Introduction

A public meeting was held on December 5, 2016 from 6:00-8:00 p.m. at Slauson Middle School (1019 W. Washington St.) to share a set of draft guidelines for crosswalk designs that the City of Ann Arbor has developed based on best practices from other communities as well as prevailing national standards. Representatives from the City of Ann Arbor and Bridgeport Consulting (providing public engagement support) delivered a brief presentation followed by a workshop and facilitated discussion.

Approximately twenty-two (22) members of the public attended the meeting, including members of Washtenaw Biking and Walking Coalition; a representative from the University of Michigan’s Safe Kids program; and other concerned residents. Ann Arbor City Councilmembers Jane Lumm, Kirk Westphal, and Jack Eaton also attended. A full copy of the presentation materials is available on the project website, which can be found online at a2gov.org/crosswalks.

Concerned parties are also invited to contact Cynthia Redinger, P.E., P.T.O.E, City of Ann Arbor Project Manager, at credinger@a2gov.org or (734) 794-6410, ext. 43632 to learn more.

Project background

The City of Ann Arbor has undertaken a project to improve the consistency of crosswalk design across the city. The inconsistency is a result of changing regulations, the evolution of design practices, individual variance among traffic engineers, and resource limitations.

The City’s desired outcomes for this project include:
- A consistent, recognizable look/feel for all crosswalks throughout Ann Arbor, and
- An improved and shared understanding among users of how to interact with crosswalks.

Meeting format and objective

This public meeting was designed to be a workshop in which participants were invited to engage with the draft crosswalk design guidelines in a hands-on activity intended to help build a shared understanding of how the guidelines will be used, and generate discussion around community preferences and priorities with regard to the guidelines’ application.

Discussion Summary

Facilitated discussion followed both the presentation and the activity. Participant questions, and the City of Ann Arbor’s responses, are summarized below. The format of this section is as follows:
The Headlines list major issues raised.

- These bulleted statements summarize **attendees’ stated questions and concerns**.
  - These indented bullets describe the way(s) in which the project team **addressed the above concerns** and questions.

Some residents feel there has been a cumulative underfunding of infrastructure.

- The budget should be selected based on what would make crosswalks safe; design standards should not be dictated by cost. (2 comments)
  - The role of including a budget in the workshop context is to simulate this realistic constraint (in, again, an entirely fictitious context) in order to help narrow and focus the choices participants make. If there were no constraints in the design scenario, one could easily imagine that everyone could select the maximum possible treatment at every fictitious location, which would limit the potential learning that would result.
  - In no way did the City mean to imply that City Council has assigned a budget to crosswalk treatments. The activity simply acknowledges that all of these choices must be made within certain constraints (whether in a fictitious design scenario or in real life), and the activity is intended to invite the community to help shape what that process looks like in practice.

What criteria drive the engineering analysis?

- Do criteria take into account pedestrian compliance (i.e. whether pedestrians cross at the crosswalk)?
  - The engineering analysis takes into account pedestrian and vehicular volumes, road speed (posted or actual), road width, pedestrian speed, crossing distance (i.e. road width), motorist stopping compliance (high or low), and other variables.
  - The tool that engineers use to help identify the appropriate treatments for a given crosswalk location allows for sensitivity testing; that means the user can analyze the types of treatments appropriate if motorist stopping compliance is low versus if it is high.
  - Traffic volumes (whether pedestrian or vehicular) are based on number per hour. The hour selected is at the discretion of the engineer; typically the “peak” hour is selected (i.e., the hour during which the greatest conflict between pedestrians and vehicles arises).

What data does the City have about the effectiveness of various treatments? In other words, shouldn’t red flashing lights be used at crosswalks instead of yellow flashing lights?
The City has a legal obligation to comply with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD), which specifies that signal warrants must be met before a red light can be installed.

- Does the City collect data about motorist compliance at existing crosswalks or pedestrian feelings of safety?
  - Because data from only Ann Arbor would not be large enough to draw reliable statistical conclusions, the City uses prevailing national research, like National Cooperative Highway Research Program (NCHRP) Report 562, to understand the effectiveness of treatments

- Different residents have different observations about motorist compliance. Some observe that City buses and other City vehicles consistently stop for pedestrians while University of Michigan buses do not, and others observe the opposite.
- The parking on State Street, between South University and East William, blocks crossing visibility for the new mid-block crosswalk.

The City should be committed to zero traffic-related deaths.

- When the City Council passed the resolution accepting the pedestrian safety committee’s recommendations, and the goal of “Vision Zero,” to have zero traffic-related fatalities on city streets by 2025, is reflected therein.

Participants in the workshop activity had the following observations:

- Overall, there was considerable consistency among the groups’ recommended design treatments.
- The design treatments in each of the categories (Standard, Standard Plus, and High Risk) seem to underestimate the risk; if a crosswalk is put at a location without adequate treatments, it could create a false sense of safety for the pedestrian, possibly making it less safe than if it had either no treatment or a higher level of treatment.
- Enhanced lighting would be desirable at all three of the locations in the activity, but the fictitious activity budget did not allow for this addition. (2 comments)
- Treatments that used energy appeared to be relatively more expensive than treatments that did not require connecting to the electrical grid. Would powering these treatments with solar or other renewable energy bring down the cost?
  - Using alternative energy sources for treatments requiring energy could help to make them more affordable – however, reliability may be affected.
- Participants observed a lack of treatment options in the mid-price range.
- Few inexpensive treatments for crosswalks were available in the Standard category, whereas more options were available in the Standard Plus and High Risk categories.
- Some crosswalks may merit a higher level of treatment (e.g. a stop light) than indicated by the engineering analysis.
The activity would be more useful using real locations (e.g. Edgewood and Stadium or Kay and Stadium) and with the data for those locations posted for the public before the meeting.

- The City can consider a follow-up workshop using real examples.

**In finalizing the design guidelines, the City should consider “outside-the-box” solutions.**

- For example, some crosswalks in Madison, Wisconsin have tubes attached poles with red flags pedestrians can use to indicate to approaching motorists that one intends to cross.
- Art can be a component of the public education around crosswalks as well as the design of streets; however, care needs to be taken to ensure the artwork does not obscure the crosswalk or distract drivers.

**Are there ways to change behavior beyond updating the crosswalk design?**

- Emphasis on education and enforcement are needed to build awareness about expectations among drivers, pedestrians and cyclists.
- Pedestrians, particularly youth, need to be taught not cross until traffic stops and clears.
- Consistency in crosswalk design and treatments will help facilitate education such that people reflexively behave as intended.
- The University of Michigan’s Safe Kids pediatric trauma program provides education on topics such as distracted driving and is interested in partnering to do more.
- Some residents feel there has been a decrease in the presence of traffic enforcement in the city.
  - The City is participating in a gateway treatment study, which includes putting signs and posts (both which give way upon impact) in road lanes. Early findings are that these treatments are very effective in terms of motorist compliance and reducing vehicular speeds.

**Once the design guidelines are finalized, how will locations be selected for improvement?**

- Some residents voiced impatience for work to begin in terms of updating the crosswalks, noting that this topic has been discussed for years.
  - Although the City has yet to determine the exact approach for aligning all crosswalks throughout the city with the design guidelines, it is committed to a systematic approach that reflects the priorities of the community.

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**Workshop Group Crosswalk Design Selections**

The workshop’s premise was for participants to assume the role of city engineers who have been requested to design crossing treatments at three locations in a fictitious – yet realistically designed – community scenario. In order to save time, participants were provided with the data
they needed to make choices among a set of appropriate crossing treatments for each of the locations. More than one “right answer” was possible for each location, which allowed participants the latitude to make choices; the rationale behind their choices would then provide a useful basis for discussion. Five groups of residents worked independently from one another to identify crosswalk treatments for three locations with the materials provided. Their selections are provided below, by location.
Group 1: Rectangular Rapid Flashing Beacon (RRFB), Warning Signs, Pavement Markings, In-Street Signs, Enhanced Lighting

Group 2: Rectangular Rapid Flashing Beacon (RRFB), Warning Signs, Pavement Markings, In-Street Signs, Enhanced Lighting

Group 3: Rectangular Rapid Flashing Beacon (RRFB), Crossing Island, Pavement Markings

Group 4: Rectangular Rapid Flashing Beacon (RRFB), Pavement Markings, In-Street Signs, Enhanced Lighting

Group 5: Rectangular Rapid Flashing Beacon (RRFB), Warning Signs, Crossing Island, Pavement Markings, In-Street Signs, Enhanced Lighting
Group 1: Warning Signs, In-Street Signs, Pavement Markings, Enhanced Lighting

Group 2: Warning Signs, In-Street Signs, Pavement Markings, Rectangular Rapid Flashing Beacons (RRFB)

Group 3: Warning Signs, In-Street Signs (2), Pavement Markings

Group 4: Pavement Markings, Enhanced Lighting

Group 5: In-Street Signs, Pavement Markings, Enhanced Lighting, Bump Outs
Group 1: Pavement Markings, Rectangular Rapid Flashing Beacon (RRFB), In-Street Signs, Warning Signs

Group 2: Pavement Markings, Rectangular Rapid Flashing Beacon (RRFB), In-Street Signs, Warning Signs

Group 3: Pavement Markings, In-Street Signs, Warning Signs, Bump Outs

Group 4: Rectangular Rapid Flashing Beacon (RRFB), Crossing Island, Warning Signs

Group 5: Rectangular Rapid Flashing Beacon (RRFB), Warning Signs, Crossing Island, Enhanced Lighting