

AAA's TOP 10 WAYS TO MAKE ROADS SAFER*

The following measures are designed to help make roads safer for all drivers, especially baby boomers and seniors.

- 1. SIGNS** – larger, simpler and better-placed guide and street signs: Use larger lettering (1 inch/33 ft) and retro-reflective materials and place them well in advance of the "event," such as an intersection or exit ramp. Confusing and multiple signs should be eliminated. Signs should be placed higher, overhead and in advance to announce upcoming streets.
- 2. CROSSWALKS** – Crosswalks and pedestrian areas in general can be made safer. Use retro-reflective pavement markings to increase visibility; countdown signals so pedestrian knows the amount of time needed to safely cross; longer walk times for slower-paced pedestrians; larger buttons that are easier to reach; and pedestrian signal plaques, to help pedestrians properly understand signals. Pedestrian refuge islands at large streets also help.
- 3. LEFT-TURN LANES** – dedicated, protected left-turn lanes and phases when there is a traffic signal, preferably "offset": Left turns at intersections are one of the most dangerous traffic conditions for seniors. Having a signalized intersection with an arrow and a left turn lane, rather than leaving it to the judgment of the driver to determine when there is a sufficient break in traffic, will reduce the number of dangerous "right-angle" collisions. Offset left-turn lanes also improve safety because cars going in the opposite direction don't block visibility.
- 4. STOP SIGNS** – Some intersections do not require a signal light, but if they have a stop sign, their safety can be improved. Minimum size of stop signs, regardless of the posted speed, should be 30 inches to help deal with the reduced visual acuity among older drivers. Retro-reflectivity of stop signs must be maintained, not only so they can be read, but so they'll be noticed. "STOP AHEAD" signs are useful in situations where drivers appear not be noticing stop signs; in many cases, older drivers are cited for "failure to yield to a traffic control device." Lines or rumble strips across the roadway before a stop sign also can help alert drivers.
- 5. LIGHTING** – better lighting overall: With age, the lens of the eye becomes less clear and the pupil shrinks, causing less light to enter the eye. Eyesight begins to worsen around age 40 and by 60, a driver needs three times more light to see than at 16. For these reasons, better lighting for highways and city streets is needed.
- 6. PAVEMENT MARKINGS** – brighter road markings: Edge and other pavement markings should be retro-reflective so drivers can see curbs, lanes and intersections/crosswalks more easily to avoid hitting curbs or pedestrians and stay within lanes. "Run off the road" crashes also would be reduced.
- 7. TRAFFIC SIGNALS** – larger traffic signal heads: The diameter should be at least 8 inches, but up to 12 inches may be needed in some locations. Providing more contrast, back plates for traffic signals also improve visibility since people's contrast sensitivity decreases with age. "All red" periods for traffic signals allow for a margin of error.

8. FREEWAY EXITS & ENTRANCES – large, advance and clearer signs marking exit and entrance ramps, including “wrong way,” would help prevent drivers from making dangerous mistakes such as driving the wrong direction on a highway.

9. WORK ZONES – Work zones are constantly changing environments that challenge all drivers because they don't know what to expect; large, bright, well-maintained and carefully placed work zone devices, such as barrels or cone – including flashing arrow panels for lane closures – should be used to help guide drivers through these difficult situations. Crashes occur at work zones because drivers are unprepared for new situations. Work zones will only become more common with the aging of the transportation infrastructure, and older drivers have more difficulty negotiating these unexpected areas.

10. CHANGEABLE MESSAGE SIGNS – Changeable message signs help drivers understand changing conditions and situations, which affect us more as we age. To be effective, changeable message signs should use short, simple words, easily understood abbreviations and not exceed two "panels." If more information needs to be conveyed than can be displayed on two panels, additional signs should be used.

*The analysis was developed with real-world data from the AAA Michigan Road Improvement Demonstration Project, along with Federal Highway Administration guidelines. This list is featured in the July 2003 edition of *Reader's Digest* in an article titled “Safe Car, Safe Driver, Dangerous Roads.”