Charles County Local Roadway Safety Plan

June 1, 2023





Acknowledgments

This project was funded by the Maryland State Highway Office of the Maryland Department of Transportation.

This project was managed by the Tri-County Council of Southern Maryland under the leadership of George Clark, CCTM, MWD-BS and John Hartline, Executive Director.

Consultant services were provided by Mead & Hunt, Inc., a national architecture, engineering, and construction management firm, under the project management of Jamie Kendrick, AICP, with assistance from Hunter Withers and James Poeschel.

This project was supported by an advisory committee of agency and public stakeholders listed on page 21.

Contents

Introduction: Fatalities and injuries on Charles County Roadways	
Part I: Traffic Safety Baseline for Charles County	6
Project Overview	6
County Overview	-
Governance of Transportation Planning, Policy, and Safety	
Transportation Network	8
Roads	8
Transit Services	
Bicycle and Pedestrian Facilities	10
Data Driven Analysis of Traffic Safety	11
Data Sources and Analytical Methods	1
Leading Causes and Contributing Factors of KSI Crashes	11
High Injury Network	13
Equity Analysis	18
Vulnerable Roadway Users	19
Time of KSI Crashes	20
Stakeholder Engagement & Viewpoints	22
Recommendations for Emphasis Areas & Targets	22
Part II: Strategies to Eliminate Roadway Deaths and Serious Injuries in Charles County	23
Emphasis Area #1: Improve Agency Capacity to Proactively Address Traffic Safety	23
Emphasis Area #2: Protect Vulnerable Roadway Users	23

Emphasis Area #3: Address "Under the Influence" Serious Injuries and Fatalities	. 24
Emphasis Area #4: Address Speeding, Reckless, and Inattentive Driving	. 24
Emphasis Area #5: Mitigate Crash Potential and Severity on High-Risk Rural Roads	. 25
Emphasis Area #6: Systematically Address the High Injury Network	. 25
Roadway Safety Targets	. 26
Implementation Plan	.27

Introduction: Fatalities and Injuries on Charles County Roadways

From 2017 – 2021, there were 2,359 traffic crashes on Charles County roadways resulting in a vehicle occupant or other roadway user being killed or seriously injured (KSI). There was a total of 119 deaths and 3,487 injuries to motorists, pedestrians, and bicyclists and others on all roads in Charles County over those five years. Nationally, roadway fatalities and the fatality rate declined consistently for 30 years, but progress has stalled over the last decade and went in the wrong direction in 2020. Charles County is no different as local trends have mirrored outcomes in Maryland and across the nation.

Every traffic-related crash impacts the lives of those involved. Fortunately, 95% of all crashes involved property damage only and resulted primarily in annoyance, inconvenience, aches, or pains. But for the 5% of crashes resulting in injury or fatality, the consequences can devastate families and communities. Thus, this plan and most other roadway safety plans focus on crashes which cause the most direct and indirect harm – those involving fatality or injury.

While property damage crashes tend to be more dispersed in time, location, and manner, there are clear patterns that emerge when reviewing the KSI crashes in Charles County between 2017 and 2021.

- More than 50% of all KSI crashes occurred between 1:00 PM and 5:00 PM on weekdays.
- More than 44% of all KSI crashes occurred on just 3.7% of all roadways, referred to in this document as the High Injury Network.
- More than 40 % of all KSI crashes involved driving under the influence of alcohol or drugs.
- More than 25% of all crashes occurred in September and October.
- Nearly 17% of all KSI crashes involved vulnerable roadway users such as bicyclists and pedestrians.

Part I: Traffic Safety Baseline for Charles County

Project Overview

Through the National Roadway Safety Strategy, the United States Department of Transportation (USDOT) has established an ambitious long-term goal of zero roadway fatalities. Achieving this goal requires sustained partnership of at all levels of government and spanning a range of agencies and disciplines including public health, law enforcement and the judiciary, public works, education, and many others. The state of Maryland, acting through the Department of Transportation (MDOT), has adopted a zero-deaths plan that is led by the Maryland Highway Safety Office (MHSO). The plan's philosophy is that all crashes are preventable, and every injury is avoidable; saving lives and preventing injuries can only be achieved through a comprehensive set of traffic safety programs.

In turn, MDOT has challenged every local government to examine their programs, policies, and practices and develop a local strategic roadway safety plan (LRSP). The plan not only drives local efforts to improve traffic safety but also is a prerequisite to receiving funds from Maryland's allocation of federal High Safety Improvement Program (HSIP) funds and the USDOT's *Safe Streets for All* (SS4A) competitive grant program which makes \$1 billion available annually on a competitive basis for comprehensive safety implementation activities. This LRSP is intended to meet the required elements of a Comprehensive Safety Action Plan as defined by USDOT to be eligible for supplemental action plan or implementation grant funds.

Through a grant from MHSO, the Tri-County Council of Southern Maryland (TCC-SMD) has taken the lead to develop LRSP's for Charles County. Partnering agencies and private organization representatives met over six months to analyze traffic safety data and develop locally supported actions that will save lives and reduce injuries on Southern Maryland roadways. To qualify as a eligible plan for HSIP funds and SS4A, each county must adopt its own LRSP¹.

This LRSP for Charles County is prepared in two parts:

- Part 1 is a "benchmark" report that describes the county, recent traffic safety data, and stakeholder views on the nature of the traffic safety problem and potential solutions.
- Part 2 is the local roadway strategic plan itself with areas of emphasis and agreed-upon strategies to save lives and reduce injuries.

¹ It is typical that the County's legislative body, chief executive, and/or chief law enforcement officer sign the LRSP.

County Overview

Located approximately 30 miles south of Washington, DC, Charles County is one of Maryland's fastest growing jurisdictions with population having risen from approximately 101,000 in 2000 to nearly 170,000 in 2020. Over the past thirty years, Charles County has transitioned from a rural jurisdiction to one that is far more urbanized. The US 301 corridor through Waldorf, St. Charles and White Plains is the hub of the county's commercial activity while dense suburban-style residential areas radiate east-west along MD 225, St. Charles Parkway, Billingsley Road, and Smallwood Drive. The county seat is in La Plata (population 10,400), which like Indian Head (population 3,900) is an independent municipality defined by a small downtown main street. Rural villages like Bryans Road, Cobb Island, Hughesville, Pomonkey, Newburg, are situated throughout the county.

Charles County is also one of the wealthiest majority-minority communities in the nation with median household income of \$107,808; the median value of owner-occupied housing is \$339,000. More than 31% of residents aged 25 or older have a bachelor's degree or higher. Despite the overall wealth of the county, there a few areas of the county have been designated by the Metropolitan Washington Council of Governments as "Equity Emphasis Areas" meaning they have high concentrations of low-income individuals and/or traditionally disadvantaged racial and ethnic population groups.² These areas include Bryans Road, Indian Head, the lower Cobb Neck communities, and portions of Waldorf. Equitable transportation planning and resource allocation demands that heightened awareness be paid to these communities.

Governance of Transportation Planning, Policy, and Safety

Charles County is a code home rule county governed by a five-member Board of Commissioners. A County Administrator manages the day-to-day work of the local government; agencies with responsibilities related to traffic safety report to the County Administrator. This includes the Department of Planning and Growth Management and Department of Public Works; the Health Department and Board of Liquor License Commissioners are quasi-state agencies that effectively function as part of county government. Other agencies critical to traffic safety include:

- The MDOT State Highway Administration which is responsible for maintenance, design, and construction of state roadways.
- The County Sheriff is the county's chief law enforcement officer and is elected by the voters countywide.
- The Maryland State Police through its patrol barracks located in La Plata; and the Maryland Transportation Authority police which patrols the area approaching and on the Nice-Middleton Bridge at the southern end of Charles County.
- The Charles County Public Schools which are governed by a separately elected Board of Education.
- Judges of the District Court of Maryland adjudicate most traffic-related charges; they are appointed by the Governor of Maryland with the advice and consent of the State Senate.

² Map Detail | Metropolitan Washington Council of Governments (mwcog.org)

- Two independent municipalities: La Plata and Indian Head, also provide municipal services including police and public works functions.
 All these agencies each with their separate reporting and accountability structures must act in concert to reduce traffic fatalities and serious injuries.
- The Tri-County Council of Southern Maryland plays a planning and convening role to encourage local governments and other stakeholders to work together in solving policy and planning challenges.

In addition, a Traffic Safety Committee operates within Charles County government and is comprised of representatives of the Sheriff's Office, Department of Planning and Growth Management, and the Department of Public Works.

Transportation Network

Because the county has grown as a "bedroom community" to Washington DC and its immediate suburbs, the average commute time to work is 45 minutes and the single occupant vehicle is the predominant mode of travel.

Roads

US 301 is the most heavily travelled roadway ranging from approximately 26,500 annualized average daily traffic (AADT) just south of La Plata to approximately 58,700 AADT just north of MD 5 (Mattawoman-Beantown Road) which carries between 25,200 and 43,150 ADT between US 301 and just south of MD 488 (La Plata Road). ³ Of the 1,047 centerline roadway miles in Charles County, approximately 200 miles are owned, operated, and maintained by the MDOT State Highway Administration. ⁴ On an individual roadway basis, state roads are the highest volume roadways in the county, where SHA estimates 268 million vehicle miles are travelled annually. By contrast, the county and municipalities control approximately 847 centerline miles which are estimated to carry 997 million vehicle miles travelled annually. ⁵

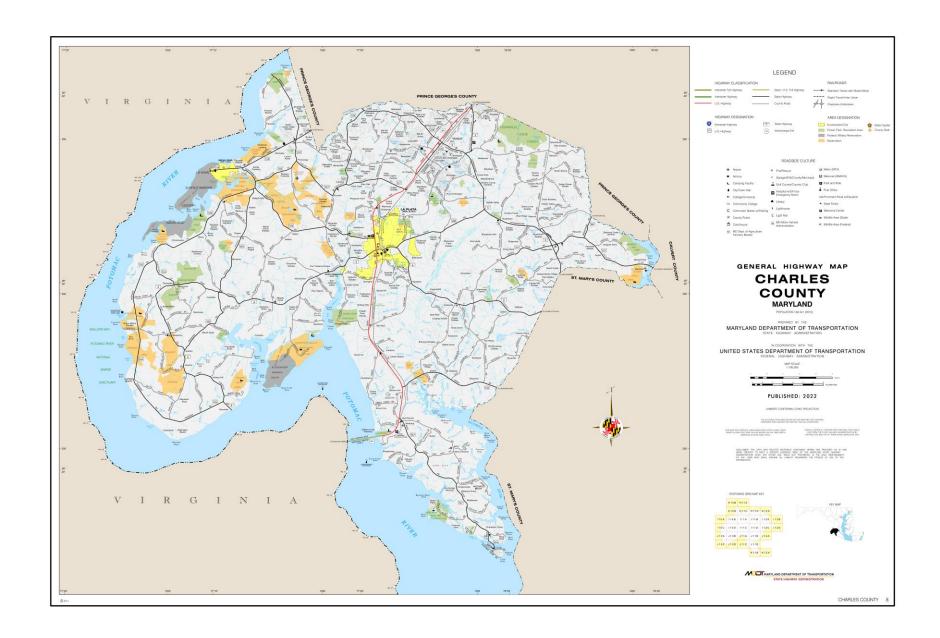
Through the capital improvement program, the County is presently advancing several safety improvements on local roads including:

- Installation of Rectangular Rapid Flashing Beacons (RRFBs) at various locations.
- Improving sight distance on Ripley Road at Poorhouse Road.
- Shoulder installation and repairs, intersection improvements, horizontal and vertical site distance improvements on Billingsley Road from MD 210 to Middletown Road.
- Realignment, safety, drainage, and visibility improvements on Turkey Hill Road between MD 227 and US 301.

³ Charles.pdf (maryland.gov)

⁴ An additional 2.5 freeway miles are on the Nice-Middleton bridge which connects Maryland with Virginia. The bridge is under the jurisdiction of the Maryland Transportation Authority.

⁵ 2021 Mileage Reports.pdf (maryland.gov)



Transit Services

Although ridership has fallen significantly post-COVID, the Maryland Transit Administration offers extensive commuter bus service between Charles County and Washington, DC with more than 70 daily round trips along US 301 and MD 5 to the federal office buildings in Suitland, Washington Metrorail stations, and downtown Washington DC. The county's "locally operated transit system" *Van Go* operates sixteen routes that operate every one to two hours. In 2021, *VanGo* averaged 1,499 riders per day. VanGo tends to serve economically- and socially disadvantaged persons with access to jobs, school, shopping, and medical appointments, while MTA commuter bus service tends to serve white-collar professionals.





Bicycle and Pedestrian Facilities

Charles County is committed to growing its network of bicycle and pedestrian facilities through retrofit of existing roadways or construction of new facilities. The county has dedicated funds to this effort in the capital improvement program and aggressively sought grants from regional and state agencies to advance bicycle and pedestrian projects contained in the 2012 Bicycle Master Plan. Among the projects currently in planning or design for bicycle and pedestrian facilities are:

- MD 6/MD 488/Radio Station Road sidepath (Town of La Plata)
- Washington Avenue sidewalks (Town of La Plata)
- Smallwood Drive sidepath from Middletown Road to St. Charles Parkway
- Extension of the Indian Head Rail Trail to connect to the Three Notch Trail in St. Mary's County.

⁶ 30088 2021 Agency Profile (dot.gov)

Data Driven Analysis of Traffic Safety

Local Roadway Safety Plans are intended to be data driven, although the qualitative experience of community residents, planners and engineers, law enforcement officials and others cannot be discounted. From 2017 – 2021, there were 14,260 reported⁷ traffic crashes in Charles County of which 667 resulted in an occupant or other roadway user being killed or seriously injured (KSI). This section explores a few datapoints which shape the Local Roadway Safety Plan for Charles County.

Data Sources and Analytical Methods

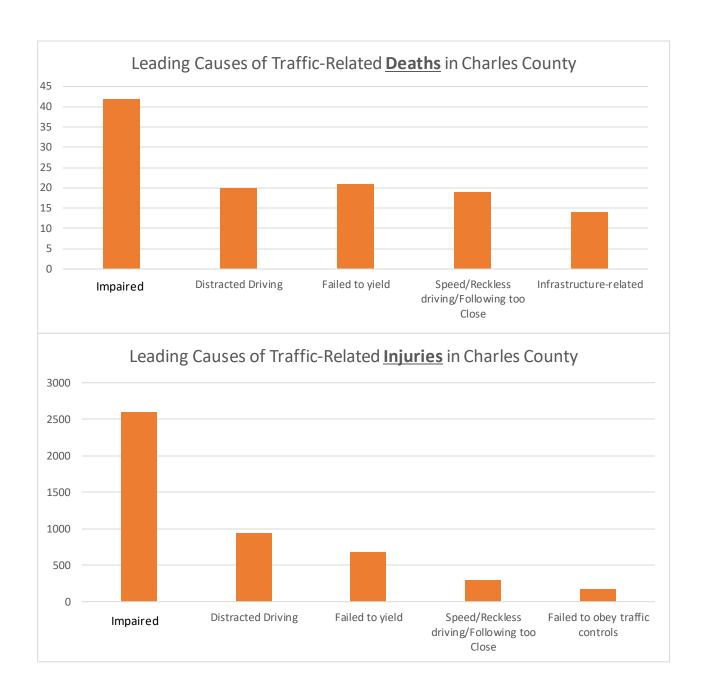
All crash data was sourced from the MDOT SHA Office of Traffic and Safety for calendar years 2017 through and including 2021. Data on roadway mileage, traffic volumes, etc. was sourced from the MDOT SHA Data Services Division's annual reports. The analysis herein may or may not align specifically with the analysis of MDOT SHA or Maryland Highway Safety Office because of difference in calculation methods. For example, there are four causes/contributing factor categories in the datasets relating to "driving under the influence" which include alcohol, illegal drugs, medications, or combinations thereof. All were combined into a single category here because they are so interrelated.

The LRSP is focused on "top lines" of traffic safety data, meaning that the findings below should be considered <u>indicative</u> of crash patterns. More granular analysis as to crashes at certain locations or by certain causes or contributing factors is necessary in making specific programmatic decisions or investments.

Leading Causes and Contributing Factors of KSI Crashes

The causes and contributing factors of KSI crashes are primarily behavioral in nature; that is, decisions made by drivers' lead to poor outcomes. Examples of behavioral factors include driving under the influence of alcohol or drugs, driving while distracted, speeding, and recklessness. While improving roadway infrastructure can mitigate the seriousness of crashes, changing driver behavior through enforcement and education will have the most significant impact on fatalities and serious injuries.

⁷ Discussions within the advisory committee indicated that there are hundreds, if not thousands more crashes that occur every year that do not get reported. Failure to document these crashes – although they tend to be minor and involve only property damage – indicates that a full picture of traffic safety is not available.

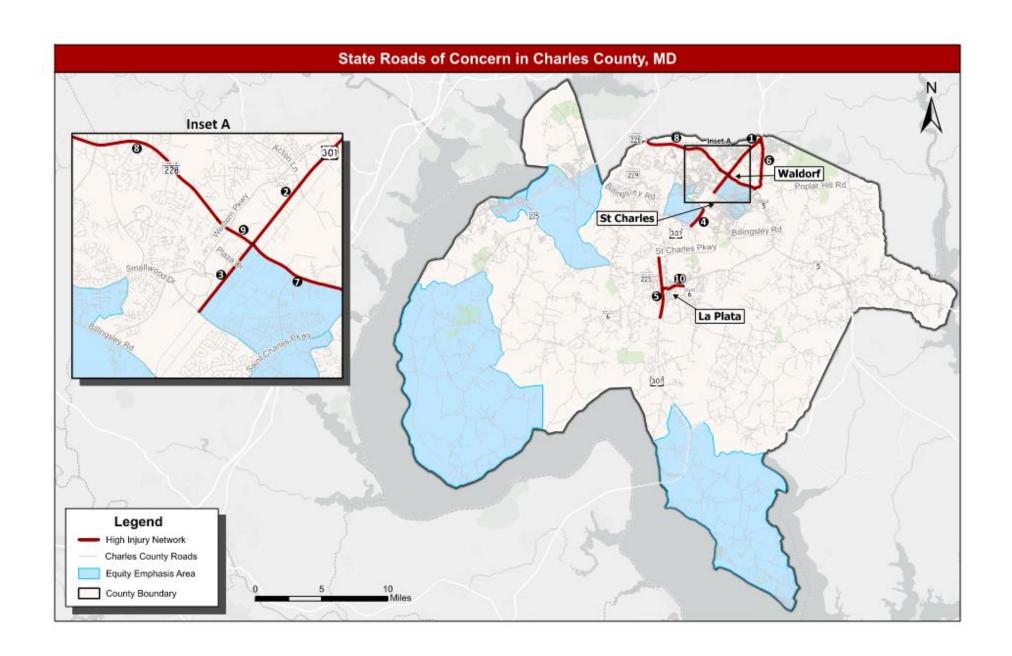


High Injury Network

Although the leading causes and contributing factors of KSI crashes are behavioral in nature, those outcomes are disproportionately concentrated on just a few roadway segments. These roadway segments are deemed the "High Injury Network" for Charles County and shown/listed in the maps and accompanying tables below.

Designation of roadway segments as part of the High Injury Network can focus resources on reducing or mitigating KSI crashes. For example, if a roadway on the High Injury Network has significant horizontal or vertical curves, there are mitigation measures that can be taken to slow traffic, alert drivers of roadway conditions, and lessen the impact at locations when crashes most frequently occur. Long, flat road segments or segments with high traffic volumes on the High Injury Network may lend themselves to saturation patrols and greater enforcement of speed limits. Specific strategies are explored later in Part 2.

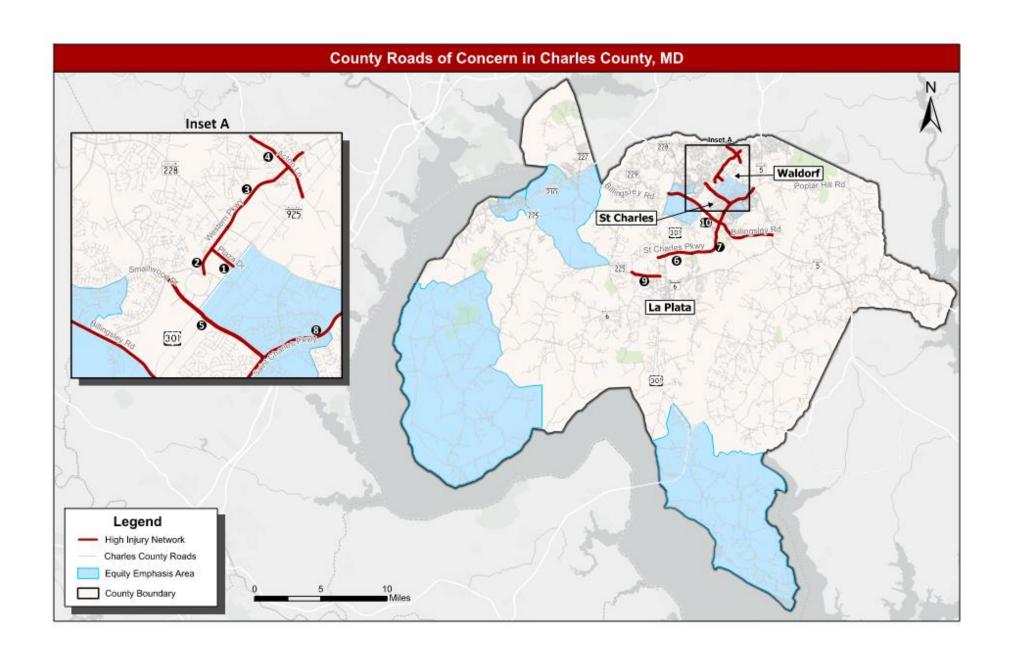
	Fatalities	s & Injuries (20	17 - 2021)	Roadway Mileage					
Road Ownership	KSI Crashes on HIN Segments	Total KSI Crashes Countywide	HIN KSI Crashes as % of Total Crashes	HIN Centerline Miles	Total Centerline Mileage	HIN Mileage as a % of Total Mileage			
State Roads	571	1,249	46%	21	302	7.0%			
County/ Municipal Roads	370	1,110	33%	25	945	2.7%			
Total	1,028	2,359	44%	46	1247	3.7%			



High Injury Network for Charles County, Maryland

State-owned Roadways Only

Roadway	Total Crashes	Vehicles Injury + Fatal Crashes	Pedestrian Injury + Fatal Crashes	Crashes per Mile	Segment Length (Miles)	Number of Travel Lanes	Speed Limit
US 301 North County border to Acton Ln	91	86	5	18.2	1.79	6	45
US 301 Acton Ln to MD 5	49	44	5	9.8	1.15	6	45
US 301 MD 5 to Smallwood Dr W	75	70	5	14.6	1.31	6	45
US 301 Billingsley Rd to MD 227	25	24	1	5	1.22	4	55
US 301 Rosewick Rd to Old Stagecoach Rd	84	77	7	16.8	3.53	4	50
MD 5 North County Boundary to St Charles Pkwy	50	48	2	10	3.46	4	45
MD 5 US 301 to St Charles Pkwy	56	49	7	11.2	1.81	4	35
MD 228 North County border to Marsh Hawk Dr	68	67	1	13.6	4.83	4	45
MD 228 Marsh Hawk Dr to US 301	30	28	2	6	0.64	4	45
Route 6 US 301 to MD 488	25	23	2	4.8	1.31	2	40



High Injury Network for Charles County, Maryland

County-owned Roadways Only

Roadway	Total Crashes	Vehicles Injury + Fatal Crashes	Pedestrian Injury + Fatal Crashes	Crashes per Mile	Segment Length (Miles)	Number of Travel Lanes	Speed Limit
Plaza Dr	12	11	1	2.4	0.42	2 to 4	35
Western Pkwy MD 228 to St Patricks Dr	19	17	2	3.8	0.81	4	40
Western Pkwy MD 228 to Holly Tree Ln	19	17	2	3.8	1.68	4	40
Acton Ln Hamilton Rd to US 301	22	19	3	4.4	1.38	2	30
Smallwood Dr St Patrick's Dr to St Charles Pkwy	65	61	4	12	3.91	4	35
Rosewick Rd	17	17	0	3.4	2.03	4	45
Saint Charles Pkwy Radio Station Rd to Duncannon Rd	39	39	0	7.8	3.62	4	50
Saint Charles Pkwy Duncannon Rd to MD 5	78	73	5	15.6	2.4	4	40
Hawthorne Rd Valley Rd to US 301	20	19	1	4	1.72	2	40
Billingsley Rd Middletown Rd to MD 5	52	47	5	10.4	7.11	4	45

Equity Analysis

Equity considerations in transportation planning emphasize an understanding how the benefits and burdens of decisions affect vulnerable or historically disadvantaged populations. In 2021, the Board of County Commissioners affirmed that "diversity, equity, and inclusion should be at the forefront of the way in which [they] would consider and establish policy" and instructed Charles County government employees to develop an equity impact assessment for all proposed policies, practices, programs, plans, and budgetary decisions before the Board of County Commissioners.⁸

In a location such as Charles County, equity considerations in traffic safety are both overlapping and sometimes difficult to discern. As described above, there are only five census tracts defined "equity emphasis areas" in Charles County. Two of these areas (Bryans Road and Waldorf) have experienced many KSI crashes. That said, the roadways on which the KSIs have occurred are primary arterials with considerable through traffic and therefore it does not necessarily correlate that the KSI crashes involved persons of economic or social disadvantage. Reliable data does not exist in this regard. It can only be noted that there were 655 KSI crashes occurred within equity emphasis areas. Of these crashes, 59 involved pedestrians or cyclists, making up 30% of all pedestrian KSI crashes.

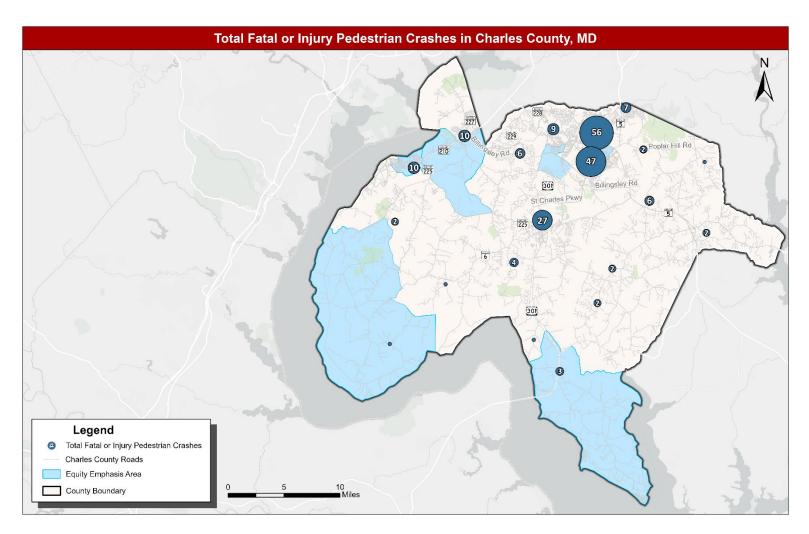
Still, the opportunity for equity to be considered in policy, program, and budget decisions is apparent. For example, areas of greater economic and social disadvantage tend to have lower rates of auto ownership and higher rates of travel on foot or bicycle. Focusing on pedestrian-safety investments in the equity emphasis areas could have a positive outcome in reducing KSI crashes. A potential negative outcome could occur, though, if a higher rate of traffic stops in equity emphasis areas disproportionately impacts persons of economic and social disadvantage. The importance of creating and fostering an environment for transportation safety for all modes of transportation in the equity emphasis areas relies on the approach reaching and communicating such needs, including the potential positive and negative consequences, with the residents and visitors to these areas at a common ground. It is key that all those who travel through these areas receive the benefits associated with traffic safety improvements. Crashes are preventable, and knowledge regarding how needs to be made available to all.

The high number of pedestrian injuries and deaths within St Charles and Waldorf can be explained by the high amount of shopping centers and other pedestrian generators. However, since pedestrian crashes are scattered within the residential regions of the equity emphasis areas and start to cluster around pedestrian generators and on busy streets, it is likely that residents from these emphasis areas walk to shopping centers and roadside restaurants and stores due to proximity. Thus, requiring residents to walk along unsafe roads and crossing roads where measures were not taken to protect pedestrians. There are two pedestrian deaths at the intersection of US 301 and Smallwood Dr and another two deaths that occurred at the intersection of US 301 and Billingsley Rd where there is no sidewalks or crosswalks present to connect equity emphasis areas to shopping areas. Providing safer conditions for pedestrians near shopping areas would not only help reduce the largest pedestrian crash hotspot of the county but would also directly benefit the safety of nearby vulnerable and historically disadvantaged residents.

⁸ Board of County Commissioners Resolution 2021-24

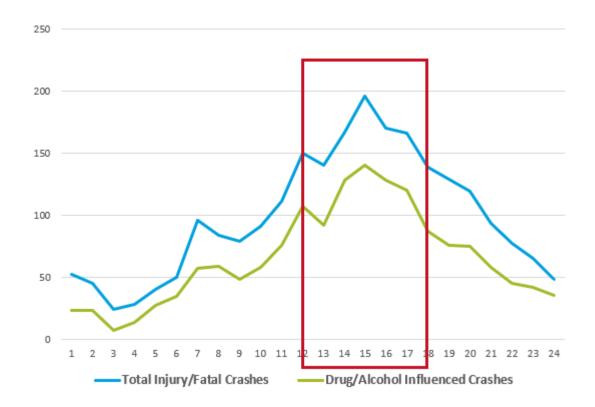
Vulnerable Roadway Users

Pedestrians, bicyclists, motorcyclists, low-speed and farm vehicle operators, and other roadway users with less protection from collisions are considered "vulnerable roadway users." Of the 119 traffic fatalities between 2017 and 2021 in Charles County, 20 were pedestrians or bicyclists. Nearly all these fatalities occurred in the greater Waldorf or La Plata areas. Three fatalities were motorcyclists and one fatality occurred on a farm or all-terrain vehicle.



Time of KSI Crashes

KSI crashes occur at all times of day but are most heavily concentrated between noon and 6pm; and "under the influence" KSI crashes occur in the same temporal pattern as all other KSI crashes. This has implications for resource allocation. For example, DUI checkpoints typically occur in the overnight hours when traffic volumes and KSI crashes occur less frequently than other times of the day. With more than one-third of all traffic fatalities caused by driving under the influence of alcohol, medication, or illegal drugs, consideration should be given to adjusting the hours of DUI enforcement efforts to occur during the mid to late afternoon.



Stakeholder Engagement & Viewpoints

Stakeholder engagement is an important part of the strategic process to develop roadway safety plans. TCCSMD selected two primary means of stakeholder engagement: a project advisory committee and information-gathering interviews with agency and community leaders to gain their views on policy and program gaps, opportunities, and priorities. Broader stakeholder engagement will occur when the LRSP is brought to the Board of County Commissioners for public hearing and adoption.

From Charles County, agencies and organizations represented on the project advisory committee included:

- Charles County Board of Education
- Charles County Department of Public Works
- Charles County Department of Recreation, Parks, and Tourism
- Charles County Department of Emergency Services
- Charles County Department of Planning and Growth Management
- Charles County Sheriff's Office

- Charles County Traffic Safety Committee
- Chesapeake Regional Safety Council
- Maryland State Highway Administration
- Maryland State Police
- Tri-County Council Bike and Pedestrian Advisory Committee (BIAC)
- University of Maryland Regional Medical Center

Interviews were conducted confidentially so that stakeholders could openly share their views on traffic safety challenges in the County. Several key themes emerged from these interviews:

- While recognized as a problem by stakeholders, traffic safety issues do not seem to have risen to a level of public consciousness that demands action by agencies and elected officials.
- Agencies are not resourced for success in reducing serious injuries and fatalities. For example, law enforcement officers who are supposed to be dedicated to traffic safety are often deployed to escort oversized vehicles, provide funeral details, and back fill patrol shifts. The County's capital improvement program is focused on delivering major capital projects and system preservation projects with fewer resources for minor safety-related projects such as spot geometric improvements, traffic calming, guardrail and rumble strip installation, and warning beacons.
- Law enforcement agencies do not effectively and efficiently coordinate resources to reduce serious injuries and deaths. Efforts to create a memorandum of understanding for resource sharing and concurrent jurisdiction among the state, county, and municipal law enforcement agencies have not been successful.

- Engineering and law enforcement efforts tend to be complaint-driven rather than data-driven. While citizen complaints about speeding, for example, indicate community quality of life concerns, those complaints tend to not correlate to historical patterns of fatalities or serious injuries. That said, a comprehensive safety education, enforcement, and preventative engineering effort in school zones would be welcomed by all stakeholders.
- Pedestrian error is often the leading cause of pedestrian injuries and fatalities. Roads in Charles County are not often designed with the pedestrian in mind and even when they are, pedestrians tend to take the shortest distance which is not always the safest route.
- Rural roadways do not have mitigations or protections that could reduce fatalities and serious injuries. Lighting at intersections, guard
 rails at sharp curves, centerline/edgeline rumble strips, and micro-surfacing to improve traction, and other efforts should be more
 widely used.
- Requirements for EMS personnel to remain with patients until fully received at hospital emergency rooms creates a significant operational weakness in EMS response capabilities. Long waits at emergency rooms necessitates repositioning of emergency response units and/or longer response times. While this concern is not limited to traffic-related serious injuries, delays in response time can result in worse patient outcomes.
- Concern was expressed that the judiciary does not impose significant penalties for the violation of serious traffic offenses. Some recent education of judges has occurred, and staff are hopeful that outcomes will improve. It has become more difficult to arrange for victim impact statements due to lack of staff at community-based organizations.

Recommendations for Emphasis Areas & Targets

Based on data analysis, stakeholder views, and to achieve alignment with other local, regional, and state plans, the following emphasis areas are recommended to eliminate fatalities and serious injuries on Charles County roadways. Specific strategies are discussed in Part 2 of the LRSP and should be applied countywide, including the municipalities of La Plata and Indian Head.

- Improve Agency Capacity to Proactively Address Traffic Safety
- Protect Vulnerable Roadway Users
- Reduce Driving Under the Influence of Alcohol and Drugs
- Address Speeding and Reckless Driving
- Systematically Address the High Injury Network
- Mitigate Crash Potential on High-Risk Rural Roads
- Improve Emergency Response Times

Part II: Strategies to Eliminate Roadway Deaths and Serious Injuries in Charles County

Emphasis Area #1: Improve Agency Capacity to Proactively Address Traffic Safety

A consistent theme from members of the advisory committee is that despite their efforts in the field, the profile and urgency of traffic safety is not considered a pressing public policy issue. There needs to be a "business case" made for investments to improve the capacity of law enforcement, planning, and public works agencies to address traffic safety. Specific improvements to improve agency capacity include:

- Include traffic safety as a strategic goal and report annual outcomes in the County's annual budget document.
- Improve crash reporting to document all crashes regardless of the seriousness of the occurrence.
- Improve information sharing among the SHA District 5 traffic engineers, law enforcement agencies, planning and public works agencies, by reinvigorating the Charles County Traffic Safety Committee.
- Establish mutual aid agreements among law enforcement agencies to create force multipliers and ease the administrative burden of resource sharing.
- Strengthen the county's traffic engineering capabilities to address key actions in the LRSP.
- Update the County's road code and land development regulations to manage speeds, provide universal bicycle and pedestrian facilities, broaden the use of traffic calming devices, etc.

Emphasis Area #2: Protect Vulnerable Roadway Users

The vulnerability of roadway users varies based on the method of transportation used, and being aware of the significance between them is a major component of improving traffic safety. Pedestrians, bicyclists, motorcyclists, low-speed and farm vehicle operators, and other roadway users with less protection from collisions are considered "vulnerable roadway users." The most vulnerable roadway users are bicyclists and pedestrians due to their lack of enforced protection from their transportation mode's utilization efforts. An individual in a car has the car's included safety features and mechanisms to protect them should they be involved in a crash. Bicyclists and pedestrians lack those safety measures and requires much more thought and care for their safety, which is of a high priority. The following details various methodologies for increasing and maintaining the safety of vulnerable roadway users being that traffic safety for all is paramount.

- Continue to build out the bicycle and pedestrian network using the County's Bicycle Master Plan, Waldorf Vision Plan and Urban Redevelopment Corridor Plan, Bryans Road Subarea Plan, as a guide to key investment priorities.
- Invest in quick-build safety measures including paint, safety posts, temporary sidewalk extensions, traffic calming devices, etc. near schools and community facilities.
- Develop and implement a pedestrian safety plan specific to the US 301 corridor that limits crossings at unsignalized locations, improves pedestrian visibility, manages vehicular speeds, and uses other effective safety countermeasures.
- Implement measures near bus stops that help transit riders walk safely to and from their destination.

Emphasis Area #3: Address Impaired Driving

In the United States, crashing involving impaired drivers accounted for 28% of all traffic-related deaths in 2019. Charles County nears the national average with 25% of deaths from 2017-2021 involving a driver impaired from drugs or alcohol. Efforts that can be put forth to help reduce driving under the influence of drugs, alcohol, or other substances include:

- Pilot a "trace to the source" initiative to identify establishments that generate the most impaired driving citations.
- Encourage reinstatement of victim impact statements by MADD or other community-based organizations at sentencing for impaired driving convictions.
- Develop a develop a judicial scorecard that tracks decisions by the State's Attorney and the courts to offer and accept plea bargains; conviction rates; and penalties for driving under the influence.
- With support from MHSO, adjust the time period when grant funds can be used to implement saturation patrols and checkpoints to match the time when most under the influence crashes occur.
- Implement education and outreach campaigns targeted to young males with support from community groups and liquor licensees.

Emphasis Area #4: Address Speeding, Aggressive, and Distracted Driving

Speeding and distracted driving are consistently amongst the most common causes of automobile crashes in the United States. Charles County is no different with speeding and inattentive driving claiming over 23% of all deaths and over 20% of all injury crashes. The following speed control policies and programs should be brought about in efforts to improve road safety:

Reduce posted speeds along the High Injury Network.

- Form a speed enforcement task force comprised of the municipal and County agencies, and the Maryland State Police to agree on speed reduction strategies and develop a resource sharing agreement to implement them.
- Encourage the judiciary to strictly adjudicate the most egregious speeding cases.
- Broaden the use of speed enforcement cameras.

Emphasis Area #5: Reduce Crash Potential and Severity on High-Risk Rural Roads

The types of crashes most characteristic of rural areas—single-vehicle roadway departures and head-on collisions—are more likely to result in serious injury or fatality than low-speed, congestion-related collisions in urban areas. While excessive speed and inattention are the driver behaviors that most frequently lead to rural-road crashes, the state and county can take steps to reduce their severity. A high-risk rural road strategy should be developed to prioritize and deploy proven safety countermeasures such as:

- Installing advanced and enhanced warning signs, reflectors, rumble strips, and guardrails to prevent or minimize the severity of crashes.
- Installing streetlights at curves, decision points, and areas of limited visibility
- conducting reviews of roadway geometry, sight distance, clear zones, roadside objects, and crash history as it resurfaces each rural road segment, as well as for any rural road segment where a serious KSI crash has occurred in the past five years.
- developing and funding a prioritized list of rural road segments for safety improvements in the capital improvement program.

Emphasis Area #6: Systematically Address the High Injury Network

More than 46% of all KSI crashes occur on the High Injury Network described in Part 1 of the LRSP. As county and state agencies make resource allocation decisions, they should be mindful of where investments will have the greatest impact. The following actions should be pursued:

- Reduce posted speeds along the High Injury Network
- Conduct roadway safety audits on all High Injury Network segments and immediately implement the low-cost, low-effort items generated from the audit.
- Develop and implement a pedestrian safety plan specific to the US 301 corridor that limits crossings at unsignalized locations, improves pedestrian visibility, manages vehicular speeds, and uses other effective safety countermeasures.
- Conduct near miss studies using camera surveillance to further identify the types and causes of crashes occurring on the High Injury Network.
- Give budget priority to improvements on the High Injury Network.

Emphasis Area #7: Improve Emergency Response Times

Population growth in Charles County has begun to outstrip the ability of fire and rescue services to respond to motor vehicle crashes and other service calls within NFPA standards. The following actions should be pursued:

- Construct a new emergency operations center to manage overall demand for services.
- Expand the use of traffic signal preemption for emergency vehicles.
- Increase the number of career emergency medical technicians and fire personnel.
- Develop agreements with hospitals to reduce wait time of emergency services personnel with non-emergent transportees.

Roadway Safety Targets

As an aspirational goal, Charles County is committed to achieving zero deaths and serious injuries on its roadways by 2038. The targets below relate to the emphasis areas where the county intends to make significant progress.

Category	2017 – 2021 Five Year	2029 Interim Target	2035 Interim Target KSIs	2040 Vision
	Average KSIs (Baseline)	Annual KSIs		
Vulnerable Roadway Users	123	81	40	0
"Under the Influence"	289	190	95	0
Speeding, Reckless, and	166	109	55	0
Inattentive Driving				
Rural Roads	108	71	36	0

Reporting on the annual targets towards zero deaths by 2040 will occur in a variety of forms and forums to be determined. The Charles County Traffic Safety Committee should be primarily responsible in reporting KSI outcomes and annual activities to move toward zero deaths.

Implementation Plan

				Agen	cies Involved	1	imeline		Cost				
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Include traffic safety as a strategic goal and report annual outcomes in the County's annual budget document.	х						x			x		
Improve Agency Capacity to Proactively Address Traffic Safety	Improve crash reporting to document all crashes regardless of the seriousness of the occurrence.		x						х		×		
	Improve information sharing among by reinvigorating the Charles County Traffic Safety Committee.		x		x	х		x			x		
	Establish mutual aid agreements among law enforcement agencies to create force multipliers and ease the administrative burden of resource sharing.		х						x		x		
	Strengthen the county's traffic engineering capabilities to address key actions in the LRSP.					×			x		x		
	Update the County's road code and land development regulations to manage speeds, provide universal bicycle and pedestrian facilities, broaden the use of traffic calming devices, etc.				x				х		х		

				Agen	cies Involved			Т	imeline		Cost		
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Continue to build out the bicycle and pedestrian network using the County's Bicycle Master Plan, Waldorf Vision Plan and Urban Redevelopment Corridor Plan, Bryans Road Subarea Plan, as a guide to key investment priorities.				x	×			х	х		x	
Protect Vulnerable Roadway	Invest in quick-build safety measures including paint, safety posts, temporary sidewalk extensions, traffic calming devices, etc. near schools and community facilities.				x	x			x		x		
Users	Develop and implement a pedestrian safety plan specific to the US 301 corridor that limits crossings at unsignalized locations, improves pedestrian visibility, manages vehicular speeds, and uses other effective safety countermeasures.					x			x			x	
	Implement measures near bus stops that help transit riders to walk safely to and from their destination.					x			х	х		х	

				Ageno	cies Involved			Т	imeline		Cost		
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Pilot a "trace to the last drink" initiative to identify establishments that generate the most impaired driving citations.		x							x	x		
	Encourage reinstatement of victim impact statements by MADD or other community-based organizations at sentencing for impaired driving convictions.		x	x				x			х		
Address Impaired Driving	Develop a develop a judicial scorecard that tracks decisions by the State's Attorney and the courts to offer and accept plea bargains; conviction rates; and penalties for driving under the influence.						Non- governmental			x	х		
	With support from MHSO, adjust the time when grant funds can be used to implement saturation patrols and checkpoints to match the time when most under the influence crashes occur.		x					х			х		
	Implement education and outreach campaigns targeted to young males with support from community groups and liquor licensees.						Health Department, Liquor Board		х	х	х		

				Ager	icies Involved			Timeline			Cost		
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Reduce posted speeds along the High Injury Network.					х		x			х		
Address Speeding, Aggressive and Reckless Driving	Form a speed enforcement task force comprised of the municipal and County agencies, and the Maryland State Police to agree on speed reduction strategies and develop a resource sharing agreement to implement them.		х		x	x		x			x		
	Encourage the judiciary to strictly adjudicate the most egregious speeding cases.		x				Non governmental		х		x		
	Broaden the use of speed enforcement cameras.	х	х						х			х	

				Agenc	ies Involved			Т	imeline		Cost		
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Conduct roadway safety audits on all High Injury Network segments and immediately implement the low-cost, low-effort items generated from the audit.				x	x			x				
Systematically Address the High Injury Network	Develop a pedestrian safety plan specific to the US 301 corridor that limits crossings at unsignalized locations, improves pedestrian visibility, manages vehicular speeds, and uses other effective safety countermeasures.					x						х	
	Conduct near miss studies using camera surveillance to further identify the types and causes of crashes occurring on the High Injury Network.				x	х			х		x		
	Give budget priority to improvements on the High Injury Network.	х			х	х		х	х	х			

				Agenc	ies Involved			Т	imeline		Cost		
Emphasis Area	Action	Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
	Installing advanced and enhanced warning signs, reflectors, rumble strips, and guardrails to prevent or minimize the severity of crashes.					х			Х		х		
Reduce	Installing streetlights at curves, decision points, and areas of limited visibility					x				х			х
Crash Potential and Severity on High-Risk Rural Roads	conduct reviews of roadway geometry, sight distance, clear zones, roadside objects, and crash history as it resurfaces each rural road segment, as well as for any rural road segment where a serious KSI crash has occurred in the past five years.					х			Х		x		
	develop and fund a prioritized list of rural road segments for safety improvements in the capital improvement program.	x			х	x			x				

Emphasis Area	Action	Agencies Involved						Timeline			Cost		
		Elected Officials	Law Enforce- ment	Judiciary	Planning & Growth Mgmt	Public Works/ MDOT SHA	Other	Immed- iate	Years 1 to 3	Years 4 to 6	Low	Medium	High
Improve Emergency Response Times	Construct a new emergency operations center to manage overall demand for services.						Emergency Services			х	Х		
	Expand the use of traffic signal preemption for emergency vehicles					х	Emergency Services; Volunteer Fire Companies		x				
	Increase the number of career emergency medical technicians and fire personnel						Emergency Services,		Х				х
	Develop agreements with hospitals to reduce wait time of emergency services personnel with non-emergent transportees.						Emergency Services	х					