



## Walking

### Types of Improvements

A variety of options are available to improve the pedestrian and roadside environment, ranging from the basic construction of sidewalks to including features that make walking more enjoyable.

**Sidewalk construction:** New sidewalk construction in the places where sidewalks are nonexistent is seemingly an obvious response. If land acquisition for right-of-way is required, the process becomes more complicated. Creative approaches may be needed such as narrowing the roadway to accommodate a sidewalk, or acquiring a walkway easement across private property. The width of a sidewalk may vary according to the amount of anticipated used. A sidewalk width of 5 feet is the minimum county standard, but wider sidewalks may be appropriate in commercial districts, or in the vicinity of college campuses, schools, and transit stops.

**Curb ramps:** In accordance with federal regulations, new sidewalks are constructed with curb ramps. However, there are many locations where pre-existing sidewalks still need to be upgraded. These are being addressed on an as-needed basis, or as sidewalks are rebuilt.

**Variety in paving materials:** While concrete is likely to be the most cost effective, the addition of decorative paving such as brick or colored concrete can add extra visual interest in special locations. In more naturalistic environments, asphalt material may be more appropriate. Rubber sidewalks can also be used in places where tree roots and uplift would otherwise damage sidewalk pavement. Where suitable soil conditions exist, permeable pavement, concrete pavers and grid pavers are options that allow storm runoff to percolate into the ground beneath, providing filtering of pollutants and storage and absorption of runoff.

**Crosswalks:** Pedestrian crossings may be marked with reflective material or paint, specialized treatments such as brick or stamped asphalt, or raised slightly higher compared to the rest of the roadway. Crosswalks should be present on all legs at signalized intersections, unless hazardous conditions make one or two legs unsuitable.

**Pedestrian traffic signals and markings:** Enhanced signals, signage, and road markings (e.g., advance stop and yield lines) offer the opportunity to strengthen crosswalk safety. Pedestrian push-button devices activate the “Walk/Don’t Walk” cycle and extend the amount of time the walking signal remains on, giving the pedestrian more time to cross the road. Count-down signals that display in seconds the amount of time available to cross the road are now the county standard, although it will take the next decade to convert all pedestrian signals in the county to the new format.





**Lighting:** Adequate lighting should be provided for all pedestrian routes along streets, and in other locations where night-time use occurs.

**Traffic Calming:** This set of techniques works to slow down passing motor vehicle traffic to better balance desires of motorists to move quickly with quality of life and safety concerns of pedestrians and neighborhood residents. The Department of Public Works has created a Neighborhood Traffic Management Program to manage and implement such projects on local streets. The decision on whether to employ active or passive traffic calming measures is dependent on traffic volume and speed, the amount of cut through traffic, and site conditions. Options include creating one way traffic patterns, turn restrictions, traffic circles or roundabouts, speed humps, and pedestrian refuge islands, among others.



**Streetscape improvements and pedestrian amenities:** Street trees, plantings, lighting, benches, trash receptacles, bus shelters, wayfinding signage, and interpretational signage should be incorporated into all pedestrian improvement projects as appropriate, to support and encourage pedestrian activity. Street trees provide shade during the summer and have a calming effect on traffic speed, making the overall environment more pleasant for walking. Benches and trash receptacles should be placed strategically, where people are likely to pause to rest or wait for transit.

## Factors that Encourage/Discourage Walking

When asked to identify the factors that encourage and discourage walking at the workshops and through the survey, the most common response was the presence/absence of sidewalks. People said that they would be encouraged to walk more if an interconnected system of sidewalks linking destinations was available, as well as more education and walk to school support for children and youth.

The pedestrian environment along the arterials where many of the identified destinations are located was described as the most difficult to navigate. These roads include Reisterstown Road, Liberty Road, Baltimore National Pike (US 40), and York Road, and are characterized by long distances between safe pedestrian crossings, wide road width, and high speeds, making walking difficult whether or not there are sidewalks. Special attention is needed to improve walkability in such corridors.

The specific issues for pedestrian facilities noted by citizens included:

**No Sidewalk:** This was the most common problem reported during the planning process. In many locations, a sidewalk had not been constructed, had been constructed on only one side of the street, or was constructed only partially, with significant gaps along the route.

**Poor condition:** The condition of the paving in some areas can make walking hazardous. In some cases, improper drainage may be an issue.

**Lack of crosswalks or pedestrian signals:** Many busy intersections lack crosswalks and pedestrian signals may not provide enough time to cross the street.

**Obstacles:** Objects such as telephone poles, fire hydrants or parked cars in driveways may block walkways and make walking difficult, particularly with strollers or wheelchairs.

**Lighting:** Lighting of walkways can be insufficient.

**Maintenance:** Several maintenance issues discourage walking, including overgrown vegetation obstructing walking routes or sight lines, litter and debris, and lack of snow removal.



## Issues and Opportunities in Constructing Sidewalks

**Lack of space/difficult topography:** In many locations, the right-of-way ends at the road paving edge requiring land acquisition, or variable topography makes it impossible to construct a continuous sidewalk without significant and expensive re-grading or retaining walls. Roadway culverts at watercourses may need to be extended, or bridges built. Utilities, drainage ditches, trees, fences, mailboxes and the like are often placed in the line of what would be the normal placement of a sidewalk. Redesign, relocation and/or removal of these items can be complicated and expensive, and can sometimes generate opposition from adjoining property owners.



**Need for easements:** Constructing a new sidewalk may entail procuring additional rights-of-way or access easements. Currently the Office of Law does not favor access easements because the County Code governing such easements does not provide adequate requirements for maintenance.



*The pedestrian environment can be challenging due to lacking or incomplete sidewalks, and, in winter, lack of snow removal.*

**Green infrastructure:** With the new state watershed protection requirements and greater citizen interest in protecting the environment, building new sidewalks offers opportunities to incorporate green techniques such as the use of permeable pavement.

**Improving access for the disabled:** Replacement of older sidewalks provides the opportunity to upgrade their design to current ADA (Americans with Disabilities Act) standards, including smoother surfaces, larger widths, relocation of obstacles, and installation of curb ramps.



*Changing zoning laws to encourage walkable design could help improve the quality of the county's commercial corridors over time, as properties redevelop.*

**Improving access to schools:** Providing safe pedestrian facilities in proximity to schools will allow more students to walk to school and help reduce the traffic congestion that occurs around schools during opening and closing times. Planning for new sidewalks around schools should be done in association with the local PTA and school administration to coordinate with busing and crossing guard requirements.

**Improving commercial corridors:** Despite streetscaping and traffic management techniques, the overall quality of the pedestrian experience along commercial corridors is diminished due to the form of the buildings and parking. The county's zoning regulations encourage orienting buildings to the automobile, with parking in the front. By way of comparison, buildings in older town centers such as Catonsville or Pikesville were constructed with buildings oriented toward sidewalks and to pedestrians, and with parking to the rear. This creates a sense of place where people feel comfortable walking, yielding an experience that is far more pleasing.

## Recommendations for Pedestrian Improvements

The recommendations for pedestrian improvements are shown on the following maps, with one map for each council district. The locations for improvements were identified by citizens, as well as through a visual survey of aerial photographs to determine neighborhoods that lacked sidewalks, but appeared to have area to accommodate them within the public right-of-way.

Not appearing on the maps, but to be incorporated into this plan, are the recommendations of the Walkable Community Workshops held in three areas within the plan's boundary— Hunt Valley, Pikesville and the US 40 area. These recommendations are contained in individual reports created in 2005.

As with the shared use path recommendations, the key that accompanies the maps also indicates the type of improvement (whether sidewalk is needed on one or both sides of the street) and priority.

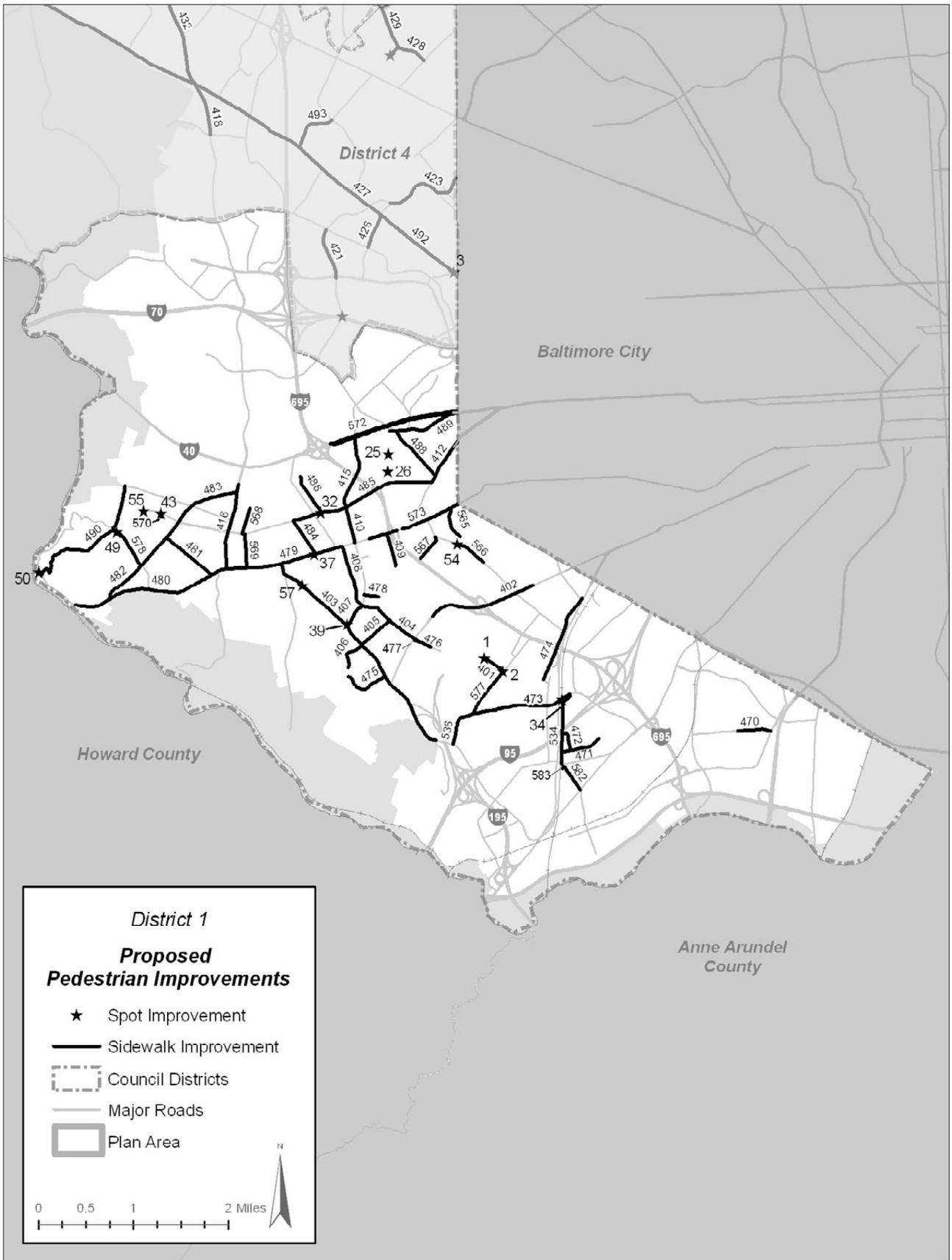
The recommended pedestrian projects fall into two general categories:

- New sidewalk construction where sidewalks are lacking, in disrepair, or otherwise in need of improvement
- Individual, "spot" improvements such as crosswalks, pedestrian signals, curb ramps and bus shelters.

Priority recommendations for pedestrian facilities were made based on two factors:

1) Pedestrian potential—how much pedestrian activity is expected in particular locations, based on a variety of factors including residential and/or employment density, and proximity to schools, parks, libraries, colleges, town center commercial districts, and transit stations; and

2) Level of pedestrian deficiency—how difficult it is for people to walk along or cross particular street because of the lack of facilities. Because financial resources are limited, recommendations prioritized locations where pedestrian activity is predicted to be significantly greater.



## DISTRICT 1 – PROPOSED PEDESTRIAN IMPROVEMENTS

Map Key



No.	Street	From	To	Type <sup>1</sup>	Priority <sup>2</sup>
401	Poplar Ave	Hilltop Circle	Shelbourne	1	1
402	Wilkens Ave	Alan Drive	Walker Ave	2	2
403	S Rolling Rd	Frederick Rd	Metropolitan Blvd	2	1
404	Hilltop Rd	Wilkens Avenue	Bloomsbury Avenue	2	1
405	Valley Rd	S Rolling Road	Hilltop Road	2	1
406	Campus Dr	S Rolling Road	CCBC Campus	1	1
407	Bloomsbury Ave	Mellor Ave	S Rolling Road	1	1
408	Mellor Ave	Frederick Road	Bloomsbury	2	2
409	Wade	Locust	Frederick Road	1	2
410	Ingleside Ave	Edmondson Ave	Frederick Rd	2	1
412	Edmondson Ave	Baltimore City Line	Harlem Ln	2	1
415	Ingleside Ave	Baltimore National Pike	Edmondson Ave	2	1
416	N Rolling Rd	Baltimore National Pike	Frederick Rd	2	1
470	3rd Ave	Hollins Ferry Road	Saratoga Avenue	1	1
471	Maple Ave	Arbutus Avenue	Road End Maple Ave	2	1
472	Arbutus Ave	Potamac Avenue	Maple Avenue	2	1
473	Sulphur Spring Rd	Selford Road	Dolores Avenue	2	2
474	Leeds Ave	Beechfield Avenue	Linden Avenue	1	2
475	Collegiate Dr	S Rolling Rd	CCBC Campus	1	1
476	Hilltop Road	Hilltop Circle	Wilkens Ave	1	1
477	Hilltop Rd	East Side Hilltop Road	West Side Hilltop Road	1	1
478	Asylum Ln	Bloomsbury Ave	Hickory	2	3
479	Frederick Rd	Mellor Ave	Rolling Rd	2	1
480	Frederick Rd	Rolling Road	River Road	2	3
481	Devere Ln	Old Frederick Road	Frederick Road	2	2
482	Old Frederick Rd	Stonewall Road	Frederick Road	2	3
483	Old Frederick Rd	Rolling Road	Frederick Road	2	1
484	N Beaumont Ave	Edmondson Ave	Frederick Rd	2	1
485	Edmondson Ave	Harlem Ln	Beaumont Ave	2	1
486	Wesley Ave	Edmondson Avenue	Roberts Avenue	2	2
488	Academy Rd	Old Frederick Rd	Edmondson Ave	1	2
489	Old Frederick Rd	Baltimore National Pike	Charing Cross Rd	1	2
490	Westchester Ave	Rockwell Avenue	Frederick Road	2	3
534	Potomac /Waelchliave	Ridge Road	Sulphur Spring Road	2	2
536	Sulphur Spring Rd	Dolores Ave	Selford Rd	2	1
565	S Belle Grove Rd	Frederick Rd	Garden Ridge Rd	2	3
566	Maiden Choice Ln	Garden Ridge Rd	Charlestown Ret. Community	2	2
567	Paradise Ave	Maiden Choice Ln	Shady Nook Ave	2	3
568	Oakdale Ave	Edmondson Ave	End	1	2
569	Dutton Ave	Edmondson Ave	Frederick Rd	1	2
570	Belleview Rd Ext.	Belleview Rd End	Catonsville MS	1	1
572	Baltimore Natl. Pike	City Line	I-695	2	1
573	Frederick Rd	City Line	Bishops Ln	2	1
578	Oella Ave	Westchester Ave	Old Frederick Rd	2	3
582	Selma Ave	Winans Ave	Washington Blvd	2	1
583	Winans Ave	Selma Ave	Washington Blvd	2	1
577	Shelbourne Rd	Sulphur Spring Rd	Poplar Ave	2	1

**1: Type Key**

1 = Sidewalk required on one side of street  
 2 = Sidewalk required on both sides of street

**2: Priority Key**

1 = High priority, short-term implementation  
 2 = Moderate priority, mid-term implementation  
 3 = Low priority, long-term implementation

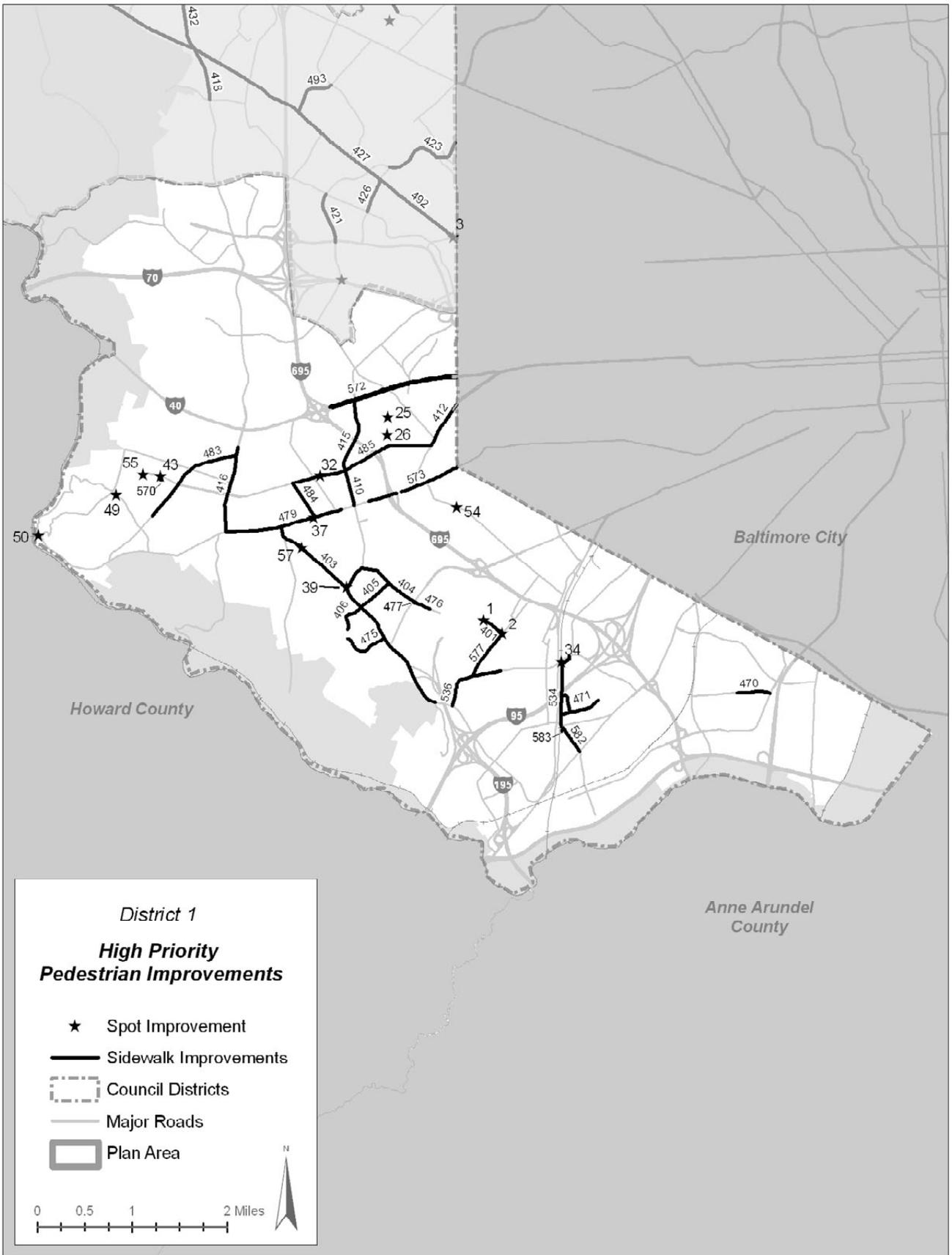


## Map Key, Continued DISTRICT 1 -- PROPOSED PEDESTRIAN IMPROVEMENTS

### SPOT IMPROVEMENTS

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No.	Location	Improvement
1	At Hilltop Circle and Poplar Ave	Bus shelter
2	At Shelbourne Rd and Poplar Ave	Bus shelter
25	At Harlem Ln and Maple Forest Rd	Ramp
26	At Harlem Ln and Harlem Ln	Ramp
32	At Edmondson Ave and Wesley Ave	Sidewalk
34	Sulphur Spring Road near train bridge	Improve steps
37	Across Frederick Road at Catonsville Library	Improved crosswalks
39	Catonsville HS at Rolling Rd	Improved crosswalks
43	Edmondson Ave near Catonsville MS	Replace storm drain
49	No. 9 at Oella Ave	Path crossing, rumble strips
50	Oella Ave and Frederick Rd	Crosswalks, curb ramps
54	Short Line and Maiden Choice Ln	Crosswalk, signage
55	Chalfonte and Edmondson	Add stop signs on Chalfonte to facilitate path access
57	S Rolling Rd and Park	Crosswalk





## DISTRICT 2 – PROPOSED PEDESTRIAN IMPROVEMENTS



No.	Street Name	From	To	Type <sup>1</sup>	Priority <sup>2</sup>
429	Campfield Rd	Bedford Rd	Wildwood Ave	2	1
441	Winands Rd	Cedars Mill Rd	Horatio Rd	1	2
442	Winands Rd	Horatio Rd	Old Court Rd	1	2
443	Sudbrook Ln	Reisterstown Rd	Milford Mill Rd	2	2
444	Sudbrook Ln	Reisterstown Rd	Park Heights Ave	1	2
447	W Lake Ave	Baltimore City Line	Falls Road	2	1
448	Charles St	Baltimore City Line	Bellona Ave	2	1
462	Greenpoint Rd	Chatterton Lough Rd	Padonia Rd	2	2
502	Brightside Ave	Reisterstown Rd	Dead End Brightside Ave	2	3
503	Hawthorne Ave	Reisterstown Rd	Dead End Hawthorne	2	3
504	Sherwood Ave	Reisterstown Rd	Dead End Sherwood PI	2	3
505	Waldron Ave	Reisterstown Rd	Purvis PI	2	3
506	Ivanhoe PI	Brightside Ave	Waldron Ave	2	3
507	Church Ln	Reisterstown	Greenwood Rd	2	2
508	Bedford Ave	Church Ln	Old Court	2	2
509	Walker Ave	Reisterstown Rd	28 Walker Ave	2	2
510	Walker Ave	Old Court	28 Walker Ave	2	2
511	Park Heights Ave	Slade Ave	Hooks Ln	2	1
512	Seven Mile Ln	Southvale	Old Court Rd	2	1
513	Seven Mile Ln	Baltimore City Line	Southvale Rd	2	1
514	Timberfield Ln	East End Timberfield Ln	West End Timberfield Ln	2	2
515	Lightfoot Dr	Old Court Rd	Dead End Lightfoot	2	2
516	Darwood Dr	Smith Avenue	Lightfoot Drive	1	1
517	Greenspring Ave	Quarry Lake Drive	I 695 Ramp	1	1
521	W Padonia Rd	Roundwood Rd	Jenifer Rd	2	3
575	Reisterstown Rd	9801 Reisterstown Rd	10123 Reisterstown Rd	1	1
574	Smith Ave	Rockland Hills Dr	400 feet west	1	3
576	W Joppa Rd	Tally Ho Rd	2328 W Joppa Rd	1	2
579	Alter St	Campfield Rd	North Alter St	2	1
581	Bedford Rd	Sudbrook MS	Milford Mill Metro Station	1	2

### SPOT IMPROVEMENTS

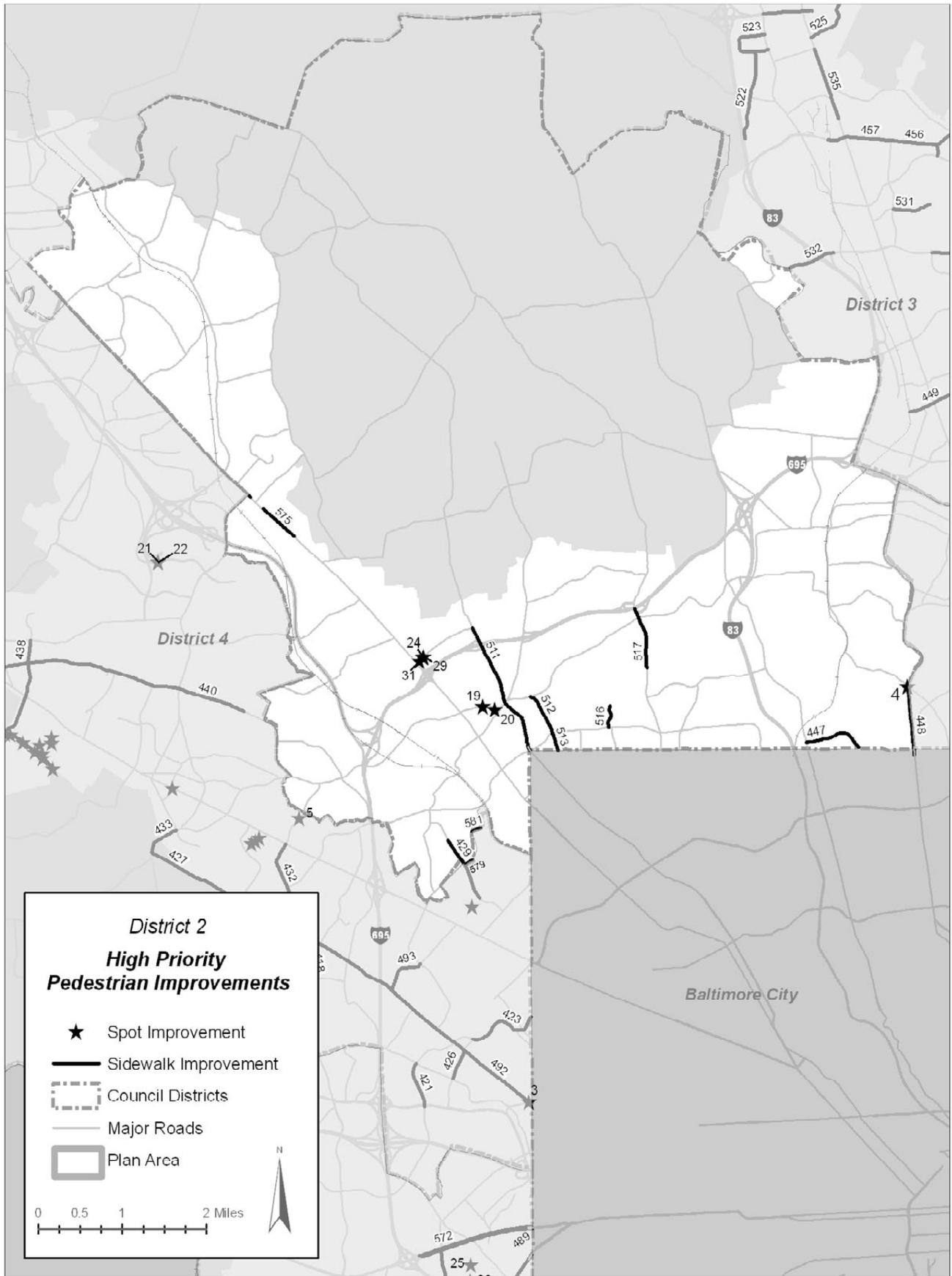
No.	Location	Improvement
4	Charles St and Bellona Ave	Crosswalk
19	Old Court Rd and Walker Ave	Ramp
20	Old Court Rd and Old Court Rd	Ramp
24	Hooks Ln and Greene Tree Rd	Crosswalk
29	Hooks Ln and Address 1	Sidewalk
31	Hooks Ln and Address 2	Sidewalk

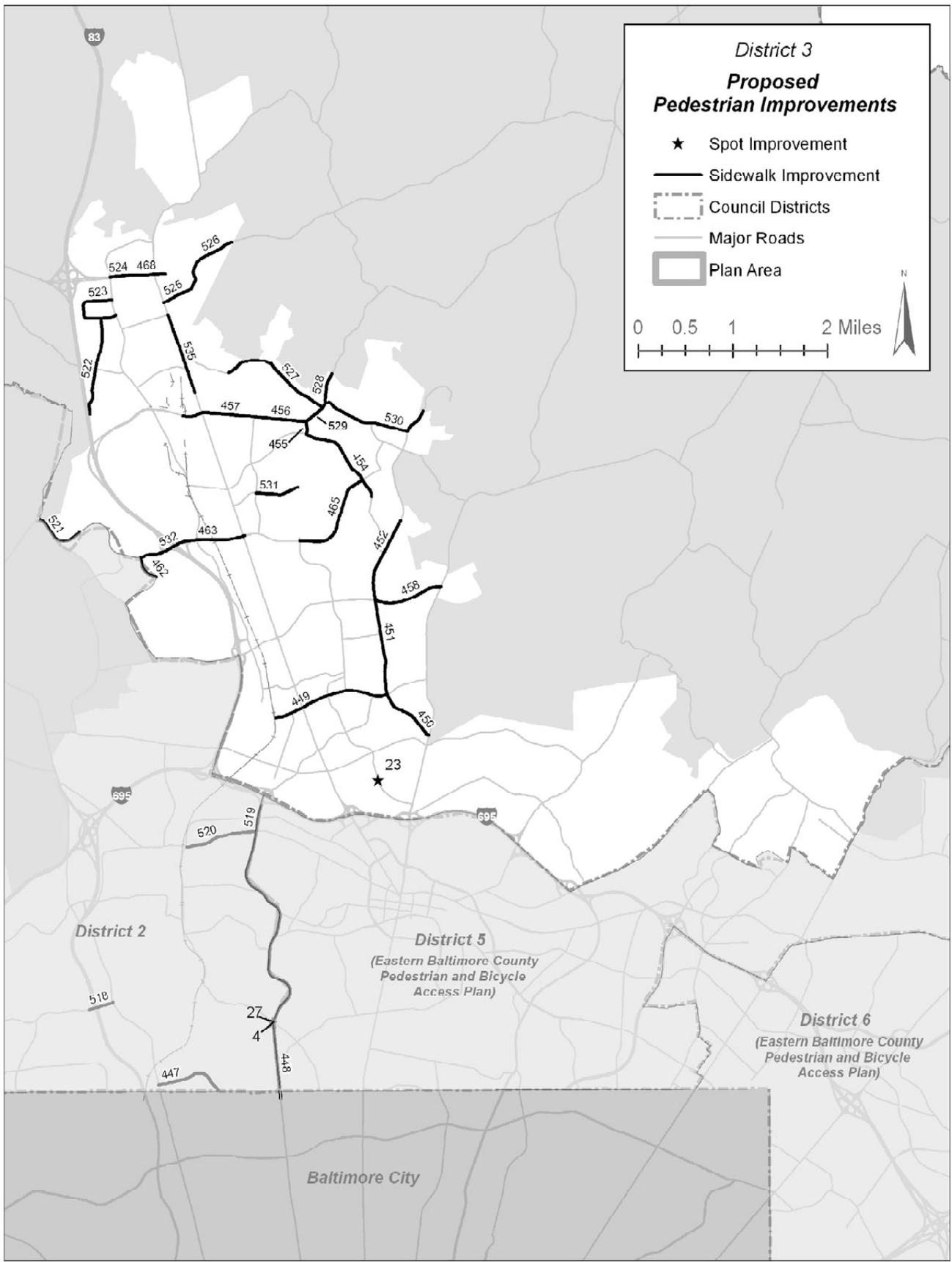
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## Map Key DISTRICT 3 – PROPOSED PEDESTRIAN IMPROVEMENTS

No.	Street Name	From	To	Type <sup>1</sup>	Priority <sup>2</sup>
449	E Ridgely Rd	Dulaney Valley	York/Aylesbury	2	1
450	Pot Spring Rd	Dulaney Valley	Ridgely	2	2
451	Pot Spring Rd	Ridgely Road	Chantry	2	2
452	Pot Spring Rd	Chantry	Stella Maris	2	2
454	Cranbrook Rd	Mistwood	Ridgeland	1	2
455	Ridgeland Rd	Girdwood	Warren	2	1
456	Warren Rd	Greenside	Ridgeland	2	1
457	Warren Rd	York Road	Greenside	2	1
458	W Timonium Rd	Dulaney Valley Rd	Potspring Rd	2	1
462	Greenpoint Rd	Chatterton Lough Rd	Padonia Rd	2	2
463	E Padonia Rd	York Rd	I-83	1	1
465	W Padonia Rd	Cranbrook Rd	Eastridge Rd	1	1
468	Shawan Rd	York Road	Light Rail Road Crossing	2	1
521	W Padonia Rd	Roundwood Rd	Jenifer Rd	2	3
522	Gilroy Rd	Schilling Circle	End Of Gilroy Road	2	1
523	Schilling Cir	Schilling Road	McCormick Road	2	1
524	Shawan Rd	Light Rail Road Crossing	McCormick Road	1	1
525	Ashland Rd	York Road	Paper Mill Road	2	1
526	Paper Mill Rd	Ashland Road	Loch Raven Reservoir	2	1
527	Sherwood Rd	Tyrie Ave	Bosley Rd	2	3
528	Warren Rd	Bosley Rd	End Of Poplar Hill Rd	2	2
529	Warren Rd	Ridgeland	Bosley Road	2	1
530	Bosley Rd/Potspring Rd	Warren Rd	Colonade Rd	2	1
531	Galloway Ave	Greenside Dr	Dead End Galloway	2	1
532	E Padonia Rd	I-83	Greenpoint Rd	2	1
535	York Rd	Matthews Ave	Wight Ave	2	1

### SPOT IMPROVEMENTS

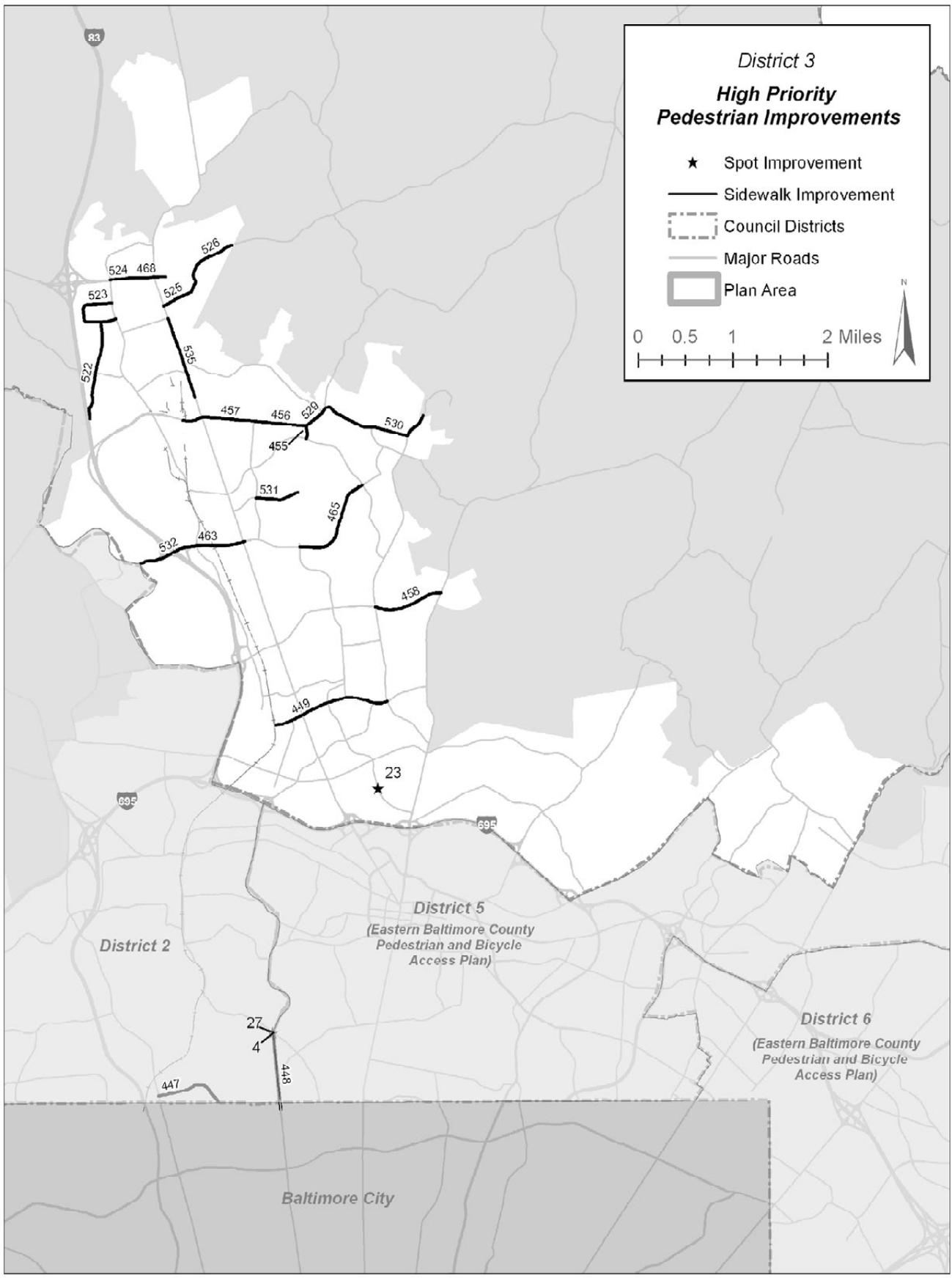
No.	Location	Improvement
23	Charmuth Rd and Felton Rd	Crosswalk

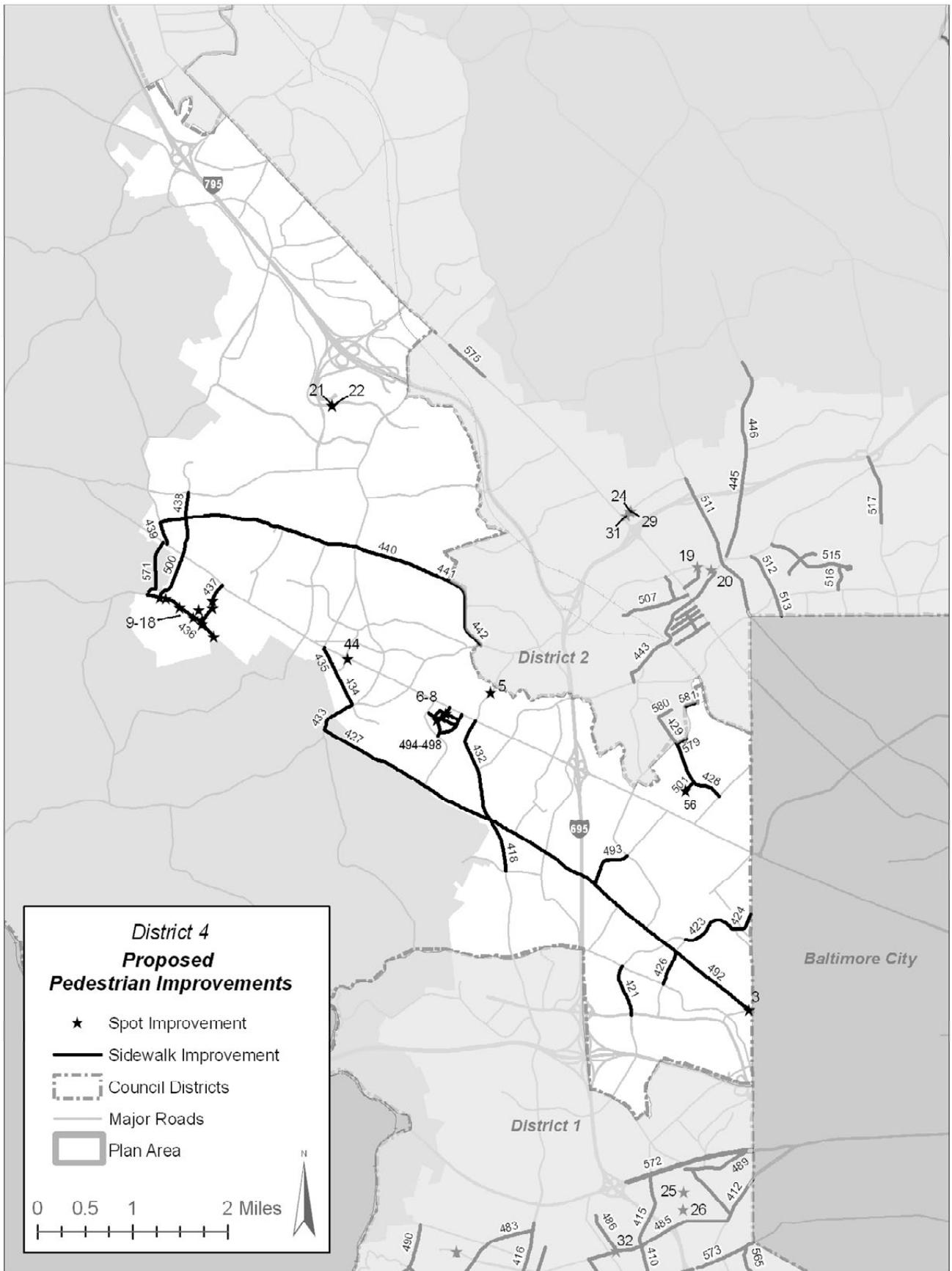
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## DISTRICT 4 – PROPOSED PEDESTRIAN IMPROVEMENTS



No.	Street Name	From	To	Type <sup>1</sup>	Priority <sup>2</sup>
418	Rolling Rd	Windsor Mill Rd	Windsor Blvd	2	1
421	Woodlawn Dr	Security Blvd	Dogwood Rd	2	1
423	Gwynn Oak Ave	Woodlawn Dr	Cedar Dr	1	1
424	Gwynn Oak Ave	Cedar Dr	Beethoven Ave	1	1
426	Gwynn Oak Ave	Dogwood Rd	Windsor Mill Rd	1	1
427	Windsor Mill Rd	Gwynn Oak Ave	Old Court Rd	1	1
428	Wildwood Ave	Campfield Rd	Patterson Ave	2	2
429	Campfield Rd	Bedford Rd	Wildwood Ave	2	1
432	Rolling Rd	Windsor Mill Road	Liberty Road	2	1
433	Old Court Rd	Windsor Mill Road	Greens Lane	2	1
434	Greens Ln	Old Court Road	Between Greenslanding/Marley	2	2
435	Greens Ln	Between Greenslanding/Marley	Liberty Road	2	2
436	Marriottsville Rd	Hernwood Es	Carriage Hills Park	2	1
437	Live Oak Rd	Liberty Rd	Marriottsville Rd	1	2
438	Marriottsville Rd	Liberty Rd	Lyons Mill Rd	1	1
439	Deer Park Rd	Liberty Rd	Winands Rd	2	3
440	Winands Rd	Deer Park Rd	Cedars Mill Rd	2	1
441	Winands Rd	Cedars Mill Rd	Horatio Rd	1	2
442	Winands Rd	Horatio Rd	Old Court Rd	1	2
492	Windsor Mill Rd	Kernan Dr	Gwynn Oak Ave	1	1
493	St Lukes Ln	Windsor Mill Road	Essex Road	2	1
494	Meadowdale Dr	Liberty Rd	Merryview Ct	2	3
495	Merryview Dr	Courtleigh Dr	Dead End Merryview Ct	2	3
496	Charmel Dr	Meadowdale Dr	Jean Dr	2	3
497	Merrymount Dr	Meadowdale Dr	Merryview Ct	2	3
498	Jean Dr	Liberty Rd	Merryview Ct	2	3
500	Marriottsville Rd	Lanamer Rd	Liberty Rd	2	1
501	Campfield Rd	Wildwood Avenue	Carol Rd	1	2
571	Sheraton Rd/Marriottsville Rd	Liberty Rd	Hernwood ES	2	2
579	Alter St	Campfield Rd	North Alter St	2	1
580	Campfield Pl	Campfield Rd	Sudbrook MS	2	2
581	Bedford Rd	Sudbrook MS	Milford Mill Metro Station	1	2

### SPOT IMPROVEMENTS

No.	Location	Improvement	
3	Windsor Mill Rd and Kernan Dr	Bus shelter	
5	Rolling Rd and Church Ln	Crosswalk	
6	Jean Dr and Merrymount Dr	Crosswalk	
7	Jean Dr and Charmel Dr	Crosswalk	
8	Jean Dr and Merryview Dr	Crosswalk	
9	Marriottsville Rd and Kings Point Rd	Ramp	
10	Marriottsville Rd and Kittridge Ct	Ramp	
11	Marriottsville Rd and Hobart Ct	Ramp	
12	Marriottsville Rd and Templar Rd	Ramp	
13	Marriottsville Rd and Corn Stream Rd	Ramp	
14	Marriottsville Rd and Orchard Shade Rd	Ramp	
15	Live Oak Rd and Waterwheel Sq	Ramp	
16	Live Oak Rd and Templar Rd	Ramp	
17	Live Oak Rd and Axhead Ct	Ramp	
18	Templar Rd and Oxyoke Ct	Ramp	
21	Red Run Blvd and Restaurant Park Rd	Crosswalk	
22	Red Run Blvd and Restaurant Park Rd	Bus shelter	
44	Along Liberty Road from Courtleigh to Offut Rd	Extend streetscaping and lighting	
56	Campfield Rd	Correct drainage problem	

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