## **Toole**DesignGroup



MEMORANDUM

Date:	November 13, 2017
То:	Eli Cooper, City of Ann Arbor
From:	Hannah Pritchard, PE PTOE
Re:	Engineering Review of Crosswalk Ordinance

## Introduction

The City of Ann Arbor has contracted Toole Design Group (TDG) to provide an independent review of Ann Arbor Code § 10:148, which specifies driver yielding requirements at crosswalks. Michigan law differs from neighboring states in allowing certain rules of the road to be codified at the municipal level. There is concern that Ann Arbor's crosswalk ordinance may be more stringent than expectations in other Michigan communities, leading to uncertainty among drivers over when they are required to yield the right-of-way to pedestrians. TDG's review has found that the requirements for driver yielding behavior at crosswalks encoded in Ann Arbor's crosswalk ordinance is within the range of regional variation in norms and practices and is consistent with driver instruction in Michigan.

Statutes governing driver yielding at crosswalks elsewhere in the U.S. are generally less explicit than Ann Arbor's ordinance, more closely matching the language in Michigan's Uniform Traffic Code (UTC). Regional variability in driver yielding behavior usually stems from factors other than the letter of the law, such as social norms, driver education, and enforcement practices. Given the City's stated goal of increasing walking and their broader efforts to ensure that walking remains safe and convenient, Ann Arbor's crosswalk ordinance is reasonable. The ordinance formalizes existing expectations for driver behavior.

## Ann Arbor Crosswalk Ordinance

Ann Arbor Code § 10:148 specifies driver yielding requirements at crosswalks and pedestrian responsibilities while crossing streets. The code states:

(a) When traffic-control signals are not in place or are not in operation, the driver of a vehicle <u>shall stop before entering a crosswalk and yield the right-of-way to any pedestrian stopped at the curb,</u> <u>curb line or ramp leading to a crosswalk and to every pedestrian within a crosswalk</u> [emphasis added] when the pedestrian is on the half of the roadway on which the vehicle is traveling or when the pedestrian is approaching so closely from the opposite half of the roadway as to be in danger.

(b) A pedestrian shall not suddenly leave a curb or other place of safety and walk or run into a path of a vehicle that is so close that it is impossible for the driver to yield.

(c) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway.

## **Engineering Review**

The Ann Arbor crosswalk ordinance is consistent with national norms and driver instruction provided in Michigan's driver manual. The ordinance more explicitly instructs drivers on how to yield to pedestrians than statutes in neighboring states, which generally match the language in Michigan's UTC. Ambiguous crosswalk yielding requirements in other communities have led to regional variations in practices and norms. Ann Arbor's crosswalk ordinance is consistent with the behaviors found in communities that place a high value on the safety and convenience for residents and visitors traveling on foot.

Ann Arbor's crosswalk ordinance includes language directing drivers approaching a crosswalk where pedestrians are attempting to cross, but have not yet entered the crosswalk, to stop to allow pedestrians to enter the roadway and safely exercise their right-of-way. This language addresses ambiguity in how driver yielding requirements at crosswalks are typically encoded in state laws in the U.S. While driver instruction, including in the state of Michigan, generally directs drivers to allow pedestrians to cross at unsignalized crosswalks, a strict reading of the language in the UTC and traffic statutes in other states could lead to the interpretation that pedestrians only have the right-of-way at crosswalks after having already entered the roadway. Since pedestrians are limited from entering the roadway when approaching vehicles are present by both statutory and practical considerations, such a strict interpretation of typical crosswalk yielding rules would give the right-of-way at unsignalized crosswalks to drivers instead of pedestrians during times of steady vehicular traffic.

Michigan is unusual in not encoding driver yielding requirements at crosswalks in state statute. Even in states where these requirements are encoded in state law, however, it is common to find variability in norms and practices for driver yielding at crosswalks since the relevant codified language typically leaves room for interpretation. By allowing municipalities to define these requirements in local ordinance, Michigan law potentially exacerbates this tendency toward regional variations in driver expectations. However, this also allows communities such as Ann Arbor to formalize and more clearly articulate local practices and norms.

Michigan's driver manual provides ample instruction that drivers should operate vehicles in a way that does not endanger pedestrians or interfere with their right-of-way. Drivers are encouraged to be alert and watch for pedestrians crossing outside of crosswalks and drive in a manner to avoid hitting people who may be walking in or across a roadway. Drivers coming from other Michigan communities have been given the same level of guidance, regardless of whether their community has adopted the UTC.

Under the circumstances—where drivers are already expected to yield to people who are in the crosswalk, watch for them under any circumstance, and take every possible precaution to avoid collision—expecting drivers to allow pedestrians to safely enter the crosswalk is consistent with existing driver instruction in Michigan. The yielding requirements spelled out in Ann Arbor's crosswalk ordinance fall within the range of norms and practices in other communities, including those where yielding requirements more closely match the wording of the UTC. Given the disparity in size and inertia between pedestrians and motor vehicles, expecting the pedestrian to fully enter the roadway

before drivers are required to yield would put pedestrians at unnecessary risk. By defining driver yielding requirements at crosswalks in a clear and explicit manner that allows pedestrians to safely make use of their right-of-way, Ann Arbor's crosswalk ordinance provides a reasonable contribution toward Ann Arbor's efforts to advance walkability and pedestrian safety.