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 National Highway Traffic Safety Administration
 400 Seventh Street, S.W., Washington, DC 20590

ZONE GUIDE FOR PEDESTRIAN SAFETY SHOWS HOW TO MAKE SYSTEMATIC IMPROVEMENTS

Public officials are constantly on the lookout for new ways to make the nation's roadways safer for walkers. With increasingly scarce funds, however, it simply is not possible to implement many of these ideas if they must be applied to an entire community. The zone process provides a systematic method for targeting pedestrian safety improvements in a cost effective manner. It involves defining relatively small geographic areas, or zones, where a relatively large proportion of the problem occurs. Then, a countermeasure program is applied only in the selected zones, targeting the locations with the biggest crash problems.

The National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA) sponsored a research study to apply the safety zone concept to reducing crashes involving older (65+) adult pedestrians. That study, released earlier this year, developed procedures for defining pedestrian safety zones, and developed, implemented, and evaluated a countermeasure program in Phoenix, Arizona and Chicago, Illinois (see Traffic Tech 174, March 1998). Older pedestrian crashes were reduced by more than 46 percent in target zones.

As a second part of the study, Dunlap and Associates prepared a concise how-to document, Zone Guide for Pedestrian Safety. The Guide describes step-by-step procedures officials can use in applying the zone process to their community's pedestrian safety problems.

Steps In Defining Zones

- Step 1. Select the crash problem
- Step 2. Map the pedestrian crashes

Finally, calculate an efficiency measure. It is not practical to apply countermeasures to 100 percent of both crashes and land area. Instead, calculate the percentages of both crashes and land area covered need to be reexamined to try to improve one or higher (for example, in Phoenix, 4.6 percent of the jurisdiction's land area).

Using Zones

Once the zones are selected, they must be examined. The problems and resources in each zone must be identified and then selected, developed as necessary.

The first step here is to review each zone to determine if it exists and the resources that are available. Review the police report for each zone crash to determine what might have caused it. Then drive through the zone to see if engineering improvements can be made.

Activities that can be applied in defining zones. Examples are:

- engineering improvements such as refreshing crosswalks; improving
- distributing posters or flyers to homes, businesses, offices and other areas in the zone

- Step 3. Define zones
- Step 4. Calculate efficiency measure and select final zones

Steps in Using Zones

- Step 5. Evaluate zones and identify resources
- Step 6. Select program activities
- Step 7. Implement program activities
- Step 8. Monitor program activities

Defining Zones The first step is to pick the pedestrian crash problem that the community wants to address. Determine if there are excessive pedestrian crashes involving young children, working adults, or maybe the elderly. Then, map the pedestrian crashes either manually or with a computerized mapping system, if one is available.

Since most pedestrian crashes occur within one mile of the victim's home or place of business, circular zones with a radius of one mile are good geometric choices. Decide on a minimum number of crashes within a particular zone for your community. These rates will vary by the size of your community. Linear or rectangular zones that meet a defined rate can also be used.

- targeting enforcement efforts in
- making presentations and giving t
congregate in the zones

Once the countermeasure ideas a
to monitor its success.

The Guide highlights examples of
includes charts, checklists, and s
materials in the zones rather tha
\$200,000 was saved. The Guide w
pedestrian safety in their commu
neighborhood one.

HOW TO ORDER

For a copy of Zone Guide for Ped
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this project, email: mlevy@nhtsa

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Editor, Evaluation Staff Traffic Sa
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