

It is concluded from this paper that there is no indication that crash frequencies increase as lane width decreases for arterial roadway segments.

These findings suggest that the AASHTO Green Book is correct in providing substantial flexibility for use of lane widths narrower than 3.6 m on urban and suburban arterials. Use of narrower lanes in appropriate locations can provide other benefits to users and the surrounding community including shorter pedestrian crossing distances and space for additional through lanes, auxiliary and turning lanes, bicycle lanes, buffer areas between travel lanes and sidewalks, and placement of roadside hardware. Interpretation of design policies as rigidly requiring the use of 3.6 m lanes on urban and suburban arterials may miss the opportunity for these other benefits without any documentable gain in safety.

The paper found three situations in which the observed lane width effect was inconsistent—increasing crash frequency with decreasing lane width in one city and the opposite effect in another city. These three situations are:

- lane widths of 3.0 m or less on four-lane undivided arterials.
- lane widths of 2.7 m or less on four-lane divided arterials.
- lane width of 3.0 m or less on approaches to four-leg STOP-controlled arterial intersections.

Because of the inconsistent findings mentioned above, it should not be inferred that the use of narrower lane must be avoided in these situations. Rather, it is recommended that narrower lane widths be used cautiously in these situations unless local experience indicates otherwise.

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