Serious Injury and Fatality Reduction Targets

The performance targets are set using a linear trend line to reach zero fatalities and serious injuries in 2030. The previous five-year average and the current five-year average were used to determine these targets. Rolling five-year averages are used to calculate the targets for each individual year. Although the 2028 – 2032 five-year average targets are not zero, zero fatalities and injuries can be extrapolated from the midpoint year of 2030, assuming annual reductions each year.

Five data points were graphed, beginning with the 2012-2016 average, and the endpoint was set as zero - the 2028-2032 midpoint. A linear trend line was fit and the resulting equation was used to calculate interim data points. Those targets are guiding points for Baltimore City to reach zero fatalities and serious injuries by 2030.

Statistically, although the endpoint is set at zero, the trend line equation calculates the rate at which a decline should occur even if the project endpoint is close to zero but not exactly that (the next data point would be at or below zero using the equation).

Table 14: Five-Year Serious Injury and Fatality Reduction Targets

	Baseline	**Current**	Targets		
	2012-2016	**2016-2020**	2020-2024	2024-2028	2028-2032
Fatalities	37	**50**	26	15	4
Serious Injuries	248	**466**	228	142	55

*Serious injuries are defined as those reported as incapacitating on the crash report.

Fatalities and serious injuries have been in an increasing trend in Baltimore City. These targets are aggressive to reach a goal of zero fatalities and serious injuries and will require a substantial paradigm shift.

Emphasis Areas and Strategies

Key Strategies

Strategies that promote these aggressive safety goals cannot be adequately addressed without first creating a fundamental shift in the ethos of Baltimore City towards its road infrastructure and transportation culture. Baltimore City passed a Complete Streets ordinance in 2018 and a Complete Streets Manual in 2020. Operationalizing Complete Streets through an equity lens into planning, engineering, and funding is essential to the majority of the transportation safety strategies outlined in the following sections. The below table recommends overarching strategies to engrain Complete Streets into the culture of DOT and the City as a whole:

Table 15: Strategies to Embed Complete Streets into City Culture

Type	Strategy	Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Policy	Develop targeted Complete Streets training for each DOT division. Administer trainings annually.	DOT Traffic	Mayor's Advisory Committee on Complete Streets	Short/ Ongoing	$$	Operating, External Funding
Policy/ Process	Create checklist for proposed CIP projects that reflect Baltimore's modal hierarchy, safety, and equity goals. Create prioritization factors and weights.	DOT Planning	CIP Project Review	Short/ Ongoing	$	Operating
Policy	Create annual Complete Streets Goals and tie to CIP projects	DOT Planning	Sustainable Transportation Subcabinet, Mayor's Advisory Committee on Complete Streets	Short/ Ongoing	$	Operating
Plan	Create City-wide Complete Streets typology map	DOT Planning	Mayor's Advisory Committee on Complete Streets	Medium	$$	External Funding

Type	Strategy	Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Policy	Create Complete-Streets-oriented Maintenance of Traffic (MOT) requirements and guidelines for in-house work, utilities, and private developers	DOT Traffic	Mayor's Advisory Committee on Complete Streets	Short	$	Operating
Policy	Promote transportation mode shift among Baltimore City government employees. Strategies involve changes to the City fleet composition, annual employee travel surveys, employee incentives for sustainable transportation, and accessible information around sustainable transportation	DOT Planning, DGS, DHR	Sustainable Transportation Subcabinet	Long/ Ongoing	$ - $$	Operating, State and Federal grants

Emphasis Areas

The following emphasis areas and corresponding strategies represent an "infrastructure first" approach to transportation safety engineering. All location-based projects outlined are to be prioritized in order of highest need through a data-driven selection process. Locations of interest will be selected by evaluating severe crash frequency and likelihood, pedestrian and bicycle crash frequency and likelihood, and equity need. This represents adherence to the legislated Complete Streets hierarchy of transportation modes through an equity lens. All existing and future DOT projects, including active projects and annual resurfacing projects, should be designed to prioritize the measures in the following sections.

Right-Sizing Driving Space

In the 1950s, Baltimore City had a population of one million people and was a leader in the industrial economy. Over the next 50 years, the proliferation of highway infrastructure made it possible for industries to relocate to more expansive and cheaper land and for City residents to relocate to suburbs. As a result, Baltimore City has oversized infrastructure for its needs today; this is particularly evident outside of peak commuting hours. Roads that have excess capacity are conducive to speeding. The Baltimore High Crash Reduction Plan identified a correlation between severe crashes and number of lanes. Right-sizing the road encourages lower speeds and creates more room in the public right-of-way for safer bike, pedestrian, and transit travel. There

are several ways to reduce the amount of road space for vehicles, including lane reduction, width reduction, and intersection turning space reduction.

Table 16: Strategies to Right-Size Driving Space

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Plan	Identify oversized roads through a survey of AADT/AAWDT, lane widths, and number of lanes. Create a plan that recommends the replacement of excess roadway with a toolbox of bike facilities, pedestrian facilities, transit facilities, traffic calming infrastructure, and green space.	DOT Planning	Mayor's Advisory Committee on Complete Streets	Long	$$	External Funding
Process	Analyze existing and future resurfacing projects and other construction projects for lane narrowing and lane reduction.	DOT Planning and Traffic	Traffic Stat	Short/ Ongoing	$	Operating
Plan	Identify roads that changed from industrial use to residential use and prioritize for retrofit as a more Complete Street.	DOT Planning	Mayor's Advisory Committee on Complete Streets	Medium	$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Process + Infrastructure	Ensure lane reduction projects are in the Construction Program each year. Create annual goals around this metric.	DOT Planning	CIP Project Review*	Short/ Ongoing	$$$	Operating + CIP Funding
Process	Couple lane width and lane reduction projects with goals pertaining to impervious surface removal and bike facilities.	DOT Planning and Traffic	Sustainable Transportation Subcabinet	Short	$	Shared DPW and DOT CIP funding
Plan	Determine corridors with peak-hour parking restrictions that experience speeding and frequent crashes. Remove peak hour restrictions appropriately.	DOT Planning	Traffic Stat	Long	$$	External Funding

*Working Group does not exist yet

Traffic Signals and Stop Control

Free flow roadway conditions that encourage speeding can result from traffic signal timing and phasing that promote the flow of vehicles over the safety of all roadway users. An important aspect of transportation safety engineering is timing and coordinating traffic signals for slow speeds and to help more vulnerable users to cross roadways. Traffic signals can also be phased to protect higher-risk movements, such as left turns, bicycle/scooter crossings, and pedestrian crossings.

Baltimore City's Complete Streets Manual recognizes the role that traffic signals can play in calming the City's streets. To create a walkable, safe, and comfortable environment, it recommends the following measures to promote the safety of natural pedestrian movements:

- Reduce the number of signal phases
- Shorten Cycle Lengths
- Fixed time operation

Table 8 in the Complete Streets Manual[3] (p. 95 – 96) details recommendations on cycle lengths, clearance intervals, pedestrian phases, coordination, and green time allocation for all Complete Street typologies shown in the following table:

Street Type	Timing Method	Peak Hours Cycle Length (sec.) (3)	Non-Peak Hours Cycle Length (sec.) (3)	Clearance Intervals	Pedestrian Phases	Coordination	Green Time Allocation
Downtown Commercial	(1)	60-90	60	(4)	(5)	(7)	(8)
Downtown Mixed-Use	(1)	60	40-60	(4)	(5)	(7)	(8)
Urban Village Main	(1)	60	40-60	(4)	(5)	(7)	(8)
Urban Village Neighborhood	(1)	60	40-60	(4)	(5)	(7)	(8)
Urban Village Shared Street	(1)	60	40-60	(4)	(5)	(7)	(8)
Urban Center Connector	(1), (2)	90-120	60-90	(4)	(6)		(9)
Neighborhood Corridor	(1)	60	40-60	(4)	(5)	(7)	(8)
Industrial Access	(1), (2)	90-120	60-90	(4)	(6)		(9)
Parkway	(1), (2)	90-120	60	(4)	(6)		(9)
Boulevard	(1)	60-90	60	(4)	(5)	(7)	(8)

[3] https://transportation.baltimorecity.gov/completestreets

(1) Pretimed (Coordinated where feasible).
(2) Actuated.
(3) Peak hours assumed to be 7AM-9AM and 4PM-6PM. Unique circumstances require exceptions.
(4) Yellow clearance intervals shall be calculated based on the target and posted speed and be kept as short as permitted by law. Red clearance intervals should be based on ITE clearance interval calculation formulas but consider engineering judgment. The goal should be to keep the red clearance interval as short as possible but minimize conflicts resultant from vehicles not clearing the intersection prior to a conflicting phase.
(5) Pedestrian Phase—Urban
- Pedestrian phases shall be recalled every cycle regardless of pedestrian presence.
- Pedestrian walk interval time can be decreased to 4 seconds to allow for a shorter desired cycle length, if this is determined to be adequate based on the characteristics of the crossing and pedestrians utilizing the intersection.
- Minimum pedestrian clearance time calculations shall include the yellow change/buffer interval. The pedestrian change interval may:
  - Include or exceed all of the minimum pedestrian clearance time or
  - Be equal to the minimum pedestrian clearance time minus the buffer interval.
- To obtain the goal of a short cycle length while providing adequate time for crossing, the pedestrian clearance times shall be set on the assumption that the minor approach can receive up to the same amount of green time as the major approach.
- Leading pedestrian intervals should be provided at locations with high turning volumes.
- At actuated signals, rest in Walk operation should be in effect, holding the walk or flashing don't walk for the entire corresponding green signal.

(6) Pedestrian Phase—Suburban/Industrial
- Pedestrian phases should be set to recall during times when pedestrians are expected to be present. Engineering judgment can be used for actuated operation.
- Pedestrian walk interval can be decreased to 4 seconds to allow for a shorter desired cycle length.
- Minimum pedestrian clearance time calculations shall include the yellow change interval.
- To obtain the goal of a short cycle length while providing adequate time for crossing, the pedestrian change interval shall be set on the assumption that the minor approach can receive up to the same amount of green time as the major approach.

(7) Coordination:
- When progression is desired, offsets/coordination parameters should be set based on the target speed. For the majority of urban roadways, this should be 20 mph.
- Offsets may need to be set differently to consider complex queue interaction.

(8) Green-Time Allocation—Urban
- To obtain the goal of a short cycle length while providing adequate time for crossing, the pedestrian change interval shall be set on the assumption that the minor approach can receive up to the same amount of green time as the major approach.
- The minor approach should receive no less than a 2/3 ratio of the green-time that the major approach receives.

(9) Green-Time Allocation—Suburban/Industrial
- The minor approach should receive no less than a 1/2 ratio of the green-time that the major approach receives.

Baltimore City must retrofit its traffic signals to comply with Complete Streets standards. Strategies:

Table 17: Strategies for Signal Timing

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Process	Leveraging the City-wide Signal contract, retime traffic signals City-wide to comply with Complete Streets manual. Enact proactive reviews of existing traffic signals with the safety and movements of pedestrians, bicyclists, and transit in mind.	DOT Traffic	Traffic Stat	Long/ Ongoing	$$	Operating + External
Policy	Provide training on Complete Streets traffic signals	DOT Traffic	Traffic Stat	Short/ Ongoing	$$	Operating + External
Plan	Leveraging the City-wide Signal contract, conduct City-wide review for new traffic signals and all-way stop need, evaluating appropriate signal distance length in the urban core for pedestrian crossing and slow vehicle speed, using best practices from other cities. Schools should be prioritized.	DOT Traffic	Traffic Stat	Long/ Ongoing	$$$	Operating + External

Speeding

Speeding can be influenced by safer infrastructure, enforcement, and policy. Community input is vital to successfully addressing this topic, as crash data does not necessarily reflect the full picture of speeding.

Current efforts to curtail speeding in Baltimore include the Neighborhood Traffic Calming program and 311 requests. The Neighborhood Traffic Calming program is an annual dedicated funding source that allows DOT to evaluate selected neighborhoods holistically and implement comprehensive traffic calming on local streets. Neighborhoods are selected through a combination of high overall crash rate and equity need. In FY22, DOT also received funds for similar traffic calming work in the Impact Investment Neighborhoods, as designated by DHCD. Community members may also submit 311 requests for traffic calming. In the past, DOT addressed these requests in order of receival, generally through speed humps exclusively. DOT

has revised its 311 program to prioritize requests coming from high crash and high equity need areas, and has revised the toolkit of strategies to include quick-build measures, such as striping and flex posts. Additionally, efforts previously described that result in a narrower roadway with fewer driving lanes and more street “infill” as well as Complete Streets traffic signal timing inherently are anti-speeding strategies.

Table 18: Strategies for Speeding Reduction

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Legislation + Policy	Continue to advocate for City's ability to link speed limits to roadway typology as defined in the Complete Streets manual. Using data-driven and best-practices approach, reduce default and maximum speed limits Citywide. Explore the possibility of enacting a "20 is Plenty" policy in the Downtown area.	DOT Director's Office	Mayor's Advisory Committee on Traffic Safety*	Short - Long	$	Operating
Policy	Create Neighborhood Slow Zones as part of the traffic calming toolbox**	DOT Traffic	Neighborhood Traffic Calming Review	Long	$$	Operating
Policy + Process + Infrastructure	Continue to build the Neighborhood Traffic Calming program***	DOT Planning + Traffic	Neighborhood Traffic Calming Review + Impact Investment Area Subcabinets	Short/ Ongoing	$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Plan + Infrastructure	Finalize the SMAP and implement traffic calming measures, including the aforementioned road diets and signal retiming, on identified high-speed corridors	DOT Planning + Traffic	Zero Stat	Long/ Ongoing	$$	External + CIP
Infrastructure + Policy	Implement additional speed cameras and targeted enforcement on noted high-speed corridors. Investigate the practicality of a fee structure that respects income.	Traffic + ATVES	Traffic Stat, Mayor's Advisory Committee on Traffic Safety*	Long/ Ongoing	$$	External + CIP
Technology	Investigate ways of capturing speeding and near misses through low-labor technologic solutions.	DOT Data Team	Zero Stat	Medium	$	Operating

*Committee does not currently exist

** Similar to School Zones, Neighborhood Slow Zones require drivers to operate at slower speeds within a given area. The typical speed of a Neighborhood Slow Zone is 20 mph. Determine the appropriate mechanism of enacting Neighborhood Slow Zones (proactively or by request/application process)

*** To build upon the Neighborhood Traffic Calming program, DOT Traffic and Planning should undertake the following:

- Develop traffic calming toolbox for engineers and planners to use, both within DOT and at other agencies.
- Identify top 10 neighborhoods for cut-throughs annually, analyzing local streets only. Select at least six neighborhoods each year for comprehensive traffic calming of local streets. Neighborhoods are to be identified at the beginning of each fiscal year.
    - Neighborhoods identified for FY22 were:

    - Oliver
    - Broadway East
    - East Baltimore Midway
    - Druid Heights
    - Sandtown-Winchester
    - Upton
- A DOT engineer and a planner will be assigned to each identified neighborhood. The team will meet with the neighborhood in the early fall to get community input around neighborhood issues, then design alternatives to present to the neighborhood by the winter. Alternatives should address speeding, injury and fatal crashes in the neighborhood, as well as other neighborhood safety concerns. Final projects will be selected collaboratively between DOT and the neighborhood and implemented in the following paving season.

High Crash Intersections and Corridors

In addition to the City-wide strategies noted in the above sections, hot spots of consistent severe injuries and fatalities should be addressed. Any fatality or serious injury should automatically trigger a design review of the location. Severe crashes are to be reviewed on an annual basis to not only update lists of targeted areas, but also to track improvements through the metrics that matter most – severe injury and death.

Table 19: Strategies to reduce High Crash Intersections and Corridors

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Infrastructure	Use annual dedicated safety funds to implement comprehensive safety improvements at high severity intersections and corridors, identified annually. Safety improvements should prioritize separating dangerous movements, lane/width reduction, improving sight lines, discouraging turning acceleration, and vulnerable user protection.	DOT Planning + Traffic + TEC	Zero Stat, Pedestrian and Bicycle Fatality Review, CIP Project Review	Long/ Ongoing	$$$	External + CIP

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Infrastructure	Improve pedestrian and bicycle crossings of major intersections. Strategies should enhance the visibility of pedestrians and bicyclists through larger crossing areas, brightly colored reflective paint, and placement in the line of vehicle sight. Enhancements may also reduce the crossing distance spent in vehicle lanes. Lead pedestrian and bicycle intervals may be implemented, or a Barnes Dance street crossing system.	DOT Planning + Traffic + TEC	Zero Stat, Pedestrian and Bicycle Fatality Review, CIP Project Review	Long/ Ongoing	$$$	External + CIP

Separating Non-Motorists from Motorists

More often than not, when a motorist collides with a non-motorist, severe injuries result. The best way of preventing those injuries and deaths is to ensure vulnerable road users do not interact with motorists. This means protective infrastructure, separate signal phasing, enhancing visibility, enforcement of dedicated lanes, and policies and incentives that reduce the number of motor vehicles on the road to begin with.

Table 20: Strategies to Separate Non-Motorists from Motorists

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Infrastructure	Build the Separated Bike Network. The Separated Bike Network identifies where bicyclists need the most protection from vehicles due to road characteristics and multi-modal transportation need. Create a dedicated annual funding source that is specifically used to implement this plan.	DOT Planning + Traffic	Mayor's Bicycle Advisory Committee	Long/ Ongoing	$$	CIP + External
Infrastructure	Further protect bus/bike-only lanes with rumble strips, flex posts, or other barriers to deter motorists from using the lanes.	DOT Planning + Traffic	Mayor's Bicycle Advisory Committee, Pedestrian and Bicycle Fatality Review	Medium/ Ongoing	$	CIP + External
Technology	Implement automated enforcement of bus-only lanes	DOT Planning + ATVES	Mayor's Complete Streets Advisory Committee	Long	$$	CIP + External

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Infrastructure	Improve pedestrian and bicyclist visibility with appropriately scaled lighting, high-output street lighting, daylighting, and high visibility paint.	DOT Planning + Traffic	Pedestrian and Bicycle Fatality Review	Short/ Ongoing	$	CIP
Policy	Investigate policies and incentives that encourage mode shift. Apply for grants.	DOT Planning + DGS + DHR	Sustainable Transportation Subcabinet	Long/ Ongoing	$$	External

Adopting a Safety Culture at Baltimore City Government

Baltimore City Government must lead in adopting the culture it seeks to see throughout the City. This can come from the projects it selects and prioritizes, the policies it has for its employees, the methods of design and analysis it uses, and the messaging it puts out internally and to the public.

Table 21: Strategies to advance a safety culture in Baltimore City Government

Type	Strategy	Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Policy	Incorporate Vision Zero philosophy within City employee driver training courses. Implement incentive programs for good driving and strict punitive measures for any City vehicle incidents with pedestrians or bicyclists.	DOT Traffic Safety + DHR	Comms and Programs Working Group*	Medium/ Ongoing	$$	Operating + External

Education + Policy	Provide Traffic Enforcement Officers with training on safety measures for pedestrians, bicyclists, and scooter-riders. Encourage and support use of bicycles, transit, and walking among Traffic Enforcement Officers.	DOT Traffic Safety	Comms and Programs Working Group*	Medium/ Ongoing	$$	Operating + External
Comms	Develop safety messaging to be included in all DOT mailings/notices.	DOT Communications	Comms and Programs Working Group*	Short	$	Operating
Education	Build upon Safety City** program with a focus on protecting pedestrians, bicyclists, scooter-riders, and people with disabilities.	DOT Traffic Safety	Comms and Programs Working Group*	Short	$	Operating + External
Education + Programs + Infrastructure	Partner with BCPS, the INSPIRE program, and Safe Routes to Schools to create social media messaging, programming, and infrastructure improvements for schools	DOT Planning + DOP + BCPS	INSPIRE monthly meeting, Safe Routes to School Working Group*	Medium/ Ongoing	$$	External + INSPIRE funding
Policy + Infrastructure	Use safe systems engineering in all active design and construction projects, including resurfacing and bridge replacement/maintenance, noting opportunities for lane reduction, lane width reduction, bicyclist separation, traffic calming measures, pedestrian crossing visibility, and intersection safety improvements. Build a toolbox with a prioritization mechanism.	DOT TEC + Traffic	Traffic Stat, Resurfacing Project Review*	Short/ Ongoing	$$	Operating + CIP

Process	Adopt a project prioritization matrix for proposed CIP projects, weighting safety engineering, road diets, and multi-modal capacity expansion highly. Projects must also be prioritized weighing equity heavily.	DOT Planning	CIP Project Review*	Short	$	Operating

*Working Group does not currently exist

** Safety City is an interactive transportation safety learning space for children in grades K-5 in Druid Hill Park. Children can learn how to be safe pedestrians by walking in a miniaturize model of Downtown Baltimore. Safety education programs are operated by DOT Staff. DOT hosts an annual event at Safety City that involves giveaways, food, and fun activities for kids.

Reporting and Benchmarking

Safety analysis is highly dependent on the availability and accuracy of the information used. Crash data notoriously has reporting consistency issues, as identified in the Baltimore Crash Reduction Plan. DOT should invest resources in improving crash reporting. It should also ensure that it has accurate geocoded infrastructure in order to link crashes to additional relevant infrastructure information, such as lane numbers and pedestrian generators. All safety improvements should also be geocoded in order to track safety improvements over time. Finally, publicly sharing key information and analysis is not only important in keeping DOT accountable to its goals but can also further empower communities to implement their own countermeasures.

Table 22: Strategies to improve Data Reporting and Benchmarking

Type	Strategy	Lead Agency(s)	Steering Committee	Time-frame	Cost	Funding Source(s)
Process	Update high severity and high ped/bike crash intersections and segments annually.	DOT Planning + Data Team + GIS Team	Zero Stat	Short/ Ongoing	$	Operating
Plan	Identify high severity and high ped/bike crash intersections and segments near public schools.	DOT Planning + Data Team + GIS Team	Zero Stat	Short/ Ongoing	$	Operating
Process	Improve turnaround of crash data and/or BPD reports to ensure data is received in a timely manner.	DOT Data Team	Zero Stat	Long	$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee	Time-frame	Cost	Funding Source(s)
Policy	Receive all BPD reports involving a fatal crash within 24 hours of the incident.	DOT Data Team	Zero Stat	Medium	$	Operating
Process	Improve internal access for crash data. House data in a centralized web-based portal for planning analysis.	DOT Data Team	Zero Stat	Short	$	Operating
Process	Work with the City's 311 system to improve ways for citizens to report traffic safety issues.	DOT Planning	Zero Stat	Short	$	Operating
Process	Analyze 911 data for injury, pedestrian, and bicycle crashes that are not captured by official crash reports.	DOT Data Team	Zero Stat	Medium/ Ongoing	$	Operating
Process	Work with BPD to ensure that information collected is complete on crash reports, with particular emphasis on correct location.	DOT Data Team + BPD	Zero Stat	Long	$	Operating
Process	Obtain follow-up medical/trauma data for victims from hospitals, particularly relating to deaths, complications, and handicaps associated with long-term injuries.	DOT Data Team + Department of Health	Zero Stat	Long	$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee	Time-frame	Cost	Funding Source(s)
Technology	Develop and launch public web-based portal and mapping tool for collecting data and public input related to safety issues.	DOT Planning + DOT Data Team + GIS Team + Comms	Zero Stat	Medium	$	Operating, External
Policy	Develop post-construction evaluation methods to be included in all DOT construction projects.	DOT Planning + Traffic	Zero Stat	Short	$	Operating
Policy	Adopt traffic safety statistics to be tracked as performance measures.	DOT Planning + Traffic + Data Team	Zero Stat	Short	$	Operating
Plan	Engage institutional partners for traffic safety research and program evaluations.	DOT Planning + Data Team	Zero Stat	Long/ Ongoing	$	Operating
Technology, Policy	Develop public safety dashboard that tracks annual severe injuries, fatalities, pedestrian crashes, bicycle crashes, and scooter crashes. Dashboard should also include new safety projects installed that calendar year.	DOT Planning + Data Team	Zero Stat	Medium	$$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee	Time-frame	Cost	Funding Source(s)
Policy	Release annual report to the public that summarizes crash metrics, progress towards safety goals, new safety projects and initiatives implemented, equity impacts, and recommendations for the following year	DOT Planning + Data Team	Zero Stat, Mayor's Advisory Committee on Traffic Safety*	Medium/ Ongoing	$	Operating

*Committee does not currently exist

Community Empowerment

Education around traffic safety does not need to be limited to driver training courses. With the right tools and resources, communities and researchers can be valuable partners in increasing safe infrastructure within Baltimore.

For example, in 2018 a team of students and graduates at the Maryland Institute College of Art (MICA) School for Social Design were awarded a grant by the Maryland Department of Transportation Motor Vehicle Administration's Highway Safety Office (MHSO) for roadway safety education. The resultant "Made You Look" campaign promotes pedestrian and bicyclist safety through brightly colored clothes and roadway art. The team worked with DOT to create a toolkit for communities to use in implementing their own "Art in the ROW" designs for traffic calming. In collaboration with DOT and ReBUILD Johnston Square, the Made You Look team is currently guiding the Johnston Square neighborhood through the Right of Way (ROW) art design process and will study the effects of the resultant design on driver speed and behavior. The project design process, funded through grants from Bloomberg Asphalt Art and AARP Livable Communities, is being shadowed by the Neighborhood Design Center (NDC), which plans to offer pro-bono Art in the ROW design assistance for communities in the future.

Table 23: Strategies for Community Empowerment

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Program	Expand the Slow Streets program to encourage pop-up traffic calming in neighborhoods.	DOT Planning + Traffic	Slow Streets Meeting	Medium	$$	CIP + External

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Program	Sponsor traffic calming and tactical urbanism workshops for communities.	DOT Planning	Comms and Programs Working Group*	Medium/ Ongoing	$$	External
Program	Create design competitions to beautify traffic calming and bike infrastructure projects.	DOT Planning + BOPA + DOP	Comms and Programs Working Group*	Medium/ Ongoing	$$	External
Partnerships	Build on partnerships with organizations such as Neighborhood Design Center (NDC), MICA School of Social Design, Bikemore, Black People Ride Bikes, Baltimore Office of Promotion and the Arts (BOPA), and community development corporations to further support the above strategies and apply for grants.	DOT Planning + Director's Office	NDC/DOT/MICA Quarterly Meeting	Medium/ Ongoing	$	Operating

Type	Strategy	Lead Agency(s)	Steering Committee(s)	Time-frame	Cost	Funding Source(s)
Partnerships	Form new partnerships with additional organizations for programs, funding, and joint grant applications.	DOT Planning + Director's Office	Comms and Programs Working Group*	Long/ Ongoing	$	Operating
Comms	Consolidate the traffic calming, Slow Streets, and community programs web pages to be an all-in-one resource for community-based traffic calming. The web page should include links to funding opportunities, transportation planning toolkits, and the Remix platform so that communities may analyze spatial data in order to plan projects.	DOT Planning + Comms	Comms and Programs Working Group*	Short	$	Operating

*Working Group does not currently exist

Conclusion and Outlook

While there are plenty of actions outlined in this Action Plan that can be done under current operating conditions, many of the strategies need additional funding or staff. DOT will need to work creatively with other agencies to share the cost and staffing burden of integrating the Complete Streets and equity-first mindset into roadway safety efforts. This is already being done through the Sustainability Subcabinet Transportation Working Group, in which DOT, DPW, and DGS are putting funds and bandwidth together in pursuit of transportation, resiliency, and sustainability goals. Understanding that road safety is a shared responsibility, similar cross-agency working groups can be formed, or reformed under current DOT working groups.

DOT must also be aggressive in its pursuit of external funding. Grants are available at the State and Federal levels for transformative road safety projects. This Action Plan will make Baltimore City eligible for new funding and will help the City determine projects to put forward in annual applications. Finally, Baltimore is home to several philanthropies, institutions, and universities that have expressed a desire to make their community safer, more livable, and more equitable. DOT should work with these organizations to push forward infrastructure project and, forming public-private partnerships that can expedite Complete Streets and safety goals through an equity lens.

Given current trends, achieving zero deaths and serious injuries by 2030 is an ambitious goal for Baltimore City. To meet this goal, DOT must respond with an equally aggressive strategy, prioritizing multi-modal and equitable safety in all decision-making. It must leverage all resources possible, including those that are currently untapped, and involve all relevant agencies, local institutions, and legislators. Finally, DOT cannot achieve this ambitious goal without the community as a strong partner. DOT will work to empower residents and businesses to make responsible roadway decisions and transform their own neighborhoods into beacons of safety and vitality.