

Crosswalk Review

MEMO 12/01/2011

BACKGROUND

The City's interest in creating and maintaining a safe comfortable and convenient walking environment is best reflected in the vision statement of the 2007 City of Ann Arbor Non-motorized Transportation Plan (NTP). It states:

"Ann Arbor Seeks to create a physical and cultural environment that supports and encourages safe, comfortable and convenient way for pedestrians and bicyclists to travel..."

Ann Arbor citizens understand the myriad benefits of active transportation. It serves as a viable transportation alternative for those who are capable of independent travel yet do not hold a drivers license. Walking leads to improved community health and well being, results in less energy consumed, fewer cars on the road, lower demand for parking. Walking as a means of getting around results in a significant reduction of the environmental consequences of transportation.

FIVE E'S

Ann Arbor relies on the 5E organizing framework to address non-motorized transportation issues. The five E's include Engineering, Encouragement, Education, Enforcement and Evaluation and are described below. Attaining our goals to provide and promote an environment to foster non-motorized travel requires us to address each of these areas. Through these memoranda, presentations and discussion staff will outline the various measures to continue to evolve our efforts in this regard.

Engineering and planning programs and policies include non-motorized transportation planning and facility design, maintenance practices, Complete Streets policies, training, end-of-trip facility requirements (e.g., bicycle parking) and other engineering and planning practices aimed at accommodating non-motorized transportation.

Encouragement activities aim to promote bicycling and walking and increase awareness of opportunities for non-motorized travel. There is often overlap between encouragement and education activities.

Educational efforts target walkers, bicyclists, and/or drivers and offer instruction in areas such as safety, rules of the road, bicycle maintenance and repair, and commuting tips. There is often overlap between education and encouragement activities.

Enforcement category includes city codes as well as police efforts to enforce them.

Evaluation of efforts to improve safety and promote non-motorized transportation are designed to help determine their effectiveness and guide improvements to subsequent efforts

REVIEW OF ANN ARBOR'S ACTION AND ACTIVITIES

1. **Education and**
2. **Encouragement** – The Education and Encouragement facets are comprised in the Non-motorized Transportation Plan, our Ann Arbor Safe Streets and Sidewalks outreach campaign and seek to reflect our community's values and vision. The emphasis has been to outline the rights and responsibilities of pedestrians and motorists, and encourage proper behaviors. We have developed a comprehensive outreach campaign relying on a variety of media formats to communicate our messaging.
3. **Engineering** –Includes the City's NTP, and many professional guidelines for transportation planning and traffic engineering. In addition to the NTP, The Michigan Manual on Uniform Traffic Control Devices and American Association of State Highway and Transportation Officials guidelines are used to identify and install proper treatments based on engineering analysis and community preferences. Areas of interest include pavement markings, signs, traffic control devices, visibility, lighting, and proximity of AATA bus stops. Staff has been working towards developing design solutions based on roadway design, speed and volume of vehicles and pedestrians.
4. **Enforcement** – City code language is a major component of this discussion. In addition to the City code, the role of targeted and ongoing enforcement of crosswalks is included to assure predictable behavior. Emphasis on crashes at crosswalks has increased attention to other areas including motor vehicle speed, importance of the number of lanes of a roadway, lack of visibility, stopping reaction time, distracted driving and knowledge of the rules of the road. Recognizing the council's introduction of a code amendment, a recent history is provided to ensure full understanding of the rules in effect and the roles and responsibilities placed upon motorists and pedestrians in our city.

In January 2010 the City adopted the following language adopted from the Uniform Traffic Code (UTC) for crosswalks:

Pedestrians; right-of-way in crosswalk; violation as civil infraction.

- (1) When traffic-control signals are not in place or are not in operation, the driver of a vehicle shall yield the right-of-way, slowing down or stopping if need be to so yield, to a pedestrian crossing the roadway within a crosswalk 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, but 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.
- (2) 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.

There are several important aspects to this language; some are better known than others.

- As it is derived from the UTC it is commonly but inappropriately referred to as the State Law.
- It required "yield" behavior

- It requires every pedestrian that crosses a roadway not in a marked crosswalk to yield the right of way to every vehicle.

These Code provisions were superseded in May 2010 by adoption of the following:

10:148. - Pedestrians crossing streets.

(a) When traffic-control signals are not in place or are not in operation, the driver of a vehicle shall stop and yield the right-of-way to every pedestrian approaching or within a crosswalk.

(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.

The result of these amendments revised the city's code to include:

- Vehicle stopping requirements for all pedestrians in a crosswalk and
- Adding the responsibility for motorists to stop for pedestrians that are approaching a crosswalk.

This language remains in effect today.

As of January 13, 2011, the City adopted by reference the Michigan Uniform Traffic Code for Cities, Townships and Villages, R 28.1001 et seq., of the Michigan Administrative Code and as subsequently amended to the extent not in conflict with existing or future ordinances and regulations of the City. The City's adoption by reference of the UTC did not simultaneously prohibit the existence, addition, and adoption of further ordinances or regulations, provided such ordinances or regulations do not conflict with State law. This allowed the UTC's **Rule 703**. Passing vehicle stopped at intersection to permit pedestrian to cross prohibited; being in effect. It reads as follows:

“R 28.1703 Rule 703. Passing vehicle stopped at intersection to permit pedestrian to cross prohibited; violation as civil infraction.

(1) When any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass the stopped vehicle.

(2) A person who violates this rule is responsible for a civil infraction.”

This language addressing drivers and requires them to stop and not overtake from the rear a vehicle stopped at a crosswalk to permit a pedestrian to cross the roadway.

Code provides the basis for enforcement activities which in turn provide credibility to engineering devices.

5. **Evaluation** – Work conducted by various city departments and the Washtenaw Biking and Walking Coalition have explored and addressed this issue of behavior and safety at or near crosswalk. Clearly, the number of pedestrian crashes in crosswalks is an important criteria but it is one of many important measures. Items such as percent of cars that properly stop for pedestrians in or near crosswalks, total number of pedestrians, number of crashes near crosswalks, percent of the population aware of the city code are among those parameters that are also important to measure. Among other statistics, staff monitors the percentage of travel accommodated by walking and biking as published by the US Census Bureau. To monitor our progress to creating an environment and cultural supportive of increased walking.

ARE WE ALONE?

Staff has conducted preliminary research and has contacted several pedestrian related professional organizations as we explored the evolving state of the practice related to crosswalks and the pedestrian realm. Contacts included the Michigan Department of Transportation, the Federal Highway Administration's supported Pedestrian Information Clearinghouse, as well as the Association of Pedestrian and Bicycle Professionals (APBP), the American Planning Association, and the Nation Completes Streets Coalition. We found the following information:

- 23 of the fifty largest US cities, by population, have driver enforcement for not yielding to bicyclists and pedestrians
- Fines range from \$50 to \$242 and up to \$500 in an instance when a bicyclist is hit by a car.
- The States of Illinois and New Jersey enacted "STOP" language last year
- Minnesota, Maryland, Washington, Colorado, Florida and Georgia are among the states that have laws requiring traffic must stop for pedestrians in crosswalks
- New Jersey's Statute 39:4-36 was amended in April 2010 to require motorists to stop and stay stopped for pedestrians in a crosswalk
 - This change was done to simply because drivers don't understand the concept of yielding to pedestrians but the word **stop** is much clearer.
- Questions has been raised a few times on this listserve, APBP, over the past 10 years or so, and so far no one has found any case of a jurisdiction adopting a law that requires drivers to stop (or yield) to a pedestrian approaching a crosswalk. Everyone seems to know of another place that has such a law but upon further examination, it doesn't exist (except in Boulder Co.)

RECOMMENDATIONS

Enforcement

1. Ordinance Language

The following is the Updated Proposed Language – First Reading Version

[Proposed Amendment Nov. 10, 2011] 10:148. Pedestrians crossing streets.

(a) When traffic-control signals are not in place or are not in operation, the driver of a vehicle shall stop *before entering a crosswalk* and yield the right-of-way to a pedestrian ~~approaching or stopped at the curb or ramp leading to a crosswalk~~ and to every pedestrian within a crosswalk, *without regard to which portion of the roadway the pedestrian is using.*(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~~ *unsafe* for the driver to yield. (c) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within a marked or unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway.

Staff recommends council consider the following amendments. Underlined materials (as such) are revised from the First Reading Version. :

Pedestrians Crossing Streets:

(1) When traffic-control signals are not in place or are not in operation, the driver of a vehicle shall stop before entering a crosswalk and yield the right-of-way, to a pedestrian stopped at the curb, curb line or ramp leading to a crosswalk and to every pedestrian crossing the roadway within a crosswalk 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, but a pedestrian shall not 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 unsafe for the driver to yield. 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.

Staff also recommends Council call attention to this provision of the UTC:

Passing vehicle stopped at intersection to permit pedestrian to cross: violation as civil infraction

(1) When any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass the stopped vehicle.

Rationale for recommendations

Curb line – Use of the term curb ramp may not be well understood.

Half of roadway – Provides clarity so motorists are able to focus on the roadway in the direction of their travel and in their immediate view. Questions have arisen as to the ability of a motorist to safely observe the opposing lanes and curb area for pedestrian that could be up to four lanes away from the lane they are driving in..

Stopped Vehicle –Education Outreach to advise motorists when a vehicle is stopped at a crosswalk, you, too, are required to stop.

2. Participate in Targeted Enforcement Campaigns – Continuing enforcement actions can provide credibility for the engineering applications, crosswalk markings, signs, and other

devices as well as reinforce the education and outreach efforts related to appropriate use of the city's transportation system.

Engineering

1. Provide appropriate active warning devices along high speed, high traffic and busy crosswalks including, Rectangular Rapid Flash Beacons (RRFB), High Intensity Walk Activated signals, (HAWK) enhanced lighting, signage and continue to monitor the development and evolution of enhanced crossing devices for deployment in Ann Arbor
2. Request MDOT to install appropriate devices at crossings along Washtenaw Ave.
3. Work with AATA to review and make adjustments of the location of bus stops near crosswalks starting at high speed high volume roadways
4. Assess visibility and lighting conditions at the crosswalk locations, program adjustments as needed
5. Monitor the activity of pedestrian traffic at crosswalks, pedestrian crashes and vehicle crashes near crosswalks to determine if additional counter measures are needed

Education and Encouragement

1. Promote awareness of pedestrian and motorists rights and responsibility.
2. Emphasize recommended revised language regarding pedestrians at the curb and stopped vehicles
3. Develop outreach related to recommended new engineering applications, i.e., RRFBs.
4. Use a variety of media including, CTN, printed materials, window decals, changeable message signs, traffic control devices including signage and lighting and innovative means such as lawn signs.
5. Coordinate with large employers and fleet operators to provide materials to commuters and operators.

Evaluation

1. Monitor effectiveness of enhanced engineering applications. Percent stop rate and vehicle crashes.
2. Measure overall compliance with local code at crosswalks
3. Monitor percent of walking trips
4. Possibly conduct focus group(s) of pedestrians to explore comfort of walking in Ann Arbor
5. Conduct focus group of resident motorists and commuters to determine effectiveness of education techniques.