

CHAPTER 7: TRANSPORTATION

Goals

- Improve MD 140 and surrounding development to optimize the highway’s capacity, operation, and safety and provide bicycle and pedestrian access
- Provide a variety of transportation options for travel within the county and outside the county for business, employment, shopping, medical, and other purposes
- Reduce traffic congestion by improving the safety and efficiency of the community’s existing and future transportation network
- Provide a redundant roadway network with alternative routes for local trips that will disperse traffic on the roadway network, thereby reducing local traffic and congestion on the area’s State highways, such as MD 140

Current Conditions

1 Inventory of Existing State, County, and Local Roads

Most of the county roads that are located within the study area have a functional classification of local. Roads that have a different classification are noted below.

Avondale Road is a two-lane, undivided road proceeding east and west from Medford Road to Stone Chapel Road. Two marked twelve-foot wide travels lanes are provided except for an industrial zone near Medford Road where the lane width expands to 17 feet. There are no shoulders serving this road. The total length of the road is .88 mile with a posted speed limit of 35 miles per hour. Average

What does Functional Classification mean?

Roads in Carroll County were classified based on the objective to develop a function classification system that would be tailored to Carroll County’s road networks, comprehensive in nature, and compatible with the MD State Highway Administration’s (SHA) arterial matrix and Federal Highway Administration’s (FHWA) guidelines.

Carroll County’s Rural Functional Classification Criteria consists of the following six functional classes: principal arterials, intermediate arterials, minor arterials, major collectors, minor collectors, and local roads.

Rural arterials provide high-speed, high-volume travel between major points in both rural and urban areas. Consequently, higher speeds may be typical. They are classified as principal, intermediate, and minor.

Rural collectors serve primarily intracounty travel and constitute those roads on which the traffic flow (regardless of volume) is facilitated between local roads and arterial highways. Consequently, more moderate speeds may be typical. These roads are classified as major or minor.

Rural local roads are all roads not classified as rural arterials or collectors, with the exception of privately-owned roads, which are not classified. Rural local roads primarily provide access to adjacent land and provide service to collectors and other higher-functional classes.

Urban areas are those which have a population greater than 5,000 within its boundaries (Westminster & Freedom). **Urban arterials** primarily provide service to through traffic that has neither origin nor destination within the urban areas. Urban intermediate arterials primarily provide service to rural-oriented traffic, and urban minor arterials primarily provide serviced to major movements within the urban area.

Urban collectors provide both land access service to and traffic circulation within residential neighborhoods, as well as commercial and industrial areas. It differs from the urban arterial in that facilities on the collector system may enter residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. The urban collector also collects traffic from local streets in residential neighborhoods and channels it into the arterial system.

Urban local streets comprise all facilities not on one of the higher systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through traffic movements is deliberately discouraged.

daily traffic (ADT's) counts taken in 2002 measured 254 vehicles west of Stone Chapel Road, and 297 north of Medford Road. The County classifies this road as a rural minor collector.

Bond Street is a two-lane, undivided road running north and south from MD 27 (Ridge Road) to MD 32 (West Main Street). Within the study area, the road runs from MD 27 to the Westminster corporate limits. Two marked twelve-foot wide travel lanes are provided with little to no shoulder. The length of the segment of road from MD 27 to the Westminster City limits is .59 mile and the posted speed limit is 30 miles per hour. ADT's taken in 2002 recorded 3,842 vehicles south of West George Street, and 3,226 north of MD 27. The County classifies this road as an urban major collector.

Center Street, for the segment located in the unincorporated environs north of MD 140, is a four-lane, divided road traveling east from Cranberry Road and curving southeast to run parallel to MD 140 where it meets the City corporate boundary just west of Malcolm Drive. The four 11-foot wide travel lanes have a posted speed of 30 miles per hour. The road includes curb and gutter the entire length of this section (0.7 mile), with a sidewalk following the southern side of the roadway. There are no shoulders. ADT's taken in 2002 recorded 5,305 vehicles east of Cranberry Road and 8,682 south of Gorsuch Road. The County classifies this road as an urban major collector. For the segment located in the unincorporated environs south of MD 140, Center Street is a two-lane, undivided roadway extending from the Westminster corporate limits at Stoner Avenue southeast to MD 32. Two marked 12-foot wide travel lanes with 3-foot shoulders are provided from Gist Road to Stoner Avenue. The length of this segment is 0.67 mile with a posted speed limit of 30 miles per hour. ADT's taken in 2002 measured 2,901 vehicles west of MD 32, 4,536 west of Gist Road, and 5,168 at Stoner Avenue. The County classifies this road as an urban major collector.

Chapel Road is a two-lane, undivided road traveling east and west between Stone Chapel Road and MD 27 (Ridge Road). Two nine-foot wide travel lanes are provided along this road, except for the Stone Chapel Road intersection where the total width of usable pavement expands to 48-feet to allow for right and left turn lanes. There are eight-foot wide gravel shoulders beginning at the Stone Chapel Road intersection and ending just west of the Western Chapel Road intersection. The total length of the road is 1.27 miles with a posted speed limit of 30 miles per hour. ADT's taken in 2002 averaged 3,361 vehicles east of Stone Chapel Road, 2,720 east of Western Chapel Road, 4,080 east of Old Westminster Road, 4,066 west of MD 27, 3,975 west of Old Westminster Road, and 1,695 west of Western Chapel Road. The County classifies this road as a urban major collector.

Cranberry Road travels north and south from MD 140 (Baltimore Boulevard) to MD 852 (Old Manchester Road). There are two separate segments of this road that fall outside of the Westminster corporate limits. The southern segment is a four-lane, partially divided road that runs between two Westminster corporate boundaries. Four marked twelve-foot wide travel lanes are provided from MD 140 to Center Street divided by a six-foot wide painted and/or concrete median. The road is reduced to two 10-foot wide travel lanes just north of the Center Street intersection. The length of this segment is .28 mile. The northern portion is a two-lane, undivided road proceeding between the Westminster corporate boundary and MD 852. Two 10-foot travel lanes are provided along this .69-mile segment. The speed limit for both sections is 30 miles per hour and there are little to no shoulders provided for either portion. ADT's taken in 2006 measured 6,728 vehicles north of Center Street, 5,402 south of MD 852, and 2,946 south of Center Street. The County classifies both of these sections as urban minor collectors.

East Main Street is a two-lane, undivided road extending east and west from MD 97 (Malcolm Drive) to Railroad Avenue. Within the study area, the road runs from MD 97 to the Westminster City line. Two marked eleven-foot wide travel lanes are provided along with 5- to 20-foot wide shoulders for on-street parking and turning movements. The length of this segment is .3 mile and the posted speed limit is 30 miles per hour. Traffic signals serve the intersection at MD 97. ADT's taken in 2002 recorded 12,525 vehicles west of MD 97, 11,544 at 140 Village Road, and 9,991 at the Westminster City line. The County classifies this road as a minor arterial - urban.

Englar Road is a four-lane road traveling north and south from Carroll Street to Hahn Road. Within the study area, the road is undivided and runs from Carroll Street to MD 140 (Baltimore Boulevard). Four marked twelve-foot wide travel lanes are provided with no shoulders. The length of this section of road is .2 mile and the posted speed limit is 25 miles per hour. The MD 140 intersection is signalized. ADT's taken between in 2002 measured 6,688 south of MD 140 and 3,232 north of Carroll Street. The County classifies this road as an urban major collector.

Gist Road is a two-lane, undivided road running north and south from Kate Wagner Road to MD 32 (Old Westminster Road). Two marked eleven-foot wide travel lanes are provided with nine-foot wide shoulders beginning at Kate Wagner Road and ending just north of the Friendship Valley Elementary School entrance. The road extends 1.51 miles and has a posted speed limit of 40 miles per hour north of Kate Wagner Road, 15 miles per hour within the Friendship Valley Elementary School Zone, and 25 miles per hour north of the School Zone. ADT's taken in 2002 recorded 2,874 vehicles south of MD 32 1,965 south of Memorial Avenue, 3,285 south of Center Street, 2,769 south of Smith Avenue, 2,493 south of Winchester Drive, 3,376 south of Hook Road, 2,469 north of Hook Road, 3,358 north of Kate Wagner Road, 2,737 north of Winchester Drive, 3,311 north of Smith Avenue, and 1,932 north of Center Street. The County classifies this road as an urban minor collector.

Gorsuch Road is a two-lane, undivided road proceeding northeast and southwest from Manchester Avenue to MD 482 (Hampstead-Mexico Road). Within the study area, the road runs from Manchester Avenue to Brehm Road. Two marked twelve-foot wide travel lanes are provided south of MD 140 and two marked ten-foot wide travel lanes are provided north of MD 140. There is minimal to no shoulder provided south of Tannery Road. However, four- to six-foot wide shoulders are provided north of Tannery Road to the end of the study area. The road extends 3.25 miles from Brehm Road to MD 140 and .16 mile from MD 140 to Manchester Avenue. The posted speed limit is 30 miles per hour from Manchester Avenue to Center Street, and 40 miles per hour north of Center Street. Traffic signals serve the intersection at MD 140. ADT's taken in 2207 registered 6,411 vehicles south of Brehm Road, 6,689 vehicles east of Tannery Road, 3,458 north of MD 140, and 2,628 vehicles south of MD 140. The County classifies this road as an urban major collector from Manchester Avenue to the end of the study area.

Hook Road is a two-lane, undivided road running east and west from Bollinger Road to Gist Road. Within the study area, the road runs from Gist Road to Sharon Court. Two marked 10-foot wide travel lanes are provided along this road. The road width expands to 39 feet on both sides of MD 97 to provide for left and right turn lanes. Nine-foot wide unmarked shoulders are provided between MD 32 and Gist Road for on-street parking. The road length within the study area is 1.95 miles and the posted speed limit is 40 miles per hour east of MD 97 and 25 miles per hour west of MD 97. The intersections at MD 97 and MD 32 are signalized. ADT's

taken in 2002 recorded 2,048 vehicles east of Gist Road, 4,646 east of MD 32, 3,331 east of MD 97, 1,761 west of Arnold Road, 5,514 west of MD 97, and 1,807 west of MD 32. The County classifies this road as an urban minor collector from Arnold Road to MD 97 and as a urban major collector from MD 97 to the end of the study area.

Hughes Shop Road is a two-lane, undivided road extending north and south from MD 140 (Taneytown Pike) to Stone Road. Two marked 10-foot wide travel lanes with no shoulder are provided from MD 140 to Pleasant Valley Road. It then turns to a two-lane dirt road from Pleasant Valley Road to Stone Road. The road extends .46 mile from MD 140 to Pinch Valley Road and 3.84 miles from Pinch Valley Road to Stone Road. The posted speed limit for this road is 35 miles per hour. The intersection at MD 140 is fully signalized. ADT's taken between 2005 and 2006 recorded 3,252 vehicles north of MD 140 and 2,820 south of Pinch Valley Road.

John Street is a two-lane, undivided road traveling east and west between West Main Street (MD 32) and Englar Road. Within the study area, the road runs from the corporate limits of Westminster to Englar Road. Two marked twelve-foot wide travel lanes are provided with seven-foot wide shoulders along this segment. The length of this segment of road is .25 mile with a posted speed limit of 25 miles per hour. ADT's recorded in 2002 were 5,248 vehicles east of Englar Road. The County classifies this road as an urban major collector.

Kate Wagner Road is a two-lane, undivided road extending east and west from MD 27 (Ridge Road) to MD 32 (Old Washington Road). Two marked eleven-foot wide travel lanes are provided along this road. The road width expands to 35 feet between Gist Road and Canon Way to provide for left turn lanes and at MD 32 to provide for left and right turn lanes. Three-foot wide shoulders are provided along both sides of the road. The road extends 1.47 miles with a posted speed limit of 40 miles per hour. Traffic signals serve the intersection at MD 27. ADT's taken in 2002 measured 6,663 vehicles east of MD 27, 4,027 east of Gist Road, 3,547 west of MD 32, and 6,781 west of Gist Road. The County classifies this road as an urban major collector.

Leidy Road is a two-lane, undivided road proceeding east and west from Hemlock Lane to Market Street. The road is predominantly unmarked, 14 feet wide, with no shoulders provided. The length is .5 mile with a posted speed limit of 25 miles per hour. ADT's taken between 1999 and 2002 measured 183 vehicles at Hemlock Lane and 781 at MD 140.

Leisters Church Road is a two-lane, undivided road traveling north and south from Dutrow Road to MD 482. Only a .32-mile segment of this road, beginning at MD 482, falls within the study area. Two marked 10-foot travel lanes are provided. No shoulders serve this road except for seven-foot wide asphalt/gravel shoulders at the MD 482 intersection. The posted speed limit is 40 miles per hour. ADT's taken in 2007 measured 1,996 vehicles north of Coon Club Road and 1,474 east of Gorsuch Road. The County classifies this road as an urban minor collector.

Lemmon Road is a two-lane, undivided road running east and west between Old Bachmans Valley Road and Sullivan Road. Two eleven-foot wide travel lanes are provided with little to no shoulder. This .76-mile long road has a posted speed limit of 35 miles per hour. ADT's taken in 2006 measured 1,474 vehicles east of Old Bachmans Valley Road and 3,853 west of Sullivan Road. The County classifies this road as an urban minor collector.

Lucabaugh Mill Road is a two-lane, undivided road extending north and south between

MD 852 (Old Manchester Road) and Sullivan Road. Two unmarked nine-foot wide travel lanes are provided from MD 852 to MD 27 (Manchester Road) and two marked eleven-foot wide travel lanes are provided from MD 27 to Sullivan Road. There are minimal to no shoulders along this road. The total length is 1.84 miles with a posted speed limit of 30 miles per hour from MD 852 to Correll Drive and 35 miles per hour north of Correll Drive. ADT's taken in 2006 registered 1,437 vehicles east of MD 27, 1,428 north of MD 852, and 2,812 west of MD 27, and 2,081 vehicles east of Sullivan Road. The County classifies the entire road as an urban minor collector.

Meadow Branch Road is a two-lane, undivided road extending north and south from MD 140 (Taneytown Pike) to MD 97 (Littlestown Pike). Two marked eleven-foot wide travel lanes are provided with little to no shoulder. The length of the road is 2.33 miles and the posted speed limit is 40 miles per hour. Traffic signals serve the intersection at MD 140. ADT's taken in 2006 measured 2,350 vehicles north of MD 140, 1,104 north of Kriders Church Road, 1,257 south of Kriders Church Road, and 1,445 west of MD 97. The County classifies this road as an urban major collector.

Medford Road is a two-lane, undivided road running east and west between Stone Chapel Road and MD 852 (Old New Windsor Pike). Two twelve-foot wide travel lanes are provided. The road's width expands to 35 feet around Avondale Road to provide for left turn lanes and to 48 feet at Stone Chapel Road for left and right turn lanes. Eight-foot wide shoulders are provided from Nicodemus Road to Stone Chapel Road, interrupted only by the turn-lane areas. The length of this entire segment is 1.19 miles and the posted speed limit is 40 miles per hour. ADT's taken in 2002 recorded 1,619 vehicles west of Stone Chapel Road, 1,713 east of Avondale Road, and 2,639 south of MD 31.

Nicodemus Road runs northwest and southeast from MD 32 (Old Washington Road) to Medford Road. Within the study area, the road runs from MD 97 (Washington Road) to Stuller Road. Two marked 10-foot wide travel lanes are provided between MD 97 and MD 27 (Ridge Road), and two unmarked 10-foot wide travel lanes are provided from MD 27 to Stuller Road. There are no shoulders for either section. The length within the study area is 3.55 miles with a posted speed limit of 40 miles per hour. ADT's taken in 2002 registered 1,411 vehicles west of MD 97, 788 west of MD 854 (Old Washington Road), 991 west of Salem Bottom Road, 382 west of MD 27, 1,074 east of MD 27, 765 east of Salem Bottom Road, and 1,402 east of MD 854. The County classifies this road as a rural minor collector for the portion located within the study area.

Old Bachmans Valley Road is a two-lane undivided road traveling north and south from Magna Way to MD 496. Two marked 10-foot wide travel lanes are provided with no shoulder along the length of this road. Extending 4.1 miles, the road has a posted speed limit of 35 miles per hour from MD 496 to Fridinger Mill Road and 40 miles per hour from Fridinger Mill Road to Magna Way. ADT's taken between 2005 and 2006 measured 3,190 vehicles north of Lemmon Road, 1,337 vehicles south of MD 496, 897 south of Fridinger Mill Road, 4,024 south of Lemmon Road, and 1,820 north of Fridinger Mill Road. The County classifies this road as a rural minor collector.

Old Westminster Pike is a two-lane undivided road extending northwest and southeast from MD 97 (Malcolm Drive) to MD 140 (Baltimore Boulevard). Within the study area, the road runs from MD 97 to Arnold Road. Two 10-foot wide travel lanes are provided for this section. 10-foot wide shoulders are intermittently provided for on-street parking west of MD 97

to Woodside Drive. There are minimal to no shoulders provided east of Woodside Drive. This portion of road extends 2.13 miles and has a posted speed limit of 30 miles per hour from MD 97 to Woodside Drive, and 40 miles per hour from Woodside Drive to the limit of the study area. Traffic signals serve the MD 97 intersection. ADT's taken in 2002 recorded 5,368 east of MD 97, 5,200 east of Poplar Avenue, 5,099 west of Woodside Drive, and 2,844 east of Arnold Road. The County classifies this road as an urban major collector from MD 97 to Arnold Road.

Poole Road is a two-lane, undivided road running east and west from MD 97 (Washington Road) to Arnold Road. Two marked 10-foot wide travel lanes are provided with no shoulder. The 2.11-mile long road has a posted speed limit of 30 miles per hour. Traffic signals serve the intersection at MD 97. ADT's taken in 2002 registered 2,120 vehicles east of MD 97 and 220 vehicles west of Arnold Road. ADT's taken in 2007 measured 298 vehicles west of MD 32. The County classifies this road as an urban minor collector.

Salem Bottom Road is a two-lane, undivided road running north from MD 26 (Liberty Road) to MD 854 (Old Washington Road). Within the study area, the road extends from MD 854 to Nicodemus Road. Two marked 10-foot wide travel lanes are provided with no shoulders. The length of the portion that falls within the study area is .9 mile with a posted speed limit of 35 miles per hour. ADT's taken in 2006 measured 1,025 vehicles north of Nicodemus Road and ADT's from 2002 measured 734 vehicles west of MD 854. The County classifies this road as a rural minor collector.

Saw Mill Road (East) is a two-lane, undivided road traveling northwest and southeast from MD 496 to Rinehart Road. Two marked 10-foot wide travel lanes are provided with no shoulders. The length of the road is 1.27 miles with a posted speed limit of 35 miles per hour. ADT's taken in 2006 reported 1,179 vehicles north of MD 496 and ADT's from 2000 showed 994 vehicles at Rinehart Road. The County classifies this road as a rural minor collector.

Stone Road is a two-lane, undivided road extending west from MD 97 (Littlestown Pike) to Kump Station Road. Within the study area, the road runs from MD 97 to Halter Road. Two marked 10-foot wide travel lanes are provided with minimal to no shoulders. The length of the road is 2.40 miles and has a posted speed limit of 40 miles per hour. ADT's taken in 2005 recorded 2,245 vehicles west of MD 97, 1,637 west of Murkle Road, 1,407 east of Halter Road, and 2,286 east of Murkle Road.

Stone Chapel Road is a two-lane, undivided road running east and west from MD 27 (Ridge Road) to Bowersox Road and north and south from Bowersox Road to MD 852 (Old New Windsor Road). Two marked eleven-foot wide travel lanes are provided. There are no shoulders provided except for six-foot wide gravel shoulders around the Medford/Chapel Road intersection. The length of the road is 3.42 miles with a posted speed limit of 40 miles per hour. ADT's taken in 2002 measured 1,520 vehicles west of MD 27, 1,783 west of Old Westminster Road, 1,887 north of Bowersox Road, 3,337 north of Chapel Road, 4,158 north of Avondale Road, 1,497 south of MD 31, 3,479 south of Avondale Road, 1,710 south of Chapel Road, 1,785 south of Old Medford Road, 3,479 east of Old Westminster Road, and 4,158 east of Western Chapel Road. The County classifies this road as an urban minor collector.

Sullivan Road is a two-lane, undivided road proceeding north from MD 140 (Littlestown Pike) to MD 27 (Manchester Road). Two marked 10-foot wide travel lanes are provided. There are no shoulders provided along this road except for intermittent seven-foot wide shoulders on both sides of the road around the Sunshine Way and Snowfall Way intersections. The length of

the road within the study area is 1.85 miles and the posted speed limit is 35 miles per hour from MD 140 to Snowfall Way and 40 miles per hour from Snowfall Way to the end of the study area. Traffic signals serve the intersection at MD 140. ADT's taken in 2006 for this segment registered 4,782 vehicles north of Hahn Road, 4,440 south of Lemmon Road, and 2,824 south of Lucabaugh Mill Road. The County classifies this road as an urban major collector from MD 140 to Lemmon Road.

Sunshine Way is a two-lane, undivided road extending northwest and southeast from Hahn Road to Sullivan Road. This road is 39-foot wide to provide for two unmarked travel lanes and on-street parking. The length of the road is .97 miles with a posted speed limit of 25 miles per hour. ADT's taken in 2006 measured 2,545 vehicles north of Hahn Road and 1,025 east of Sullivan Road. The County classifies this road as an urban minor collector.

Uniontown Road is a two-lane, undivided road extending west from MD 31 (New Windsor Road) to MD 84 (Clear Ridge Road). Within the study area, the road runs from the Westminster Corporate boundary west to the study area boundary near Lloyd Drive. Two marked 10-foot wide travel lanes are provided. There are minimal to no shoulders serving this road except for a four-foot wide shoulder along the westbound lane from the Westminster corporate limits to the Rockland Road intersection. The road length within the study area is .78 mile and the posted speed limit is 50 miles per hour. No ADT counts are available for the segment of road that falls within the study area. The County classifies this road as an urban major collector from the Westminster corporate limits to Bell Road and as a rural major collector west of Bell Road.

Warfieldsborg Road is a two-lane, undivided road proceeding east from MD 27 (Ridge Road) to MD 854 (Old Washington Road). Two eleven-foot wide travel lanes are provided with little to no shoulder. The length of the road is 1.88 miles with a posted speed limit of 40 miles per hour. ADT's taken in 2002 recorded 1,531 vehicles east of MD 27, 2,092 west of MD 854, and 1,667 west of Bertie Avenue. The County classifies this road as a rural minor collector.

MD 27, Ridge Road, Westminster-Manchester Road, Manchester Road, is a two-lane, undivided road traveling north and south from the Frederick County border to MD 30 (Hanover Pike).

Southern Segment: Within the study area, this highway segment runs from Nicodemus Road northeast to the Westminster City limits. Two marked eleven-foot wide travel lanes are provided, with shoulders ranging from 7- to 9-foot wide. Within the study area, the highway is 4.56 miles and the posted speed limit is 50 mph from Nicodemus Road to Bond Street, and 40 mph from Bond Street to the Westminster corporate limits. The intersection at Kate Wagner Road is signalized. ADT's taken in 2006 measured 10,961 vehicles at Kate Wagner Road and 9,481 at Bond Street. The state classifies the road as a rural minor arterial south of the Bond Street intersection and as an urban principle arterial between Bond Street and the Westminster City limits.

Northern Segment: Two marked twelve-foot wide travel lanes are provided north of the Westminster corporate limits to the limit of the study area around Ogg Drive. The pavement widens to 48 feet between MD 140 and Bennett Cerf Drive to allow for left and right turn lanes. There are nine-foot wide shoulders provided along this segment of road. Within the study area, the road extends for 3.62 miles and has a posted speed limit of 40 mph from the Westminster corporate limits to Bennett Cerf Drive and 55 miles per hour

from Bennett Cerf Drive to the study area boundary. Traffic signals serve the intersections at Mall Ring Road, Hahn Road, Bennett Cerf Drive, and MD 482. ADT's taken in 2006 recorded 20,371 vehicles at the MD 140 underpass and 14,031 at MD 482. The State classifies the road as a principle arterial from the Westminster City limits to Hahn Road and as a rural minor arterial north of Hahn Road.

MD 31, New Windsor Road, is a two-lane, undivided highway extending northeast from the Frederick County line to MD 140 (Taneytown Pike). Within the study area, the road runs northeast from Medford Road to the Westminster corporate limits. Two marked twelve-foot wide travel lanes are provided with 8- to 10-foot shoulders. The length of the segment within the study area is 2.9 miles, with a posted speed limit of 55 miles per hour south of Windsor Drive and 45 miles per hour from Windsor Drive to the Westminster City limits. ADT's taken in 2006 recorded 7,991 vehicles at Medford Road. The state classifies this segment of road as a rural minor arterial.

MD 32, Sykesville Road, Old Washington Road, Washington Road, is a two-lane, undivided road proceeding generally north and south between the Howard County border and MD 140 (Taneytown Pike). Two marked eleven-foot wide travel lanes are provided from the study area boundary at MD 97 (Washington Road) to the Westminster corporate limits. No shoulders are provided. The Total pavement width increases from 25- to 28-feet between MD 97 and MD 854 (Old Washington Road), 36- to 40-feet between Kate Wagner Road and Hook Road, and 30-feet between Hook Road and Center Street to allow for right and/or left turn lanes. Within the study area, the highway is 2.88 miles long with a posted speed limit of 40 miles per hour from MD 97 to Hook Road, 35 miles per hour from Hook Road to Center Street, and 30 miles per hour from Center Street to the Westminster corporate limits. Traffic signals serve the MD 97 and Hook Road intersections. ADT's taken in 2006 measured 11,790 vehicles at MD 97. The state classifies this road as an urban minor arterial from MD 97 to the Westminster corporate limits.

MD 97, Washington Road, Malcolm Drive, Littlestown Pike, is predominantly a two-lane, undivided highway running north and south from the Howard County border to the Pennsylvania line. The highway is divided into two segments, south of Westminster (Washington Road/Malcolm Drive) and north of the City (Littlestown Pike). The central segment, from Malcolm Drive to Pennsylvania Avenue, is shared with MD 140 (this segment is reported as part of MD 140).

Southern Segment: Two marked twelve-foot wide travel lanes are provided from the study area boundary at the MD 32 intersection to .15 mile south of the East Main Street intersection. Just south of East Main Street, the road is divided by a grass median. Two twelve-foot wide travel lanes extend on either side of the median. North of the East Main Street intersection, the divided highway expands to a pavement width of 60-feet to allow for both left and right hand turn lanes. Ten- to eleven-foot shoulders are provided from the study area boundary at MD 32 to where the highway is divided south of East Main Street, interrupted only by turn lanes at Hook Road and Poole Road. Within the study area, the highway is 3.18 miles long with a posted speed limit of 55 miles per hour from the study area boundary at MD 32 to the division south of East Main Street and 40 miles per hour from the division to the Westminster City line. Traffic signals serve the intersections of MD 32, Hook Road, Poole Road, and East Main Street. ADT's taken in 2006 recorded 21,410 vehicles at MD 32 and 28,500 at East Main Street. The state classifies this highway segment as an urban principal arterial from MD 32 to the

Westminster City line.

Northern Segment: Within the study area this portion of highway runs from MD 526 (Pennsylvania Avenue) to Stone Road. Two marked twelve-foot wide travel lanes are provided. From the MD 140 overpass to Corporate Center Drive the pavement width expands to 36-feet to provide an extra northbound lane to accommodate for merging traffic from MD 140. The road returns to two twelve-foot lanes north of Corporate Center Drive. Nine- to eleven-foot wide shoulders are provided along this segment, interrupted by left and right turn lanes at Airport Drive and left turn lanes at Old Meadow Branch Road, Pleasant Valley Road, MD 496, John Owings Road, and Stone Road. The length of the road within the study area is 3.12 miles and the posted speed limit is 50 miles per hour. Traffic signals serve the intersections at Airport Drive and MD 496. ADT's taken in 2006 registered 24,450 vehicles at Pennsylvania Avenue, 20,340 at Old Meadow Branch Road, and 15,500 at MD 496. The state classifies this highway segment as an urban principle arterial from the MD 140 overpass to MD 496, and as a rural minor arterial north of MD 496.

MD 140, Baltimore Boulevard, Taneytown Pike, travels northwest from the Baltimore County to the Frederick County lines.

Southern Segment: Within the study area, this section of MD 140 runs from the eastern study area boundary (.57 mile northwest of Reese Road) to the Westminster corporate limits. The highway is divided by a grass median and has two marked twelve-foot wide travel lanes on either side of the median. The pavement width expands to 60 feet at the MD 97 intersection to allow for two left turn lanes. Four-foot interior and 10-foot exterior shoulders are provided for both northbound and southbound lanes. The length of the road within the study area is 1.69 miles, with a posted speed limit of 50 miles per hour. The MD 97 intersection is signalized. ADT's taken in 2006 measured 48,391 vehicles at Bethel Road and 58,581 at Malcolm Drive. The state classifies this segment of road as an urban principle arterial.

Central Segments: Three short divided segments of MD 140 fall on unincorporated land as the road proceeds through the City of Westminster. The first segment is a marked six-lane road beginning .18 mile east of Gorsuch Road and ending .12 mile east of the Center Street intersection. This section of road is 60-feet wide and .62 mile long. The intersection at Gorsuch Road is signalized. The second segment is a marked six-lane road beginning .41 mile west of Center Street and ending .10 mile west of Englar Road. This portion of road is 60-feet wide and .38 mile long. The intersection at Englar Road is signalized and ADT's taken in 2006 at the Manchester Road overpass recorded 45,521 vehicles. The third segment is a marked four-lane road beginning .23 mile east of Sullivan Road and ending .13 mile east of MD 31. This segment of road is 48-feet wide and .73 mile long. All three segments have a posted speed limit of 45 miles per hour. The State classifies these three segments as urban principal arterials.

Northern Segment: Within the study area, this portion of undivided highway runs from Meadow Branch Road west to the study area boundary (.38 miles west of Baugher Road). Two marked twelve-foot wide travel lanes with four- to 10-foot wide shoulders are provided along this section. Road length within the study area is 1.78 miles, with a posted speed limit of 55 miles per hour. The Meadow Branch/Royer Road intersection and the MD 832/Hughes Shop Road intersection are both fully signalized. ADT's taken

in 2006 measured 18,491 vehicles at Hughes Shop Road. The state classifies this section of road as a rural principle arterial.

MD 482, Hampstead-Mexico Road, is a two-lane undivided highway traveling east and west from MD 27 (Manchester Road) to within the Hampstead Town limits. Only a .56-mile segment of this road, beginning at MD 27, falls within the study area. Two marked twelve-foot wide travel lanes with 10-foot wide shoulders are provided. The posted speed limit is 50 miles per hour. Traffic signals serve the MD 27 intersection. ADT's taken in 2006 recorded 8,172 vehicles at MD 27. The state classifies this highway as a rural minor arterial.

MD 496, Bachmans Valley Road, is a two-lane undivided highway proceeding northeast from MD 97 (Littlestown Pike) to MD 30 (Hanover Road). Within the study area, the road runs northeast from MD 97 to the limit of the study area at the Old Bachmans Valley Road intersection. Two marked 10-foot wide travel lanes are provided, with little to no shoulders. The road's length within the study area is 3.12 miles, with a posted speed limit of 50 mph. Traffic signals serve the MD 97 intersection. ADT's taken in 2006 measured 4,112 vehicles at MD 97 and 3,222 at Old Bachmans Valley Road. The state classifies this road as a rural major collector.

MD 808, Spring Mills Road, is a two lane undivided road traveling south from MD 27 (Ridge Road) until it dead-ends. Two unmarked 8- to 9-foot wide travel lanes are provided. The total length of this road is .23 miles and has no posted speed limit. No ADT counts are available for this road.

MD 832, Old Taneytown Road, is a two-lane undivided highway running southeast from MD 140 (East Baltimore Street in Taneytown) to MD 140 (Taneytown Pike) at the intersection of Hughes Shop Road. Within the study area, the road extends from MD 140 to the study area boundary (.38 mile west of Baugher Road). Two marked eleven-foot wide travel lanes are provided. Four-foot wide shoulders are provided near the MD 140 intersection. The remainder of the highway within the study area has little to no shoulders. Within the study area the highway is 1.44 miles long with a posted speed limit of 35 miles per hour. ADT counts taken in 2006 measured 842 vehicles at Amanda Drive.

MD 852, Old New Windsor Pike, is a two lane undivided highway running east and west from MD 31, at the intersection at Slingluff Road, to MD 31, just south of Congressional Drive. Within the study area, the road runs north from the study area boundary at Roops Mill Road to Luther Drive and east from Luther Drive to the MD 31 intersection. Two marked 10-foot wide travel lanes are provided with little to no shoulder. The road's length within the study area is 1.3 miles and the posted speed limit is 40 miles per hour. ADT counts taken in 2006 measured 3,422 vehicles at Othello Court..

MD 852, Old Manchester Road, is a two-lane undivided highway proceeding northeast from MD 27, at the intersection of Bennett Cerf Drive, to MD 27, just west of Random Ridge Drive. Two marked 10-foot wide travel lanes are provided with no shoulder. The total length of this road is 2.7 miles and the posted speed limit is 30 miles per hour. Traffic signals serve the intersection at MD 27 (Bennett Cerf Drive). No ADT counts are available for this road.

MD 854, Old Washington Road, is an undivided highway traveling north and south from Muller Road to MD 32 (Sykesville Road). Within the study area, the road runs north and south from Nicodemus Road to MD 32. Two marked 10-foot wide travel lanes are provided with no shoulder. The pavement width expands to 29 feet and is divided by a concrete median at the MD

32 intersection to allow for right and left turns from the northbound lane. The total length of the segment within the study area is 2.56 miles and the posted speed limit is 40 miles per hour. No ADT counts are available for this road.

2 *Scenic Byways*

The City of Westminster is the starting point of the Old Main Streets State Scenic Byway, worthy of strategies that encourage sensitivity when making decisions concerning the visual quality surrounding this resource. In Carroll County, the byway route follows Main Street in Westminster west to MD 832 and MD 140 beyond Taneytown, as well as Uniontown Road west to MD 77, and MD 84 to MD 31 and MD 75. The Maryland State Highway Administration (SHA) partnered with Carroll County to designate the Old Main Streets Scenic Byway (OMSSB) on November 15, 1999.

3 *Inventory of Pedestrian and Bikeway Facilities and Greenways*

Sidewalk facilities are available in a select few subdivisions outside the corporate limits of Westminster. In the Autumn Ridge and Sullivan Heights subdivisions, off of Sullivan Road, sidewalks are available on the right or left side of the street. There are no streets with sidewalks serving both sides. In the Washington Court and Willow Wind Garden subdivisions, off of MD 32 (Washington Road), sidewalks are provided on the left or right side of the street. Hook Road has no sidewalk service from MD 32 west to Valen Court, sidewalks serving the right hand side of the street from Valen Court to Tall Pines Drive, and sidewalks serving both sides from Tall Pines Drive to Gist Road. Canon Way also has sidewalks service on both sides of the street. There are no bikeway or greenway facilities available within the Westminster Environs area.

4 *Inventory of Public Transportation Facilities and Services*

The following is a list of other transportation facilities and services available to residents even though many are located outside the boundaries of the study area:

A ⇄ Railways

The State of Maryland (Maryland Department of Transportation) owns the right-of-way for the railway that traverses the study area. Within the study area the track runs northeast, parallel to MD 31 (New Windsor Road), until the MD 852 (Old New Windsor Pike) intersection. After the MD 852 intersection the track heads east crossing MD 27 and then northeast into the Westminster Corporate limits. On the northern side of the corporate limits, the track runs northeast parallel to MD 27 (Westminster-Manchester Road) and then southeast from MD 852 (Old Manchester Road) to the study area boundary. Maryland Midland Railway, Inc., based in Union Bridge, leases a 67-mile portion of the railway from Blue Ridge Summit in Pennsylvania southeast through Carroll County to the town of Glyndon in Baltimore County. Two trips (one in each direction) are made each day, on average. Cement and other materials are shipped through the study area on their way to Lehigh-Portland Cement Company, based in Union Bridge.

B ⇄ Park and Ride Lots

Park and ride lots are intended for commuters who transfer from their own vehicles to alternative means of getting to work: carpools, vanpools, etc. There are seven park and ride lots located in Carroll County: Manchester (MD 27 at MD 30); Sandymount (near MD 140 at Green

Mill Road); Fenby (MD 97 at MD 32); Dorsey Crossroads (MD 97 at MD 26); Eldersburg (MD 32 at Circle Drive); Sykesville (MD 851 at MD 32); and Mount Airy (MD 27 at I-70). All of these facilities are State owned with the exception of Sandymount which is County owned.

C ⇨ Local Paratransit Opportunities

The Carroll Area Transit System (CATS) began in 1972 as the Senior Overland Service, started by the Carroll County Bureau of Aging. In 1988, CATS became a private, non-profit corporation with a primary mission of providing available, efficient, safe, and demand-responsive transportation to older adults, persons with disabilities, emotionally disadvantaged, and transportation-disadvantaged citizens of Carroll County. CATS provides these public transit services under contract with the County, which funds the service through a combination of County funds and State and Federal grants. The system operates from 7:00 a.m. to 5:00 p.m. Monday through Friday. Persons requiring transportation are requested to call 24 hours in advance to schedule their rides.

Carroll Transit currently maintains a fleet of 23 vehicles, with 18-20 of them normally scheduled for use each day. Fourteen of the vehicles are lift-equipped, providing 25 wheelchair spaces. The system is currently averaging approximately 7,500 persons each month. The vehicles range in size from a 7-passenger van to a 21-passenger mini-bus. All vehicles are equipped with two-way radios and are staffed by drivers who have been trained in CPR, first aid, and passenger assistance. Refresher training is done annually.

Transportation is provided to all five Carroll County Senior Centers and the Westminster Supper Club. This demand-response transportation is available to seniors and the disabled population on a primary service basis. This service also is available to the general public on a space available basis. Door-to-door service is provided for all passengers. Carroll Transit provides coordinated service to 13 service agencies and 12 service providers in Carroll County. Job Training Partnership Act (JPTA) clients are picked up at their home, transported to day care facilities (if necessary) and then to the workshop or job site.

An additional service provided by Carroll Transit is the Shoppers Shuttle, a deviated fixed-route service for individuals in the City of Westminster. The Shuttle provides transportation to grocery stores, drug stores, shopping centers, the Health Department, Carroll County General Hospital, Carroll County Public Library, and the Post Office.

D ⇨ Taxi Services

Headquartered in Winfield, *Carroll County Cab* operates six vehicles seven days a week between the hours of 6:00 a.m. and 6:00 p.m. Carroll County Cab provides service throughout the County, except in the City of Westminster.

County-wide Taxi and Transportation Service is based in Westminster and operates five vehicles throughout Carroll County seven days per week, generally from 8:00 a.m. through 11:00 p.m. However, they will provide scheduled runs with 24-hour notice at any time.

E ⇨ Charter Buses

Located in Manchester, *Bill Rohrbaugh's Bus Service, Inc.* operates 18 coaches, 2 vans, and 13 school buses for charter trips and tours, which are available to a variety of destinations.

Trips to BWI, Dulles, and Washington National airports are provided on a "demand" basis, which requires 24-hour advance notice. The company also offers daily service to Atlantic City with tour buses originating in Manchester.

Rill's Bus Service operates 4 motor coaches, 15 school buses, and 1 van for its charter, tour, and shuttle services. One of the school buses is equipped with a wheel chair lift. The van is a 14-passenger vehicle. The company is located east of Westminster on Dutrow Road.

F ⇨ Airports

Carroll County has one regional airport and a number of small local airports and private airfields. The following airports and airfields have the most relevance to the study area.

The ***Carroll County Regional Airport*** is a general aviation facility owned, operated, and managed by Carroll County government. It is designated by the Federal Aviation Administration (FAA) as a Reliever Airport for the Baltimore/Washington International Thurgood Marshall Airport (BWI). This "reliever" designation means that Carroll County Regional Airport can attract general aviation activity that could otherwise be destined for BWI, thus relieving strain on BWI's limited general aviation facilities. The Reliever designation also provides opportunities for Carroll County Regional to qualify for special FAA Airport Improvement Program (AIP) funding for facility planning and construction.

Carroll County Regional Airport currently serves aircraft up to Approach Category C, Design Group II standards (aircraft with approach speeds of less than 121 knots and wingspans of less than 79 feet), which means it is able to accommodate corporate-sized piston and business jet aircraft. The airport has been upgraded with the construction of a 5,100-foot long runway, as well as the extension of the former runway to a full-length parallel taxiway. The VOR nonprecision instrument approach provides an opportunity for equipped aircraft to operate in most weather conditions.

As air traffic activity has increased, the terminal area has been upgraded with the construction of a 100' x 100' maintenance hangar with an adjoining operations center and classroom area; new corporate hangars; expansion of the airport's fueling services; and reconstruction of the aircraft parking aprons. Both "Jet A" and Avgas fuels are available.

Begun originally as the Westminster Airport with two turf landing strips, the Carroll County Regional Airport is located on the north side of the City of Westminster off of MD 97 (north). The initial owner and operator was the Shriver Packing Company. By 1969, there were about 22 based aircraft and approximately 7,500 annual takeoffs and landings according to the FAA.

In 1976 the Airport was acquired by Carroll County. Three parcels of land were purchased in 1977 for future use. A 2,930' x 40' paved runway was constructed in the fall of 1977. The following year the main hangar/administration building and the first T-hangar were constructed (without federal or State funds). Also, in 1978, runway lighting was installed. A parallel taxiway was paved and the runway extended 300' in the fall of 1979. The runway and taxiway were widened in the early 1980's.

The airport and adjoining Carroll County Air Business Center comprise an important component of economic development in the county. In 2005, the County began an effort to

update the Airport Master Plan with 95 percent of the funding for the plan provided by the FAA and Maryland Aviation Administration (MAA). The Master Plan is looking 20 years into the future in order to plan for airport facility and services improvements needed to maintain and expand its economic and transportation contribution to the surrounding community.

Located about eight miles south of Westminster, *Clearview Airport* is a public-use airport with a 1,845' paved runway. Services and facilities include major maintenance, A & P mechanic during daytime, rotating beacon, runway lighting on request, attendance on weekends during daylight, and aircraft storage and tie-downs.

Baughers Farm Airport on Baughers Road off MD 140 in Westminster is a 1,000-foot-long turf runway and is the base for two ultralight aircraft.

Analysis of Community Needs

Over the last several decades, Carroll County's land use has been shifting from an overwhelmingly rural county to a very suburbanized county. The Westminster region has grown into a major population and commercial center. Development pressures have resulted in an increase in area roadway traffic volumes and associated congestion. As the Westminster region has grown into a major population and activity center, the existing transportation network has become stressed.

State highways such as MD 140, MD 97, and MD 27 are primarily designed as higher speed facilities to accommodate regional (or through) trips. County and City roadways are designed to supplement the State highway system by accommodating local trips in and around Westminster to destinations such as residential neighborhoods, businesses, and community facilities.

In the Westminster region, State highways are used for a large number of local trips, creating congestion on the highways and putting greater demands on the State highway network to accommodate regional trips. A major contributing factor to the use of highways for local trips is the lack of alternative routes. For example, MD 140 is the major east-west route in the area. Motorists needing to travel from areas around the eastern area of Westminster to areas near the western end (or vice versa) have few choices other than MD 140.

The analysis of transportation needs for the Westminster environs area was broken down into several categories: road improvement needs, pedestrian and bicycle needs, transit, and rideshare needs. To help analyze these needs for transportation, several factors were considered, including community survey and workshop results, current level of service on roadways, accident rates at intersections, existing conditions for services, and underutilized opportunities.

Survey and workshop results indicate the community generally supports expansion of existing roadways and construction of new roadways, specifically the Westminster bypass. The need for expanding existing roadways and/or constructing new roadways is the result of deteriorating traffic movement, particularly during peak hours, and even during non-peak periods along the MD 140 corridor.

For many years the Westminster bypass project had been planned as a controlled-access State highway that would extend around Westminster to the north, beginning at MD 140 near

Reese and tying back into MD 140 near Hughes Shop Road. The purpose of the highway project was to carry regional traffic around Westminster and relieve traffic congestion on existing MD 140. The State removed the proposed Westminster bypass alignment from its Consolidated Transportation Plan (the State equivalent to a capital improvement program). In 2001 and 2003, the Board of County Commissioners passed two resolutions that removed most of the bypass alignment from both the Carroll County Master Plan and the Westminster and Environs Comprehensive Plan. Only a small portion of the original alignment, lying roughly between Sullivan Road and MD 97 North, remains as part of a local roadway improvement project (Bennett Cerf Drive Extended).

In terms of non-motorized means of transportation, pedestrian or bicycle access throughout the community is generally unconnected or non-existent and is generally located within individual developments. Sidewalks are provided within some of the area's residential developments, but there is a general absence of linkages between residential neighborhoods and other destinations such as schools, parks, and commercial centers.

Local countywide paratransit is the only transit system currently provided in the area. Rail transit and bus transit to downtown Baltimore originate from the Owings Mills and Reisterstown areas, respectively. Therefore, a large portion of residents commute to work to other counties by automobile, resulting in a large portion of the peak-hour traffic on MD 140, MD 97, and MD 27 that other transit alternatives may help to alleviate.

Recommended Actions

The following recommended actions are policies, implementation measures, and projects that were developed to facilitate achieving the community's transportation goals and addressing its identified transportation needs. These actions are broken down into two categories of recommendations: those that relate to the community as a whole (General Transportation Recommendations) and those that are site-specific roadway and trail projects (Specific Transportation Project Recommendations).

1 General Transportation Recommendations

A ⇨ Update the Carroll County Airport Master Plan

In 1983, the Carroll County Board of Commissioners authorized development of a master plan for the Carroll County Airport with funding from the Federal Aviation Administration and the Maryland State Aviation Administration. The master plan was completed by Delta Associates P.E., Inc., an airport planning consulting firm, in January 1986. Since then, most of the airport improvements proposed in the plan have been implemented, including completion of a new 5,100-foot long runway and construction of corporate hangars and a fuel farm. As use of and demand for the airport continue to increase with the county's growth, various facilities of the airport will need to be expanded, improved, or introduced.

To anticipate future facilities needs for the airport and for economic development, the Airport Master Plan is in the process of being updated. Some of the issues that are being addressed in the plan update are the need for: additional corporate hangars (to store larger aircraft) and T-hangars (to store smaller aircraft), a Precision Landing System to aid pilots to safely land in conditions of poor visibility, upgrading and expanding the terminal building to

provide a quiet rest area for corporate pilots, and expanding the fuel farm. Some land use and/or roadway modifications in the vicinity of the airport may arise out of the final recommendations contained in the updated Airport Master Plan. These will need to be addressed as amendments to the Westminster Environs Community Comprehensive Plan, since at this time it is not possible to know which, if any, changes may be necessary. The Westminster Environs Community Comprehensive Plan has proposed compatible land uses surrounding the airport to address possible noise impacts. Additionally, any development that takes place in the vicinity of the airport should ensure that structural heights do not negatively impact the airport's functionality.

Because of the tremendous investment that has been made in the airport and the opportunities it presents Carroll County, this Plan implements and/or recommends the following actions and policies specifically related to protecting the long-term viability and service of the airport:

- Encourage the protection of the Carroll County Regional Airport from adjacent incompatible land uses and/or activities that could impact the present and/or future use of the airport as an important public facility, endanger the lives of people on the ground and/or promote inadvertent growth of incompatible land uses. Incompatible land uses may include residential, multi-family, height hazards, and special uses such as schools, hospitals and nursing homes, and explosive/hazardous materials.
- Discourage the siting of uses adjacent to the airport that attract birds, create visual hazards, discharge any particulate matter in the air that could alter atmospheric conditions, emit transmissions that would interfere with aviation communications and/or instrument landing systems, or otherwise obstruct or conflict with aircraft patterns, or result in potential hazards to aviation.
- Encourage the adoption of development regulations that protect the airport from height hazards.
- Coordinate the protection of the Carroll County Regional Airport with the City of Westminster by developing consistent development regulations that encourage compatible land uses adjacent to the airport.
- Encourage open space/clear areas and use zoning criteria within key safety areas adjacent to the airport to facilitate protection of the airport as an important public facility, and reduce safety risk exposure to people on the ground and in the air. Applicable criteria may include promoting cluster development to promote open space/clear areas, locating structures away from the extended centerline of the runway, discouraging public assembly, transfer of development rights, and other applicable strategies. When possible, promote contiguous open space parcels.
- Create and adopt a map that indicates areas in the airport vicinity that may be impacted by airport operations ("airport influence area").
- Within the airport influence area, require a notice to title/disclosure statements for new or substantial redevelopment of lots, buildings, structures, and activities. The notice should indicate that the property is located adjacent to the Carroll County Regional Airport and may experience low overhead flights, odor, vibrations, noise,

and other similar aviation impacts.

- Identify, preserve, and enhance goals, policies, and development regulations that promote significant regional transportation linkages and multimodal connections to and from aviation facilities and employment centers.
- Encourage economic development opportunities and aviation related uses adjacent to the airport and promote the efficient mobility of goods and services region-wide consistent with economic development and regional transportation needs.

B ⇨ Explore opportunities for addressing commuter congestion

Only 36.2 percent of those who responded to the community survey indicated that they work in Carroll County. Since 25 percent of the respondents replied that they don't work, you would assume that 38.8 percent of the respondents commute out of the county to work. According to the 2000 U.S. Census, roughly 64,443 of the 77,592 people in the labor force in Carroll County who commuted to work drove alone. Of that total, 7,533 lived in the City of Westminster. When you include the number of people who live in the Westminster environs, that number grows even larger. This large number of commuters contributes significantly to the traffic congestion on MD 140 and other State roads at peak travel times (rush hour). A number of options could be explored that would offer commuters an alternative to commuting alone, thereby reducing the amount of single-occupancy vehicles on the roads. These alternatives could include commuter bus service to Baltimore and/or Washington area metro stations, park-and-ride lots, ridesharing programs, or expanded paratransit service.

Currently, the only park-and-ride lot in Westminster is located at the intersection of MD 32 and MD 97. This lot primarily serves commuters heading south on MD 97. At least one additional park-and-ride lot location should be identified to serve commuters who travel down MD 140 toward Baltimore. The location of this lot should also be coordinated with the location of a commuter bus service pick up location for commuters. This will allow the lot to be used for parking regardless of whether the commuter's ride is with another driver, a commuter van, or on a commuter bus. The MD 32/MD 97 lot is underutilized. Providing commuter transit service, if it is found to be appropriate at that location, could increase usage and reduce congestion on the State highway system.

Some interest has been expressed for exploring MARC commuter rail service to Westminster. Because such a service would have county-wide implications for transportation, if and when this issue is examined it should be in the context of the county-wide transportation network and should involve input from stakeholders on a regional level.

C ⇨ Expand paratransit services

As the county's population and business community continue to grow, the *Carroll Transit System* will need to expand to keep pace. As the need for transportation services grows, the nature of these services and destinations may have to expand as well. Carroll Transit will probably need to expand its hours of operation and provide service on weekends. The Shoppers Shuttle would serve more business destinations with more vehicles. More commuter service within the county will provide connections between resident workers and county employment centers. Providing fixed routes between Westminster and some of the larger municipalities or

urban areas in the county, such as Taneytown, Sykesville/Freedom, and Mount Airy would provide connections between area residents and major employment, business, and activity centers. A commuter shuttle to Westminster to tie into commuter bus service to Owings Mills Metro Station and to Mount Airy (as discussed above) would improve ridership to both the Baltimore and Washington, D.C. metro subway systems. As demand and services expand, the type, number, and size of Carroll Transit’s vehicles will need to be adjusted.

D ⇨ Construct bicycle and pedestrian connections between neighborhoods and between the downtown, residential areas, and activity centers

To facilitate additional mitigation of traffic congestion, measures to promote alternative modes of transportation should also be implemented. In addition to providing a social connection between downtown, residential areas, and other activity centers, appropriate locations for bicycle and pedestrian facilities should be identified and constructed to provide residents with alternatives to driving to stores, neighbors’ houses, and other destinations within the community.

E ⇨ Construct sidewalks to improve pedestrian access and the overall transportation network

Sidewalks provide social connections within communities and reduce traffic congestion by providing alternative modes of transportation to neighbor’s houses, schools, stores, recreational facilities, and other activities. Many areas of the community are not connected by sidewalks. Sidewalks connecting large residential areas to commercial areas and downtown are especially important. Areas where sidewalks could be constructed to help provide access for pedestrians to these locations should be identified. Other areas in the community provide sidewalks on one side of the street but not the other. While it may be difficult to go back and install sidewalks in some of the large subdivisions that have already developed, consideration should be given to revising the County subdivision regulations to require sidewalks on both sides of the street. This will also help to increase pedestrian safety. Low Impact Design techniques could be considered for new sidewalks to encourage pervious pedestrian walkways and a more natural way for stormwater to be managed. As pedestrian facilities are identified, designed, and implemented, the facilities will be in compliance with regulatory requirements relating to ADA.

F ⇨ Obtain land/public access easements for trail implementation of the proposed bicycle/pedestrian trail system

Several bicycle/pedestrian trails have been identified in the Plan to connect schools, parks, residential communities, and other activity centers. These bicycle and pedestrian facilities serve to reduce traffic congestion and air pollution, provide access to the transportation system for non-motorists, and improve health and fitness. To implement this action, the County must acquire the land needed for construction for the trails. Where property is going through a development process, the County may require construction of the trail by the developer and deeding of the land involved with the trail to the County. Another option may be to establish a right-of-way bank where the County purchases the land for the trail in advance of constructing the trail. Through this option, the bicycle/pedestrian trail project may be eligible for federal funding through the Transportation Enhancement Program. In some areas along a trail, the County may need to acquire an easement through private property to secure public access to the trail.

G ⇨ Identify areas of traffic safety concerns and provide solutions

Within the overall Westminster area roadway network are areas that present concerns for traffic, pedestrian, or bicycle safety. This action entails identifying high-accident intersections and roadway segments involving motorists or pedestrians/bicyclists. Other candidates for improving safety are areas with substandard geometric design based on County design standards (e.g., poor sight distance, inadequate access control, sharp curves, absence of shoulders, and lack of a clear zone from obstructions such as trees). Correcting these safety problems will typically involve improving roadway and intersection geometrics, enhancing lighting, providing dedicated pedestrian and bicycle facilities where appropriate, and fixing poor drainage and flooding problems. Additional solutions could include instituting truck route restrictions for substandard roadways and ensuring adequate emergency vehicle access and improving emergency response time by providing multiple access routes (i.e., through an interconnected roadway network).

In July 2006, Carroll County participated in the Traffic Safety Summit organized by the State. This summit was aimed at developing priority strategies for improving safety on public roadways. The priorities were integrated into the Maryland Strategic Highway Safety Plan, a working document for the years 2006-2010 that contains measurable objectives for improving roadway safety. The plan's main focus areas are to reduce impaired driving, improve information and decision support systems, eliminate hazardous locations, increase occupant protection, improve driver competency, curb aggressive driving, and improve the emergency response system. Carroll County's continued participation with this effort will help to improve traffic safety locally and statewide.

H ⇨ Enhance the aesthetic appearance of the transportation infrastructure by requiring appropriate landscaping along urban streets and major collectors

Transportation facilities can be enhanced beyond their primary function of carrying vehicular traffic and/or pedestrians and bicyclists. Appropriately placed landscaping, particularly street trees and landscaped medians (i.e., planted with trees and shrubs), not only improves the visual impact of a transportation facility, it also reduces noise, glare, air pollution, and storm drainage problems. In addition to vegetative plantings, the facility can be improved with decorative paving (e.g., stamped concrete) in select areas such as pedestrian crossings and high-visibility gateway areas to designate a change in land use and urban character. Street furniture such as park benches, trash cans, and decorative lighting can be provided along pedestrian/bicycle trails and in areas of high-density land use and gateways to demonstrate unique neighborhood character. Bridges can be designed with aesthetically pleasing architectural treatments and landscaping. Landscaping and other beautification projects for transportation facilities may be eligible for federal funding through the Transportation Enhancement Program.

I ⇨ Minimize the number of access points along major roads or planned major roads to ensure their safety and efficiency and the integrity of the overall transportation network

To improve traffic safety and flow as well as reduce congestion and traffic conflicts, new access points should be consolidated or directed to existing access points. Shared access, especially on new development where consolidating access points is easier to implement, should be one means of reducing overall access points to major roadways. Access directed to existing roads coming into the main road or to new service roads is another means of reducing overall access points. In addition, the State Highway Administration has drafted an Access Management

Plan for the MD 140 corridor between Liberty Reservoir and Market Street. Access points and turn movements they have proposed to eliminate include two areas east of Westminster. One involves eliminating or consolidating three commercial driveways that directly access the highway that are located on the north side of MD 140 and east of Leidy Road/Hemlock Lane. The other one involves eliminating a median break/crossover within MD 140 that is located approximately 2,500 feet west of the entrance into the Northern Landfill, and a residential/farm driveway located in line with and south of the crossover. The residential/agricultural property has direct access to Old Westminster Pike at the south end of the property.

J ⇨ Revise the County’s Roads and Storm Drain Design Manual

In April 1994, Carroll County adopted the *Carroll County Design Manual – Roads and Storm Drains*. The manual includes, among other items, design specifications for County roads, storm drains, and trees and landscaping within County roadways. Since 1994, transportation needs, trends, and technology have changed, creating the need to revisit the Design Manual and update it where necessary. Some of the issues that require review include: determine when and where to provide recreational facilities such as bicycle and pedestrian facilities (e.g., bike lanes, sidewalks, pedestrian paths), update roadway design (e.g., roadway widths, swale design to handle drainage for water quality control), update design criteria for landscaping within roadways, provide standards for access controls, reevaluate road-section design, evaluate criteria for roadway interconnectivity (i.e., standards under which cul-de-sacs, loop roads, and use-in-common driveways may be allowed), review standards for street lighting, and evaluate traffic-calming measures to reduce speeding as part of roadway design. The evaluation of traffic-calming measures could result in provisions that allow sharper-radius roadway curvature, permit narrower paving widths for drive lanes, eliminate on-street parking along specified types of roadway segments, and stipulate criteria for channelization and landscaping of medians.

K ⇨ Evaluate, identify, and address parking facility needs in the Westminster environs community

Parking needs should be evaluated to see if adequate parking is available for the current uses and demand. Parking needs in terms of requirements in the zoning ordinance for various types of uses should also be evaluated to ensure that the appropriate amounts of parking are provided. In some cases, too many spaces may be required, and in others, not enough. Once the needs are evaluated, locations for any additional parking facilities can be identified and addressed.

L ⇨ Take into consideration the impacts of roadway improvements and adjacent development in the vicinity of state scenic byways

The Old Main Street Scenic Byway is virtually the only state scenic byway in the county. It is worthy of strategies that encourage sensitivity when making decisions concerning the visual quality surrounding this resource. Refer to SHA’s *Scenic Byway Design Guidelines* whenever any road improvements occur along the Old Main Streets Scenic Byway.

2 Specific Transportation Project Recommendations

A transportation study to evaluate the feasibility of constructing and/or improving various local roadways was conducted by Whitney, Bailey, Cox, & Magnani (WBCM) for the Carroll County Department of Planning. The study focused on the need to develop a redundant

transportation network in the Westminster area. This redundant roadway network will ensure that the citizens of, and visitors to, the Westminster area will have multiple routes to access area businesses, residences, and community facilities. By dispersing traffic on the roadway network, the number of vehicular trips generated by motorists is shared by numerous roadways. Traffic flows more smoothly and safely, and the area's investment in transportation facilities is optimized. Without redundancy (alternatives for local traffic), motorists are forced to rely on the State roadway network to reach destinations in the area. Because the State roadway network carries the bulk of the area's total vehicle trips, the State roadway network becomes overburdened and congested.

The following proposed roadway projects focus on the goal of creating this safe and efficient redundant roadway network for local residents. These proposed alignments were designed to provide additional access to residential communities as well as shopping centers, schools, employment centers, and recreational facilities. The roadways were not designed as a substitute for the proposed bypass recently deleted from the State's transportation plan. Please reference the *Westminster Area Transportation Study* dated August 2002 and performed by Whitney, Bailey, Cox, & Magnani for more detailed information on design criteria, typical roadway sections, impacts, and costs. The County will work with the State to develop access control plans for the area's State highways.

A ⇔ Malcolm Drive Extended

The proposed alignment for Malcolm Drive Extended expands on the Center Street/Market Street roadway system and provides a connection between MD 140 (through Center/Market Streets) and MD 27. Malcolm Drive Extended travels north from the intersection of Malcolm Drive and Center/Market Street, crossing over Gorsuch Road. North of Gorsuch Road, just south of the Maryland Midland Railroad, the alignment curves to the northwest roughly following local topography. The alignment crosses the Maryland Midland Railroad at grade and ties into Old Manchester Road at the intersection with Cranberry and Lucabaugh Mill Roads. With the growing congestion on MD 140 and MD 27 (Manchester Road), this connection is designed to provide an alternate route for local traffic to access the new Winters Mill High School and the commercial development on MD 140.

Inclusion of a separated hiker/biker trail (also known as a bicycle/pedestrian trail) along this alignment is recommended to provide an easy connection between Bennett Cerf Park and the new Westminster area school facilities. This connection provides alternative modes of access for both students as well as employees of Random House.

B ⇔ Bennett Cerf Drive Extended

The proposed alignment for Bennett Cerf Drive provides a new connection between MD 97 and MD 27. The roadway begins at the Random House distribution facility and parallels the eastern side of the West Branch of the Patapsco River on a roughly north/south alignment. The road then crosses a small tributary of the river and continues northward to a proposed intersection south of existing Sullivan Road. From this proposed intersection (which involves a short realignment of Sullivan Road), the Bennett Cerf Drive Extended alignment continues westward, following the right-of-way initially reserved as part of the former Maryland State Highway Administration (SHA) Westminster bypass project, intersecting MD 97 at Meadow Branch Road. An interchange at MD 97 would be constructed when the State makes improvements to MD 97 from MD 140 to Pleasant Valley Road. In the meantime, the right-of-way for that interchange

will be planned for and reserved. From the western intersection, Sullivan Road turns and continues south and eventually intersects with MD 140. This alignment will provide an alternate route for local traffic seeking to avoid MD 140 that currently utilizes local roadways such as Lucabaugh Mill Road.

The alignment identified in this plan passes through the headwaters of the City of Westminster's municipal reservoir source. The City has expressed concern over this issue, and the County has worked closely with them in designing the preliminary alignment shown in this plan. Both jurisdictions will continue to coordinate closely to ensure that every environmental caution is exercised during the planning, engineering, and construction of the project.

Inclusion of a separated hiker/biker trail along this alignment is recommended to provide an easy connection between the residential neighborhoods in this area to Bennett Cerf Park and to the new Westminster area school facilities. This connection also provides alternative modes of access for both students as well as employees of Random House.

C ⇨ Lemmon Road Realignment

The proposed realignment of Lemmon Road would move the intersection of Lemmon Road at Sullivan Road, where Lemmon Road currently terminates on the east, south to intersect with Sullivan Road directly across from Lucabaugh Mill Road. This will create a safer intersection for both roads and better traffic flow.

D ⇨ Arnold Road Realignment/Reconstruction

The proposed realignment and reconstruction of Arnold Road improves driving conditions and safety. The realignment would eliminate the sharp curves and switchbacks and widen the roadway in some areas as well as improve access to the southeast portion of the planning area. Arnold Road was identified as an important link in the transportation network of southeastern Westminster. Arnold Road and Bollinger Road are the only major north-south routes in southeastern Westminster. While Bollinger Road has an adequate typical section and geometric design to handle projected traffic, Arnold Road has severely deficient characteristics with switch back curves and narrow typical sections.

While this plan does not include specific provisions for extending Arnold Road north to MD 140, it does recognize the possibility that it may be considered in the future. Connection to MD 140 will help reduce traffic on Old Westminster Pike and provide a more direct connection to a major regional arterial for residents in the southeastern portion of the Westminster area. Any future decisions to consider connecting Arnold Road to MD 140 will be predicated on the requirement that this connection will result in no net increase in access to MD 140. Achieving this constraint may involve the partial closing of other intersections along MD 140, such as at Reese Road and/or Bethel Road. Other considerations may involve limiting access to right-in, right-out only movements for Arnold Road at MD 140. The County understands that any proposals to connect Arnold Road to MD 140 will need to comply with the State's access control requirements.

E ⇨ Leidy Road Extended

Leidy Road Extended provides a connection between the Westminster Marketplace and the new Motor Vehicle Administration (MVA) and State Police Barracks. The roadway

extension would also serve any future development between Market Street and Hemlock Lane, including the industrially zoned land located in the vicinity of Leidy Road and Hemlock Lane. The extension intersects with Hemlock Lane and could provide an alternate means of access to that road, thus potentially eliminating an access point along MD 140. Additionally, eastbound traffic destined for the MVA, State Police Barracks, and/or commercial operations on the north side of MD 140 could access these facilities via a signalized intersection at Market Street as opposed to performing a left-turn movement across the westbound lanes of MD 140. The same is true for eastbound traffic exiting the facilities. Furthermore, Leidy Road Extended in conjunction with the proposed Malcolm Drive Extended would allow traffic an additional means of access to the new Westminster area school facilities, the Westminster Marketplace, MD 27, Random House, and other destinations north of MD 140 without navigating the multiple signals along MD 140. While this project is important to overall function of the transportation system, it is a lower priority project and is not recommended for inclusion within the CIP until 2022. The County may, however, require portions to be completed by developers if properties within the alignment are developed before that time.

F ⇨ Pleasant Valley Road Realignment

Modifications to the existing alignment of Pleasant Valley Road are recommended to improve safety and driving conditions on the segment of Pleasant Valley Road that directly connects with MD 97. The alignment modification would also reduce the number of access points on MD 97 (Littlestown Pike), thereby improving safety and driving conditions on that road as well. The proposed realignment would begin to curve to the south just west of Chris Lane and tie into Old Meadow Branch Road west of Joleen Lane. The existing intersection at Pleasant Valley Road and MD 97 would be eliminated. However, the existing road would be maintained for local traffic.

G ⇨ Rockland Road Extended

Rockland Road would be extended from Uniontown Road to connect with MD 140. The goal of this new connection is to provide a continuous collector roadway between Roops Mill Road and MD 140, for a total roadway length of roughly 12,358 feet. The roadway, including the above realignment/reconstruction, would serve existing and future development in the Rockland Road corridor and may reduce congestion on other area collector roads such as Royer Road and Tahoma Farms Road. While this project is important to the overall function of the transportation system, it is a lower priority project and is not recommended for inclusion within the CIP until 2022. The County may, however, require portions to be completed by developers if properties within the alignment are developed before that time.

H ⇨ Meadow Branch Road Realignment

The realignment of this roadway would eliminate the sharp curve where Vision Way Drive intersects with Meadow Branch Road and provide a large curve radius on that segment of roadway. The portion that is eliminated from Meadow Branch Road would be maintained to serve local residential and industrial traffic to that area. Meadow Branch Road should be designed to serve as the main collector road for northwestern Westminster. With connections to MD 97 and MD 140, Meadow Branch Road will begin to serve a more important role in travel patterns in the area. This project is currently located within Westminster City limits and is expected to be performed by local developers.

I ⇨ Market Street Extended

This project involves the construction of a new roadway from Old Westminster Pike north to MD 140, using the existing connection of Old Baltimore Road with MD 140. By providing a more direct access route to MD 140 from Old Westminster Pike, this connector will reduce traffic on Old Baltimore Road and the local streets located in the residential development known as Buckingham View (i.e., Sycamore Avenue, Maple Avenue, Spruce Avenue, Willow Avenue, and Locust Avenue) that extend from Old Westminster Pike to Old Baltimore Road. At the south end of the new roadway connector, the alignment extends between the old cider mill and the house to the west of the mill property before connecting to Old Westminster Pike.

J ⇨ Kate Wagner Road Extended

The proposed alignment for Kate Wagner Road Extended completes the connection of Kate Wagner Road from MD 27 to MD 97 (New Washington Road). East of MD 32, the roadway currently exists to serve the Carroll County Firemen's Training Center, Adelphia Communications Company, and the Gateway School. The extension of this road to MD 97 provides a new connection between MD 32 and MD 97, giving two means of ingress/egress to/from the fire training facilities, Gateway School, and other facilities located on this segment of roadway. The proposed alignment is located entirely within existing county-owned property. The project length (approximately 1,050 feet) includes redoing nearly 600 feet of roadway that was extended as part of the Gateway School project. The new school was completed in 2003 and opened in August of that year. To accommodate the school, Kate Wagner Road was extended approximately 750 feet. The roadway extension was designed and constructed to eventually extend beyond MD 97, with a grade-separated "flyover" at MD 97. The roadway terminus as recently constructed has a 45-foot grade differential between it and MD 97. This plan no longer anticipates the extension of Kate Wagner Road east of MD 97. Consequently, Kate Wagner Road is planned to connect to MD 97 at an at-grade intersection. To extend the roadway to intersect MD 97 at grade, the County estimates that 600 feet of the roadway will need to be regraded and rebuilt. While this project is important to the overall function of the transportation system, it is a lower priority project and is not recommended for inclusion within the CIP until 2022.

K ⇨ Krider's Church Road Realignment

Modifications to the existing alignment of Krider's Church Road are recommended to improve safety on a roadway that currently intersects MD 97. The realignment would involve eliminating the connection of Krider's Church Road at MD 97 and providing a connection from the current roadway northward to Meadow Branch Road. The new connection would extend through the Meadowbranch Industrial Park, which is located within the corporate limits of the City of Westminster. The connection would begin at existing Krider's Church Road, nearly 1,800 feet west of MD 97, and would extend approximately 1,000 feet north-northeast to intersect Meadow Branch Road. Meadow Branch Road intersects MD 97 approximately 1,200 feet to the east of this proposed intersection. The remainder of existing Krider's Church Road, which extends approximately 2,400 feet in a west-northwest direction to Meadow Branch Road, would be eliminated as part of the Bolton Hill residential development, which is also located within Westminster. The termination of Krider's Church Road west of MD 97 would eliminate an unsafe intersection. There is limited sight distance north of the intersection and the short distance (approximately 270 feet) between the intersection and the MD 140 off-ramp (i.e., the ramp from westbound MD 140 to northbound MD 97) results in unsafe weaving motions by

motorists trying to get into the left, or through, lane on MD 97. These alignment modifications would also reduce the number of access points on MD 97, thereby improving safety and driving conditions on that road as well. The proposed realignment of Krider's Church Road is expected to be completed by local developers.

While this plan does not include specific proposals for providing a connecting road between Krider's Church Road and Wyndtryst Drive, it does recognize the possibility that it may be considered in the future.

L ⇨ MD 97 Widening: MD 140 to Pleasant Valley Road

This segment has been identified on the Maryland State Highway Administration's 2005 Highway Needs Inventory for capacity improvements to serve existing and future development in the MD 97 corridor. This project will accommodate bicycles and pedestrians.

M ⇨ MD 97 Widening: East Main Street/Old Westminster Pike to MD 32

This segment is identified on the Maryland State Highway Administration's 2005 Highway Needs Inventory for capacity improvements to accommodate future traffic. It is proposed for widening to help accommodate the traffic flow through this area and reduce cut-through travel on local neighborhood roads by non-local traffic. Pedestrian and bicycle facilities will be provided.

N ⇨ MD 140 Improvements: Sullivan Road to Market Street

This segment has been identified on the Maryland State Highway 2005 Highway Needs Inventory for capacity improvements to serve the Westminster area. Project Planning is nearly complete to evaluate alternatives for capacity improvements within the MD 140 corridor. These improvements may include widening (e.g., additional lanes) and/or grade-separated interchanges. The project will include the use of Continuous Flow Intersections at Center Street and Englar Road, and a Single Point Urban Interchange at Malcolm Drive. This project will provide for bicycles and pedestrians. The State recently completed a project to widen and reconstruct the bridges over MD 97 North and MD 27 to provide for future capacity improvements to MD 140 through Westminster. Wide curb lanes were constructed to accommodate bicycles, and sidewalks were provided. The MD 140 Improvements Project is part of the State's efforts to provide alternative transportation solutions to the formerly planned Westminster Bypass and is aimed at alleviating traffic problems in the Westminster area.

O ⇨ Hiker/Biker Trail: MD 27 to MD 97 Parallel to Bennett Cerf Drive Extended

This trail will run parallel to the alignment for Bennett Cerf Drive Extended. Beginning at Bennett Cerf Park, the trail will follow Bennett Cerf Drive to MD 97. This trail could be considered a substitute for building sidewalks along that stretch of road. The trail would provide a connection to employment centers, shopping centers, and parks and recreational facilities for the residential areas through which it runs. Connection to the hiker/biker trail recommended to parallel Malcolm Drive Extended would also provide an alternative means of access to the new school facilities on Center Street as well as additional shopping areas.

P ⇨ Hiker/Biker Trail: Market/Center Street to MD 27 Parallel to Malcolm

Drive Extended

This trail will run parallel to the alignment for Malcolm Drive Extended. Beginning at the intersection of Market/Center Street and Malcolm Drive, the trail will follow Malcolm Drive Extended to MD 27. This trail could be considered a substitute for building sidewalks along that stretch of road. The trail would provide a connection to employment centers, shopping centers, and school facilities from other residential areas that connect up with the trail system. Connection to the hiker/biker trail recommended to parallel Bennett Cerf Drive Extended would also provide an alternative means of access to additional shopping and employment areas.

Q ⇔ Hiker/Biker Trail: Westminster Community Pond to the Hiker/Biker Trail Parallel to Bennett Cerf Drive Extended

This trail is proposed to connect the Westminster Community Pond to the trail system that extends from MD 97 to MD 27 (parallel to Bennett Cerf Drive Extended), from MD 27 to Market/Center Streets (parallel to Malcolm Drive Extended), and from Bennett Cerf Park to downtown Westminster. Beginning at the Westminster Community Pond located on the north side of MD 140, the trail would extend northeast to Sullivan Road, continue east generally paralleling and then intersecting Sunshine Way, and continue northeast to intersect the trail paralleling Bennett Cerf Drive Extended. The majority of the land involved with this trail is publicly owned.

R ⇔ Hiker/Biker Trail: MD 27 to Center Street Parallel to Longwell Run

This trail is proposed to connect MD 27 to Center Street, running parallel to Longwell Run. The majority of this property is already publicly owned. It would provide further access to the County Government Complex and facilities for citizens as well as employees. It also provides additional access opportunities from residential areas to employment areas. Once the entire hiker/biker network is completed, this trail would connect with the trail proposed to run along MD 27 from Tuc Road to Bennett Cerf Park. This connection provides additional access to the trails by Bennett Cerf Park, the downtown Westminster area, and shopping and employment centers.

S ⇔ Hiker/Biker Trail: Bennett Cerf Park to Downtown Westminster Parallel to Longwell Branch & MD 27

This trail is proposed to connect the downtown Westminster area to employment centers, shopping centers, residential areas, and park and recreational facilities north of the City. The trail is proposed to begin where the sidewalk on the west side of MD 27 terminates (i.e., at the property located opposite Tuc Road) and run parallel to Longwell Branch and MD 27 northeasterly to Hahn Road, and continue northeasterly on the northwest side of the railroad tracks to Bennett Cerf Park. Once the entire hiker/biker network is completed, it would provide further access to the County Government Complex and facilities for citizens as well as employees. This trail would connect with the trail proposed to parallel Bennett Cerf Drive Extended.

T ⇔ Hiker/Biker Trail: Hook Road @ Westminster High School to YMCA Parallel to MD 97

This trail would begin at Hook Road near MD 97. It would then follow MD 97 south and

terminate at the YMCA. This trail would provide additional means of access and travel between many public facilities, including the Westminster High School, the Carroll County Career and Technology Center, Carroll County Firemen’s Training Center, Carroll Community College, Robert Moton Elementary School, the Gateway School, and the YMCA. The bulk of this land is already under public ownership. A culvert or some other method of safe crossing will need to be considered where the trail would cross the planned connection of Kate Wagner Road to MD 97.

Fiscal Implications

The recommendations contained in this plan may be policy-oriented or action-oriented, and their implementation may be the responsibility of the County, other public agencies, private landowners and developers, or a combination of these. This section is designed to identify the potential fiscal impacts to the County of each of the recommendations. There could be “No Fiscal Impact,” meaning the County would not incur direct or predictable expenses as a result of implementing the recommendation, an “Undetermined Impact,” meaning there likely would be a cost associated with implementing the recommendation but that cost can not be determined at this time for various reasons, or a “Fiscal Impact,” which likely would be incurred by the County if the recommendation were implemented. For recommendations that have an identified fiscal impact, the cost of implementing that recommendation is estimated to the best degree possible.

1 General Transportation Recommendations

- Update the Carroll County Airport Master Plan
No Fiscal Impact (this project is already underway so this recommendation does not create additional fiscal impacts)
- Explore opportunities for addressing commuter congestion
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Expand paratransit services
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Construct bicycle and pedestrian connections between neighborhoods and between the downtown, residential areas, and activity centers
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Construct sidewalks to improve pedestrian access and the overall transportation network
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Obtain land/public access easements for trail implementation of the proposed bicycle/pedestrian trail system
Undetermined Impact: The cost to construct trails ranges from \$100,000 per mile for a 6’ wide trail located on parkland to \$500,000 per mile (including acquisition, construction and shoulder widening) for an 8-10’ wide trail located alongside a road. Because the trails proposed in this plan could be constructed in whole or in part by developers, the State Highway Administration, and/or the County, it is difficult to determine the direct fiscal impact that implementing this recommendation would have on the County.
- Identify areas of traffic safety concerns and provide solutions

No Fiscal Impact

- Enhance the aesthetic appearance of the transportation infrastructure by requiring appropriate landscaping along urban streets and major collectors
No Fiscal Impact
- Minimize the number of access points along major roads or planned major roads to ensure their safety and efficiency and the integrity of the overall transportation network
No Fiscal Impact
- Revise the County’s Roads and Storm Drain Design Manual
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Evaluate, identify, and address parking facility needs in the Westminster environs community
Undetermined Impact: While there likely would be a cost associated with the implementation of this recommendation, the project needs more development before a reasonable cost estimate can be determined.
- Take into consideration the impacts of roadway improvements and adjacent development in the vicinity of state scenic byways
No Fiscal Impact

2 *Specific Transportation Project Recommendations*

The following cost estimate information was taken from estimates provided in the Westminster Area Transportation Study completed by Whitney, Bailey, Cox, & Magnani (WBCM) in August of 2002. Projects proposed to be included in the CIP within the next six years include a cost estimate for construction as well as right-of-way. The total estimate given is more than the sum of construction and right-of-way because an additional standard 30 percent was built in for contingencies. The cost estimate for other projects proposed to be funded, at least in part, by the County includes only construction costs. While preliminary engineering was performed by WBCM, additional engineering and design would be required; these costs are not included in the estimates provided by WBCM.

The County reserves the right to require the construction of any roadway by the developer on a proposed (or similar) alignment should properties along the proposed alignment be developed and/or redeveloped before the County has the project scheduled for construction in the CIP.

See the map titled “Proposed Transportation Improvements” for an illustration of the location of the following roadway and hiker/biker trail alignments.

The following projects are recommended for inclusion in the next County CIP. These alignments meet the goal of providing a redundant roadway network for a large number of area residents. Analysis of the benefits of the proposed alignments compared to the potential impacts indicates they are most likely to maximize meeting the immediate travel needs of local residents. Funding designated for the Southern Parkway would be used instead toward the Arnold Road and Kate Wagner Road projects. Funds already reserved for the Northern Parkway would be used toward the Malcolm Drive Extended and the Bennett Cerf Drive Extended projects. Each set of cost estimates below is followed by a summary of the impacts of those projects in the area of the proposed alignment.

WESTMINSTER ENVIRONS COMMUNITY COMPREHENSIVE PLAN

| Project | Description | Cost Estimate | Anticipated Funding Sources |
|--|--|---|------------------------------|
| Roadway Projects Recommended for Inclusion in the Next County CIP | | | |
| ◆ Bennett Cerf Drive Extended | Connect existing terminus @ MD 27 to MD 97 | \$5.90M (C) + \$0.14M (R/W) = \$7.70M (total includes contingencies) | Carroll County Developers |
| ◆ Malcolm Drive Extended: Market Center/Street to Gorsuch Rd | Connect existing terminus @ Market/Center Street to Gorsuch Rd | \$0.71M | Carroll County |
| ◆ Arnold Road Realignment* / Reconstruction** | Straighten curves & widen some areas – 6,500’ of reconstruction & 2,180’ of realignment | \$1.70M (C*) + \$2.66M (C**) + \$0.188 (R/W) = \$4.548M | Carroll County Developers |
| ◆ Pleasant Valley Road Realignment | Begin realignment just west of Chris Lane & tie into Old Meadow Branch Rd west of Joleen Lane; eliminate existing intersection at Pleasant Valley Rd & MD 97 | \$1.80M (includes C, design, & contingencies) | Carroll County |
| ◆ Market Street Extended | Connect Old Westminster Pike to MD 140, using existing intersection of Old Baltimore Road at MD 140 | \$0.692M (includes C, R/W, design, & contingencies) | Carroll County Developers |

The following projects are recommended for inclusion in the County CIP by FY 2022. While they are a high enough priority to include within the CIP by FY 2022, it is not feasible to include them within the next CIP.

| Project | Description | Cost Estimate | Anticipated Funding Sources |
|--|--|---|------------------------------|
| Roadway Projects Recommended for Inclusion in the County CIP by FY 2022 | | | |
| ◆ Malcolm Drive Extended: Gorsuch Rd to MD 27 | Connect Gorsuch Rd to MD 27 | \$7.50M (C) + \$0.46M (R/W) = \$9.76M (total includes contingencies) | Carroll County Developers |
| ◆ Leidy Road Extended | Connect from Market St to Hemlock Lane | \$1.70M* | Carroll County Developers |

*Figure is for construction cost only.

The following projects are recommended for inclusion in this plan; however, they are not recommended for inclusion in the CIP before FY 2022 for County construction funding. These alignments meet the goal of providing a redundant roadway network for area residents. However, the roadways typically serve fewer residents and analysis of the benefits of the proposed alignments compared to the potential impacts indicates they are less likely to meet the immediate travel needs of enough residents to justify the cost of construction.

WESTMINSTER ENVIRONS COMMUNITY COMPREHENSIVE PLAN

| Project | Description | Cost Estimate* | Anticipated Funding Sources |
|--|--|---|-----------------------------|
| Roadway Projects Not Recommended for Inclusion in the County CIP before FY 2022 | | | |
| ◆ Rockland Road Extended | Extend from Uniontown Road to MD 140 – 12,358 feet; may include bridge structure | Not available | Developer, Carroll County |
| ◆ Kate Wagner Road Extended | Connect existing terminus @ Gateway School to MD 97 | \$0.92M (includes C & contingencies) | Carroll County |

*Figure is for construction cost only

Hiker/biker trails are recommended to accompany a few of the proposed alignments as well as stand alone facilities in some areas. Hiker/biker trails generally are utilized when pedestrian/bicycle origins and destinations are separated by a considerable distance. Several of the proposed alignments cross long distances of undeveloped area but connect schools and parks with residential communities, making them good candidates for hiker/biker trails instead of traditional sidewalks. If construction of the hiker/biker trails is determined to be feasible, use of American Association of State Highway and Transportation Officials (AASHTO) hiker/biker design criteria is recommended for standardized design of the trails. These trails could substitute for sidewalks where they are recommended.

| Project | Description | Cost Estimate | Anticipated Funding Sources |
|--|---|---|--|
| Hiker/Biker Trail Projects Recommended for Inclusion in the County CIP before FY 22 | | | |
| ◆ MD 27 to MD 97 Parallel to Bennett Cerf Drive Extended* | <ul style="list-style-type: none"> • Construction of 11,900 lineal feet (lf), 10-foot wide macadam • Land acquisition – n/a (part of road contract) • Crosswalks, signage, bollards, ADA, etc. • Total | \$595,000 0 <u>30,000</u> \$625,000 | Carroll County Developers Transportation Enhancement Program (TEP) |
| ◆ Market/Center Street to MD 27 Parallel to Malcolm Drive Extended* | <ul style="list-style-type: none"> • Construction of 7,800 lf, 10-foot wide macadam • Land acquisition – n/a (part of road contract) • Crosswalks, signage, bollards, ADA, etc. • Total | \$390,000 0 <u>20,000</u> \$410,000 | Carroll County Developers TEP |
| ◆ Westminster Community Pond to Hiker/Biker Trail Parallel to Bennett Cerf Drive Extended | <ul style="list-style-type: none"> • Construction of 5,400 lf, 10-foot wide macadam • Land acquisition – n/a (easements from City) • Crosswalks, signage, bollards, ADA, etc. • Pre-engineered bridge and 400 lf boardwalk • Total | \$270,000 0 9,500 <u>54,000</u> \$333,500 | Carroll County TEP |
| ◆ MD 27 to Center Street Parallel to Longwell Run | <ul style="list-style-type: none"> • Construction of 2,500 lf, 10-foot wide macadam • Land acquisition (± 1 acre Landmark/Carroll County Times property) • Crosswalks, signage, bollards, ADA, etc. | \$125,000 40,000 <u>8,200</u> \$173,200 | Carroll County Developers TEP |

WESTMINSTER ENVIRONS COMMUNITY COMPREHENSIVE PLAN

| Project | Description | Cost Estimate | Anticipated Funding Sources |
|---|--|----------------------|------------------------------------|
| | • Total | | |
| ◆ Bennett Cerf Park to Downtown Westminster Parallel to Longwell Branch & MD 27 | • Construction of 6,300 lf, 10-foot wide macadam | \$315,000 | Carroll County Developers TEP |
| | • Easement/Land Acquisition (Specific to trail location) | 45,000 | |
| | • Boardwalk (along stream at Hahn Rd., 100 lf) | 12,000 | |
| | • Pre-engineered bridge (±60 lf) | 24,000 | |
| | • Crosswalks, signage, bollards, ADA, etc. | 20,000 | |
| | | \$416,000 | |
| | • Total | | |
| ◆ Hook Road @ Westminster High School to YMCA Parallel to MD 97 | • Construction of 6,300 lf, 10-foot wide macadam | \$315,000 | Carroll County TEP |
| | • Land acquisition – n/a (County owned) | 0 | |
| | • Crosswalks, signage, bollards, ADA, etc. | 16,000 | |
| | | \$331,000 | |
| | • Total | | |

** Cost estimates include excavation/grading costs are based on AASHTO recommended 10-foot wide pavement.*

The following projects would not have an impact on the Carroll County CIP as they would be funded by sources other than Carroll County. However, their completion is important to the overall transportation network. Please note that no one type of recommendation takes precedence over another with respect to timing. For example, the State Highway Administration (SHA) may perform highway improvements, a developer may be required to construct portions of an alignment, or Carroll County may construct portions of an alignment at any given time.

| Recommended projects to be funded by sources other than Carroll County | | |
|---|---|-----------------------------------|
| Project | Description | Anticipated Funding Source |
| ◆ Lemmon Road Realignment | Realign the existing terminus of Lemmon Rd at Sullivan Rd to intersect directly across from Lucabaugh Mill Rd | Developers |
| ◆ Meadow Branch Road Realignment | Eliminate sharp curve @ Vision Way Dr & provide larger curve | Developers |
| ◆ Krider’s Church Road Realignment | Realign connection to Meadow Branch Road & terminate intersection @ MD 97 | Developers |
| ◆ MD 97 Widening: MD 140 to Pleasant Valley Rd | Improve capacity and provide pedestrian and bicycle facilities | SHA Developers |
| ◆ MD 97 Widening: MD 140 to MD 32 | Widen and provide pedestrian and bicycle facilities | SHA |
| ◆ MD 140 Improvements: Sullivan Rd to Market St | Improve capacity and provide for pedestrians and bicycles | SHA |

Maps

1 2007 Transportation Improvements

