 responses to 38.

There were four types of questions. One type asked the participant to respond to the survey statement with a Strongly Agree, Agree, Neutral, Disagree or Strongly Disagree. A second type asked for a miles per hour response or a yes/no response. The third type of question asked for a simple statement from the participant, and the fourth type asked the participant to rank five survey statements in order of importance. Following are the results of the survey.

Survey Statement 1. "As a pedestrian, I think the sidewalk system and crossing in the CBC are safe and comfortable for walking." Forty-six percent of participants Disagreed with this statement and 43% Strongly Disagreed with the statement. The remaining responses were 5% Strongly Agree and 3% each for Agree and Neutral.

Survey Statement 1a. "There are a sufficient number of crosswalks in the CBC, and they are well marked." Forty-five percent Strongly Disagree, 42% Disagree, 9% Neutral, and 3% Agree. No one Strongly Agreed.

Survey Statement 1b. "The traffic signals in the CBC are sufficient in number, well-timed and support pedestrian crossings." 42% Disagreed, 22% Strongly Disagreed, 19% Agreed and 17% were Neutral. No one Strongly Agreed.

Survey Statement 1c. "In the evening, the lighting is sufficient in the CBC, and I feel comfortable walking home." Thirty-nine percent were Neutral, 24% Strongly Disagreed, 18% Disagreed, 15% Agreed and 3% Strongly Agreed.

Survey Statement 1d. "There is sufficient lighting at the bus stops in McLean." Fifty-five percent were Neutral, 32% Disagreed, 6.5% Strongly Disagreed, and 6.5% Agreed. No one Strongly Agreed.

Survey Statement 1e. "There is sufficient signage alerting drivers to pedestrian crossings." Fifty-one percent Strongly disagreed, 38% Disagreed, 5% were Neutral, 3% Agreed and 3% Strongly Agreed.

Survey Statement 2. "Automobile traffic moves at about the right speed in the McLean CBC." Fifty-three percent Disagreed, 30.5% Strongly Disagreed, 11% were Neutral, and 5.5% Agreed.

Survey Statement 2a. "What do you think the speed limit is on Old Dominion Drive within the CBC." Forty-three percent chose 35 MPH, 41% chose 25 MPH and 16% chose 30 MPH. The speed limit is 30 MPH from Dolley Madison east to Holmes Place (the road to the east of the Balducci's shopping center) at which point it increases to 35 MPH.

Survey Statement 2b. "Speed limits currently vary in the CBC. It is a good idea to standardize the speed limits entering the CBC and once inside the CBC for the speed limit to be a uniform 25 MPH." Forty-nine percent Strongly Agreed, 41% Agreed, 5% were Neutral, 2.5% Disagreed and 2.5% Strongly Disagreed.

Survey Statement 3. "There is a well maintained pedestrian route (sidewalk or natural trail) from my neighborhood into the McLean CBC." Forty-two percent Strongly Disagreed, 26% Agreed, 21% Disagreed, 8% were Neutral and 3% Strongly Agreed.

Survey Statement 4. "I wish there was a pedestrian route, i. e., a better sidewalk or trail, on (name a street or location below):" Twenty people responded. Five people specifically noted Lewinsville Road while four cited Dolley Madison for improvement. Several people mentioned a better crosswalk into Lewinsville Park crossing Chain Bridge Road. Others mentioned better bike paths on Chain Bridge Road.

Survey Statement 5. "If there were bike lanes entering the McLean CBC from my neighborhood, I would consider riding my bike instead of driving my car into McLean." Eighty-seven percent or 33 people said Yes, one person said No, and 11% (or four people) said Not that Important.

Survey Statement 6. More bike lanes and bike racks are needed in the CBC itself." Sixtyone point five percent Strongly Agreed, 25.5% Agreed, 8% were Neutral and 5% Disagreed.

Survey Statement 7. "I think Fairfax County/VDOT should improve the following pedestrian areas:" Twenty-three people responded to this statement. The majority sentiment is for improvements in central McLean, on Old Dominion Drive, on Chain Bridge Road and on Dolley Madison. The entrance crosswalk to Lewinsville Park was mentioned again. There were some comments to link central Mclean to Tysons Corner.

Survey Statement 8 asked respondents to rank five statements in order of importance.

Statement a. "Improved sidewalks in downtown McLean (e. g., continuous, wide, buffered from traffic)." Eight people ranked this as number 1 priority while 9 people ranked it last. Thirteen were in the middle.

Statement b. "Bike trails into and around downtown McLean". Eight people ranked this as number 1 while 7 each ranked it as 3rd, 4th or 5th.

Statement c. "Improved pedestrian routes into downtown McLean." Nineteen people ranked this as 2^{nd} or 3^{rd} priority while 8 people ranked it 4^{th} or 5^{th} .

Statement d. "Improved crosswalks in the business district (e. g., greater number, more highly visible)." Eighteen people ranked this a 4th or 5th priority. Ten people ranked it as 2nd or 3rd.

Statement e. "A more inviting pedestrian environment-such as scattered benches, a unified sidewalk design, and a greater sense of place." Eighteen people ranked this 1st or 2nd while 6 people ranked it 3rd. Seven people ranked this as 4th or 5th.

Statement 9, the last question, asked respondents to provide their top 3 personal priorities. A sampling of number 1 answers includes:

"Crosswalk on Old Chesterbrook where Pimmit Run crosses."

"Bike lanes."

"123 trails."

"Enforce 35 MPH on Dolley Madison."

"Brawner sidewalk needed the full length - school kids."

"Ramps on sidewalks at all crosswalks."

"More police radar traps."

"Sidewalks on Old Dominion should be widened and extended."

"Continuous pedestrian paths around, through and connecting shopping areas."

"No right on red at major intersections."

"Crossings over chain Bridge Road to McLean HS and Lewinsville Park."

"Slow down 123 to 25 MPH (like Hwy 7 in Falls Church)."

"Bike lanes."

"Unified sidewalk design."

"Pedestrian signals."

"Prevention of speeding."

"Midblock crossing."