



Department Source: City Manager
To: City Council
From: City Manager & Staff
Council Meeting Date: December 16, 2024
Re: Pedestrian Safety

Executive Summary

This report is to provide Council with requested information regarding strategies to improve pedestrian safety within the City.

Discussion

In 2016 the city of Columbia adopted its first Vision Zero Policy. The overarching premise of Vision Zero is that death and serious injuries on public roadways are unacceptable. The City established a goal to eliminate traffic deaths and serious injuries by 2030. Vision Zero utilizes a holistic safe systems approach to reduce serious injuries and fatalities as a result of motor vehicle accidents. The plan recognizes the need to address the following to achieve the goal:

- Safer vehicles;
- Safer roads;
- Safer speeds;
- Post-crash care; and
- Safer people.

This report provides background on crashes involving pedestrians and regulatory efforts to enhance pedestrian safety within the City. Although some of the characteristics are similar, this report does not address facilities or individuals utilizing other modes of non-motorized transportation. Likewise, the report does not address the capital improvement plan or enhancements to the built environment which could improve pedestrian safety.

Supplemental material with data on pedestrian crashes within the city as well as national data and best practices for design of infrastructure to safely accommodate both pedestrians and motor vehicles is provided in the materials. Pedestrians include any person on foot, walking, running, jogging, hiking, sitting, or lying down. Although commonly discussed in tandem, it is important to note the fatalities to people on personal conveyances such as scooters, motorized skateboards, inline skates, etc. are not included in the pedestrian statistics. Likewise, bicycles and other cycles are also not included in the statistics.

From January 1, 2022 through November 21, 2024 there were 91 reported crashes involving pedestrians within the city limits. Seven of the crashes were fatalities while 25 resulted in serious injury. The majority of those occurred along collector, arterial and highway roadways. The bulk of crashes resulting in minor injuries occurred in or near the downtown area and University of Missouri campus.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

The data published by the Federal Highway Administration shows the risk to pedestrians increases as driver speed increases. At 20 mph, a pedestrian has a 90% probability of surviving a collision with a motor vehicle. At 30 mph the survival rate drops to 60% and at 40 mph only 20% of pedestrians are likely to survive an impact from a moving vehicle. The State of Missouri ranks 20th in the highest number of pedestrians killed per 100,000 population, with a total number statewide of 128. In 2022, nationally 18% of all traffic crash fatalities were pedestrians.

The data from the Federal Highway Administration also shows the risk of serious injury or death to pedestrians increases as the traffic volume of motor vehicles on a roadway increases; however, the traffic volume data is somewhat dependent on the pedestrian facilities available on the high-volume roadways. The risk to pedestrians on high volume roadways increases on those roadways without adequate pedestrian facilities and also increases with the speed of the vehicle.

Two key ways identified by experts to reduce fatal and serious pedestrian injuries are to (1) separate pedestrians from motorized traffic, and (2) to slow vehicle speeds to levels low enough that if a collision does occur it will not result in fatal or serious injury. Obvious challenges are high speed environments and existing infrastructure that was not built with pedestrian safety as a guiding principle. In addition, a number of the roadways within the City that have higher traffic volumes and/or speeds are constructed and controlled by MoDOT. Likewise, in areas where the City has existing infrastructure or is unable to design for human mistakes/limitations, there is a need for additional regulations to proactively identify and address risks to reduce pedestrian/vehicle interactions, crash severity and save lives.

In the current built environment, median width on multi-lane roadways is an area of concern for pedestrian safety, particularly when the medians have not been constructed to accommodate adequate refuge islands for pedestrians. An example of calls for service received by the Columbia Police Department related to pedestrians utilizing medians in an unsafe manner is included in the supplemental materials. The Fire Department reports that their large fire apparatus has overhangs and blind spots, often finding themselves nearly colliding with pedestrians laying or seated in mid-roadway islands—which are not designed for pedestrians. The vast majority of medians within the City were originally constructed to guide vehicular traffic flow. Medians constructed to accommodate pedestrian activity have different design characteristics meant to protect pedestrians and have been found by the Federal Highway Administration to reduce pedestrian crashes by up to 32%.

In order to be effective, a pedestrian refuge island must provide a place for a pedestrian to rest and reduce the amount of time a pedestrian is in the roadway. A median or pedestrian refuge island is required to be a minimum of 4' wide to accommodate pedestrians with disabilities; however, the Federal Highway Administration recommends construction to be 8' wide and of adequate length to allow the anticipated number of pedestrians to stand and wait for signal changes or gaps in traffic before resuming crossing movements.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Columbia has taken a number of proactive steps to enhance safety of pedestrians and motorists within the city. Numerous traffic calming and infrastructure improvements have been constructed to reduce vehicle speeds in neighborhoods and enhance pedestrian safety. Outreach and education efforts are ongoing with plans for more focused campaigns to proactively modify at-risk behavior of both drivers and pedestrians. Enforcement of vehicle traffic safety laws has resumed by the police department, along with evaluation and training for focused enforcement of pedestrian requirements.

The current city code requires drivers to yield to pedestrians crossing the right of way in a crosswalk. Drivers are required to exercise the highest degree of care to avoid colliding with any pedestrian upon any roadway and must give warning by sounding the horn or exercise other precautions if observing any child or confused or incapacitated person upon a roadway. Pedestrians are currently required by city code to cross a roadway at right angles to the curb or by the shortest route to the opposite curb. Pedestrians are also required to yield to vehicles when crossing a roadway at an unmarked intersection. Within the downtown area, pedestrians are required to use a crosswalk to cross the roadway as well as required to cross only in accordance with official traffic control devices. The use of sidewalks, when present, is mandatory by pedestrians. Pedestrians are prohibited from walking or moving upon any roadway in any manner which restricts the flow of traffic.

In addition to the foregoing highlighted city code provisions, Section 14-586 of the Code of Ordinances provides: No person shall stand in a roadway for the purpose of soliciting contributions or business from the occupant of any vehicle. At the time Section 14-586 was enacted it was a valid and enforceable regulation; however, recent litigation in other jurisdictions has struck down similar language as being content-based restriction which is not narrowly tailored to meet a compelling government interest. The courts have found that asking for charity or gifts is an activity protected by the First Amendment. As protected speech, any regulation must be narrowly tailored to serve a compelling government interest. In addition, under the Equal Protection Clause of the Fourteenth Amendment the regulated conduct cannot discriminate between persons on the basis of content unless there are clear reasons for the distinction. As a result, Section 14-586 may not be enforced and must be either repealed in its entirety or amended to meet strict scrutiny.

Recent case law provides guidance on content-neutral and narrowly tailored legislation to regulate pedestrian activity and interaction with motor vehicles. To ensure the safety of its citizens and visitors, further regulations may be considered on identified high speed and/or high-volume roadways and intersections with any of the following characteristics:

- High-speed roadway – defined as speed limit of at least “x” mph or greater.
- High-speed intersection – defined as at least one approach of “x” mph or greater.
- High-volume roadway – defined as average daily traffic volume of “x” per day or greater.
- High-volume intersection – defined as average daily traffic volumes on one roadway of intersection of “x” vehicles per day or greater.



A non-exhaustive list of options to improve safety on these types of streets and intersections include:

- Prohibit a pedestrian from stopping, standing or otherwise occupying a median less than “x” feet wide on a high-volume traffic roadway or a high-speed roadway when the pedestrian is not in the process of lawfully crossing the road in accordance with applicable traffic and safety laws.
- Require all pedestrians to wear a reflective vest or bright/reflective clothing when navigating on the side of a high-volume traffic roadway or high-speed roadway between dusk and dawn.
- Prohibit any physical interaction between a pedestrian and an occupant of a motor vehicle, including the transfer of any product or material, while the vehicle is located on a high-volume traffic roadway, high speed roadway, or within 50 feet of a high-volume intersection. Such interaction would not be prohibited when a vehicle is legally parked.

In determining next steps, it is necessary to ensure ample safe opportunities exist for individuals to continue to engage in protected speech and to encourage motorists to safely provide financial support. If pedestrian safety regulations along high-traffic and high-volume roadways are considered, signage and education campaigns to ensure the needs of pedestrians affected by the regulations continue to be met within the community should also be considered.

Fiscal Impact

Short-Term Impact:
Long-Term Impact:

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Reliable and Sustainable Infrastructure, Secondary Impact: Safe Community, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Mobility, Connectivity, and Accessibility, Secondary Impact: Livable & Sustainable Communities, Tertiary Impact: Infrastructure

Legislative History

Date	Action

Suggested Council Action

Provide guidance to staff on next steps desired to improve pedestrian safety.