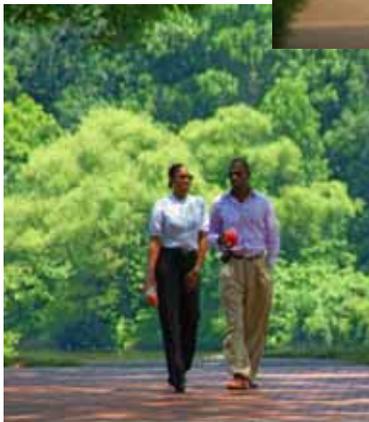
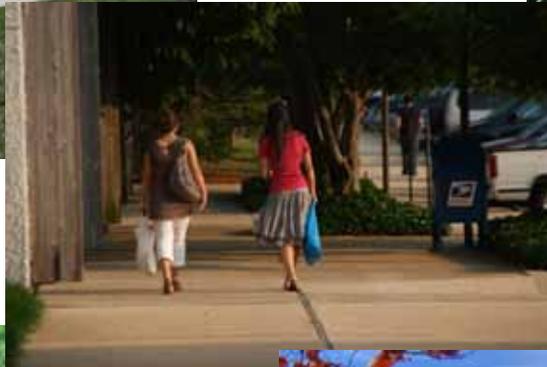


# Howard County Pedestrian Master Plan





# Acknowledgements

## County Executive:

*Ken Ulman*

## County Council:

*Calvin Ball, Chairman  
Courtney Watson, Vice Chairman  
Greg Fox  
Mary Kay Sigaty  
Jennifer Terrasa*

## Contributors:

### **Department of Planning and Zoning**

*Marsha McLaughlin, Director  
Steve Lafferty, Deputy Director  
Kimberley Flowers, Deputy Director  
Carl Balsler, Chief, Division of Transportation Planning  
Elmina Hilsenrath, Chief, Division of Environmental and  
Community Planning  
Benjamin Pickar, Planning Supervisor  
Brian Muldoon, Planning Specialist  
Niva Kodolikor, Planning Technician  
William Mackey, Planning Supervisor  
Randy Clay, Planning Specialist  
Lisa Hill, Administrative Analyst I  
Roberta Jackson, Administrative Support Technician III  
Elizabeth Green, Administrative Support Technician I*

### **Department of Public Works**

*James Irvin, Director  
Steve Sharar, Chief, Division of Transportation Projects  
Mark DeLuca, Chief, Division of Traffic Engineering  
George Frangos, Engineering Specialist, Traffic Engineering  
Diane Schwarzman, Engineering Specialist, Traffic Engineering*

### **Department of Recreation and Parks**

*Clara Gouin, Engineering Specialist I*

### **Department of Public Information**

*R. Scott Kramer, Technical Services Support Technician III*

### **Geographic Information Services Division**

*Virginia Peterman, GIS Coordinator  
Robert Slivinsky, Technical Services Specialist*

### **State Highway Administration**

*George Miller, District 7, Traffic Engineering*

### **Corridor Transportation Corporation**

*Fred Baumgardner, Service Quality Manager*







# Table of Contents

---

<b>SECTION ONE-INTRODUCTION</b> .....	<b>4</b>
Plan Purpose.....	4
Guiding Principles .....	5
Prioritization Factors.....	6
Estimated Implementation Timeframe .....	7
<b>SECTION TWO-PROCESS AND METHODOLOGY</b> .....	<b>9</b>
Initial Research .....	9
Field Research.....	10
Timeframe and Prioritization.....	10
Community Outreach.....	11
Next Steps .....	12
<b>APPENDIX A</b> .....	<b>13</b>
Improvement Location Table.....	13
<b>APPENDIX B</b> .....	<b>BACK COVER</b>
Improvement Location Map .....	Back Cover

## SECTION ONE

# Introduction

*P*edestrian travel is the most basic mode of human transportation. Moderate pedestrian activity offers many physical and mental health benefits. Some people in Howard County walk for recreation or exercise, but for others walking is a necessary means of travel to and from public transit, work, school, shopping and other activities. To effectively support and promote pedestrian activity, it is essential to provide a network of safe and reliable sidewalks, crosswalks, pathways, shoulders, pedestrian signals, signage, raised protective medians and other improvements.



Howard County's current network of pedestrian facilities evolved over many decades, during the same timeframe in which Howard County itself evolved from its rural roots to its current suburban and urban character.

Pedestrian facilities built during that period through the efforts of the government or private sector were developed generally in an *ad hoc* fashion. Only in Columbia was there a consistent strategy to coordinate pedestrian improvements from an overall community standpoint.



Today, there are many gaps and inconsistencies in the County's pedestrian network. The Pedestrian Plan process is intended to close those gaps, provide greater uniformity and predictability, improve access to public and commercial land uses and create a well balanced and effective pedestrian network.

## Plan Purpose

Recent efforts by Federal, State (including Maryland) and local governments nationwide to promote pedestrian planning and activity have reinforced the value of a systemic approach to pedestrian improvements. The Howard County Transportation Planning Division, in the Department of Planning and Zoning (DPZ), recognizing the need for a comprehensive and rational approach to a pedestrian network in Howard County, initiated this planning process in the Summer of 2005. County staff from the DPZ and the Department of Public Works (DPW) observed pedestrian activity and conducted extensive field surveys and evaluation of pedestrian facilities and needs Countywide. These field inspections, surveys and research by the County have revealed a pedestrian system of mixed characteristics. In addition to noting the presence or absence of sidewalks, the project team evaluated the need for such added features as marked crosswalks, curb cuts, raised medians, pedestrian signals, street lighting and other improvements. As the list of potential improvement locations grew, staff held seventeen meetings with

community groups to solicit their input, to confirm staff observations, to identify additional problem locations and to better understand community priorities.

In the same way that the existing pedestrian network was developed through both public and private initiatives, it is anticipated that future pedestrian improvements will be provided through a combination of County and State capital projects plus private sector construction as new development occurs. The Pedestrian Plan will provide guidance and structure as these improvements evolve. The Plan provides a list and map of locations where pedestrian facility improvements are deemed to be needed. This Improvement Locations list and Map establishes a framework for evaluating and prioritizing pedestrian improvement options.

## Guiding Principles

In identifying those locations where pedestrian improvements are needed and the possible improvement options, the following guiding principles were applied:

- Provide a system of sidewalks, pathways and associated pedestrian facility improvements which meet the mobility needs of current and future residents, enhance public safety, improve access to transit and support community revitalization.
- Establish a process for prioritizing the use of capital funds to be directed toward pedestrian facility improvements.



- Focus efforts on sidewalks and crossings in the more densely populated eastern part of the County.

- Direct resources to potentially unsafe areas as well as to locations which serve the greatest number of people based on pedestrian origins and destinations.

- Provide for safe pedestrian travel along and across minor collector and higher classified roads.

- Provide pedestrian improvements in residential neighborhoods consistent with the Howard County Policy on Sidewalk Extensions in Established Residential Neighborhoods (referred to herein as the County Sidewalk Policy).



- Provide guidance for the review of all development plans submitted to the County, including plans for State and County capital projects, with respect to the need for pedestrian facilities.

## Prioritization Factors

Clearly, the gaps and deficiencies in the County’s existing pedestrian facility infrastructure cannot all be addressed at once. Each of the potential improvement projects was therefore evaluated based on the following criteria and then placed into broad prioritization categories (high, medium, low) for possible future implementation, as noted in Appendix A: Improvement Location Table:

- ❖ The highest priority will be given to improvements which mitigate hazards to pedestrians.
- ❖ Primary initial focus is to create a system of pedestrian facilities along and between minor collector and higher classified roads linking important destinations (retail centers, public buildings, parks, employment sites, etc.) with major pedestrian points of origin.
- ❖ Priority will be assigned to pedestrian connections that also provide access to transit stops.
- ❖ Current and anticipated pedestrian demand will be primary factors in initial prioritization.



- ❖ Pedestrian facilities along State roads serving commercial areas, like US Route 1 and US Route 40, shall generally be considered for high priority. Review by and coordination with SHA on ownership, maintenance and liability is a prerequisite for proposals.
- ❖ Pedestrian connections to senior centers and senior living facilities will be prioritized based on anticipated walking destinations.
- ❖ Provision of pedestrian connections from existing neighborhoods to schools will be guided by the Howard County Public School System proposals and the County Sidewalk Policy.
- ❖ Pedestrian facilities along local roads will be considered if there are safety issues needing mitigation or if the improvement provides needed connectivity to pedestrian facilities on collector or arterial roads.

- Sidewalks are rarely appropriate along scenic roads due to the typical open section road design and often constrained rights-of-way. Paths may be appropriate to connect schools or parks to adjoining subdivisions. Safety issues however must be considered on scenic roads.
- Areas of the County with lower densities like the Rural West will be most cost-effectively served by road shoulder improvements enhanced for pedestrians. These enhancements can include improved sight distance, wider shoulders, street lighting, safety signs, etc.



### Estimated Implementation Timeframe

The Pedestrian Plan is an acknowledgement that the present network of facilities does not satisfy existing and anticipated pedestrian needs. The Plan is a tool for guiding government and private sector investment



in pedestrian facilities. Moving the list of projects in this Plan toward implementation cannot occur all at once, nor will it be accomplished by only Howard County government. Rather, it will require a concerted effort on several fronts. Involvement from a variety of organizations including the Columbia Association (CA), the State Highway Administration (SHA) and private sector development firms will be needed.

Through the County Capital Improvement Program (CIP) and State Consolidated Transportation Program (CTP), planners and engineers will be able to more efficiently allocate public funds for high priority pedestrian improvements. Similarly, as private development and redevelopment



occur, County staff will be able to use the priority listing to direct developers and property owners to provide pedestrian facility improvements which are consistent with existing and anticipated vicinal improvements and which fill gaps in the pedestrian facility network. The estimated implementation timeframes which follow reflect County and State Capital budgets, assumptions about lead time needed for projects, generalized cost estimates and the likelihood of private sector development improvements. It should be noted

that implementation of some improvement projects may be phased over a number of years and may not be completed in the timeframe in which they were initiated. For purposes of this report, implementation timeframes are categorized as follows:

- Committed – Project design and/or construction funds in the current year budget (County CIP or State CTP) and/or impending private sector development which includes pedestrian improvements.
- Short Term – improvement expected to be initiated within a 4-year period.
- Mid Term – improvement expected to be initiated within a 5 to 10 year period.
- Long Term – improvement expected to be initiated after 10 years.

## SECTION TWO

# Process and Methodology

## Initial Research



Prior pedestrian planning documents and studies with a pedestrian component were reviewed to identify possible improvement locations and proposals. Deficient locations previously identified which had not been improved were reevaluated as candidate improvement sites. These studies included:

- Howard County Comprehensive Transportation Plan – 1996
- MD Dept. of Transportation (MDOT) Transportation Emission Reduction Pilot Program (TERPP) – 1996-1998
- Greater Elkrige Pedestrian and Bicycle Plan -1997
- MDOT Access 2000 Program-1999-2001
- Howard County General Plan – 2000
- US 1 Revitalization Study - 2000 to 2002
- MD State Bicycle and Pedestrian Plan – 2002
- Pedestrian Access to Transit Study - 2003
- US 40 Corridor Enhancement Study - 2004



In addition to transportation-oriented and pedestrian studies, various land use and development plans were reviewed. These studies and plans indicate not only where pedestrian improvements are planned with development but also where future pedestrian demand might be generated. These land use plans included:

- 2003/2004 Comprehensive Rezoning Plans
- Long-term and large scale private development plans including Emerson, Maple Lawn Farms, Waverly and Columbia Town Center.
- Recently approved or in-process Sketch, Preliminary Final and Site Development Plans



Public agencies like the Howard County Department of Public Works and the State Highway Administration install and/or fund pedestrian improvements as both stand-alone projects or as part of larger projects e.g. road or intersection construction. Public agency capital budgets and long-range plans were consulted to determine where pedestrian improvements had been proposed or where other proposed capital projects might create pedestrian demand. These public agency plans and/or budgets were:

- Howard County Capital Budgets and Capital Improvement Master Plans
- MDOT Consolidated Transportation Programs



- Howard County Public School System (HCPSS) plans
- Howard County Department of Recreation and Parks plans.
- County Government databases were also consulted. These included various layers from the County Geographic Information System (GIS) including aerial photography, parcel lines, school locations, sidewalks, etc., as well as transit stop mapping and pedestrian count data.



## Field Research

GIS scale maps (600' = 1") were developed from the prior listed data sources. These maps included data from initial research plus additional GIS data layers. These maps and potential pedestrian improvement locations were then discussed in a series of meetings attended by Howard County Planning and Zoning (DPZ), Public Works (DPW), Recreation and Parks (DRP), Citizens Services and the Maryland State Highway

Administration (SHA). Howard Transit was also represented. A “core” group of participants evolved from these meetings which included Transportation Planning (DPZ), Environmental and Community Planning (DPZ), Traffic Engineering (DPW), and Transportation Projects (DPW). Transportation Planning solicited comments and recommendations, and then conducted extensive field work with DPW, developing listings and maps of potential pedestrian improvement locations.



## Timeframe and Prioritization

*Timeframe*- These are estimates of when improvements at candidate locations may be initiated. As described previously, timeframes are a combination of expectation, budgeting and planning goals. Timeframes may reflect a developer’s multi-year land use plan (e.g. Maple Lawn) or be indicated as a County or State capital project scheduled goal.

*Prioritization factors* – These are described as policy statements in the Pedestrian Plan. These

policy statements are distilled to five variables for which each proposal is scored: 3 for High, 2 for Medium and 1 for Low. The variables were also assigned a weighting factor to reflect relative importance in scoring. Weighting is as follows:

- Safety-multiply score by 4
- Cost effectiveness-multiply score by 3
- Demand-multiply score by 3
- Community Response-multiply score by 2
- Connectivity-multiply score by 2



Total scores (priority score times weight) were determined for all proposed locations and a frequency distribution for all scores was developed. Using median scoring as a starting point, projects scoring 33 or more are designated High Priority; 28 to 33 are designated Medium priority and 27 or less are designated Low Priority.

*Prioritization and Timeframe* – Priority scoring of High, Medium or Low may be indicated for a location associated within any *Timeframe*. For example, a private sector mixed use development may not be expected to be initiated for 10 or more years but by definition mixed use developments are assumed to be high generators of pedestrian traffic. Hence while the *Timeframe* is Long Term the *Priority* would still be High.

It also should be noted that this process for the Pedestrian Plan will be ongoing and dynamic. As projects are completed or determined to be non-buildable and move out of the Plan queue, other proposals will move forward in *Timeframe* and may change in *Priority* based on newly emerging factors. For example, residents of newly constructed communities often request sidewalks if they were not constructed during the land development process. Thus, public and community support could change the *Community Response* score and possibly the overall *Priority* score. Funding sources for pedestrian projects may also vary over time. A proposal which today is *Cost Effective* may not be so a few years from now when anticipated grants funds are unavailable.

## Community Outreach

The Pedestrian Plan was developed in phases by geographic area of the County beginning with the US 1 Corridor. As draft recommendations for each area were completed, they were vetted with area community organizations for review and comment. The Greater ElkrIDGE Community Association was the first to review draft concepts.

The North Laurel Civic Association followed. As the planning process continued, review was added by Ellicott City, Columbia, Scaggsville, and other communities. The Plan was presented to civic organizations including all of the Village Boards in Columbia, the Howard County Citizens Association, the Public Transportation Board, Transportation Advocates of Howard County and other groups. Comments and recommendations were consistently evaluated, and the draft Plan was modified as appropriate. Updated drafts were circulated to public agencies including DPW and



SHA for further review. The draft Plan was placed on the Howard County Government Web page for review and comment. Open public meetings for Countywide reviews were conducted in September 2006 where additional input was garnered.



## **Next Steps**

*T*his plan does not recommend specific design solutions. The alignments shown on the map which accompanies this plan are conceptual rather than engineered. The implementing agency or developer usually will determine the most appropriate design requirements once funding has been identified. The DPZ will work with other public agencies and private sector developers identifying possible

improvements and will monitor the progress of projects.

This Plan is also not a static document. As new developments and improvements occur and as traffic and pedestrian patterns evolve, it is anticipated that priorities for future upgrades will also shift. It is important that the County be alert and sensitive to those changes. Accordingly, it is anticipated that the list and mapping of projects which follow will be revised and comprehensively updated approximately every two years. Anyone who has knowledge of a need for pedestrian improvements in Howard County is urged to contact the Department of Planning and Zoning at (410) 313-2350.

## **Appendix A**

# **Improvement Location Table: Explanation of Format**

The following list indicates locations in Howard County where there are gaps or deficiencies in the County's existing pedestrian facility network or where it is expected there will be considerable pedestrian demand in the future. The list is organized as follows:

- Column 1      Community location.
  
- Column 2      Location Number on the corresponding map(s).
  
- Column 3      Description of the location and potential improvement concepts.
  
- Column 4      Weighted score of the proposed improvement (Appendix B **Timeframe and Prioritization**)
  
- Column 5      Estimated Implementation Timeframe(s)
  
- Column 6      Priority Level
  
- Column 7      Map number on which the location is depicted.
  
- Column 8      Comments describing site details, improvement options and other factors







**Howard County Department of Planning and Zoning  
Transportation Planning Division  
3430 Court House Drive  
Ellicott City, Maryland 21043  
410-313-2350**