

# Non-Motorized Plan Implementation Update

February 28, 2014

## Mid-Block Crosswalks and Downtown Pedestrian Safety

### *Effect or otherwise implement:*

- Detailed Study – The Non-motorized Plan (NTP) identified locations that met planning criteria for consideration of installing enhanced pedestrian crossing devices. Enhanced pedestrian crosswalks may include:
  1. Enhanced markings
  2. Warning Signs
  3. Advanced Warning signs
  4. Overhead Warning signs
  5. Streetlights
  6. Rectangular Rapid Flashing Beacons (RRFB)
  7. HAWK
  8. Full signals

City transportation planning and traffic engineering staff will collect and review detailed data regarding each of the identified locations and plan for appropriate improvements. Evaluation will rely upon NCHRP 562 Methods for determining if enhanced crossing treatments are needed.

- Prioritization - Once the detailed data and proposed improvements planned at each location are known, the priority, timing and sequencing of improvements can be determined.
- Monitor Changing Conditions - The NTP's identification of midblock crossing improvement locations was based on the traffic and pedestrian information available at the time the plan was developed. Over time conditions change, traffic and pedestrian volumes vary, posted and actual speeds are monitored and adjusted. Ongoing evaluation of the need to add or delete locations from the list is an ongoing process and will be reviewed periodically. This will be done as a part of the detailed evaluation, as traffic parameters are a key part of the analysis.
- Coordination with Pedestrian Safety Task Force – The recently appointed Pedestrian Safety Task Force may identify midblock crossing locations as an area for their focus and attention. Staff will provide needed support to facilitate the task force completing its efforts.

### *Schedule & Cost*

- For the twenty locations identified in the NTP update, in order to perform the next steps of engineering analysis, it is anticipated it will require approximately \$10,000 worth of effort to collect the necessary data, and another approximately \$5,000 to perform the analysis. This total of **\$15,000** would result in a list of recommended treatments for each location.
- The estimated time of completion for the above analysis is anticipated to take approximately 5 months. The data collection efforts could not begin until the weather is sufficiently warm to promote increased pedestrian activity.
- Construction of the enhanced pedestrian facilities is estimated at \$20,000 per location for a total of approximately **\$400,000** in improvements. This preliminary estimate is based on the cost of installing an RRFB. The schedule for construction the improvements will depend on the funding committed.

## *Funding*

- MDOT Safety Grants – The types of improvements outlined above can typically be funded by MDOT’s Safety Program. Locations are included in the program and funding provided after crash statistics are compiled and the benefit –to-cost (B/C) ratio is found to be favorable, i.e., greater than one. As MDOT’s Safety Program funds are limited, the allocation of funds is based on competitive criteria; higher B/C ratios are generally funded first. The City has obtained funding in the past for midblock crossing improvements from this program. Recent examples include Fuller Road east of Cedar Bend, Geddes Avenue at Gallup Park and South University at Tappan.
- CIP Programming – Funding for City capital improvements are programmed through the City’s CIP development process. As the planned improvement locations are developed into implementable projects, the CIP team reviews these needs in the context of other similar or related projects. The CIP process assigns priority to the projects and outlines funding needed to implement the projects.
- Inclusion in Road Projects – When the midblock crossing improvement is coincidental with other road construction projects (e.g. road reconstruction), the crosswalk improvement needs are included in the overall project. Recent installations along Platt Road, Green Road, Miller Avenue, East Stadium Blvd and Packard Street have been provided in this manner.
- Other Federal and State Transportation Funding – Pedestrian system improvements are eligible for a variety of funding programs. City staff works to align our priority project needs with federal and state funding as it becomes available. Recent improvements along Green Road used Safe Routes to School program funding to install improved crosswalks along this corridor.
- Alt Transportation Funding – The City Council annual budget process programs funding for the Alt Transportation Fund. These funds are used to provide matching resources for state and federal grants to sustain pedestrian system improvements. The funds are also used to install improvements outlined in the NTP.

### **Downtown Intersections:**

#### *Solutions to improve safety*

- Study the crash reports – It is generally recognized that there are a higher number of vehicle-pedestrian crashes in the downtown area. This results from the high level of interactions between pedestrians and vehicles occurring in the City’s busy downtown and Central Campus areas. Although the number of crashes in this part of the City is higher, more detailed crash review and analysis is needed to identify if patterns and cause/effect relationships exist.
  - Engineering strategies and solutions – Once specific crash studies are completed, City staff can outline proposed strategies or improvements to respond to the underlying reason for crashes at specific locations. Example strategies may include signal timing adjustments, traffic regulations, countdown pedestrian signal, signage or other improvements.
- Coordinate with the Pedestrian Safety Task Force - City resource staff will be coordinating closely with the Pedestrian Safety Task Force. Input provided by the task force will be factored in staff consideration of policies, strategies and actions to enhance safety throughout the downtown area.

- Outreach and Education – It is generally recognized that awareness and understanding of traffic and pedestrian safe practices is a fundamental element to enhancing community safety. Continuing to build upon the existing Ann Arbor Safe Streets and Sidewalk Committee’s *Walk, Bike Drive: Our Safety Depends on You* campaign is a part of addressing downtown area pedestrian safety.
- Enforcement - Respect for the Laws is reinforced through appropriate enforcement activity. Motorists and pedestrians should be able to count on predictable behaviors by other users of the City’s transportation systems. Enforcement is a key mechanism to assure all users do not inappropriately use our system. Enforcement campaigns can be, and are, a key element of the City’s outreach program.
- Ongoing evaluation – As with any continuous improvement program ongoing monitoring and review of experiences enables staff to be aware of and responsive to changing conditions. As new features are being installed to facilitate safer interactions between drivers and pedestrians the monitoring and evaluation of installed improvements is key. This evaluation can support future program priorities. Staff reviews crash statistics on an annual basis and reviews specific installations with before and after analysis as part of this effort.

#### *Schedule & Cost*

Analysis of crash data is already an on-going effort already being performed by the City’s traffic engineers. One of the results of this effort has been the installation of pedestrian countdown signals (as recommended in the 2007 NTP, page 58). These signals have been installed in place of existing signals as the old signals are slated for replacement, at an average rate of approximately 4 per year.

City traffic engineers are committed to working closely with the Pedestrian Safety Task Force to recommend additional improvements in the future. The timing and cost of this work will be highly dependent on the output of the Task Force, and therefore cannot be accurately estimated at this time.