- 8. The fit of the bicycle to the operator, especially in terms of his or her ability to touch the ground while seated, is an important factor in bicycle accidents. This factor of disaccommodation appears more important for younger (smaller, less experienced) children than for the older (larger, more skillful) ones.
- 9. Although the issue has been insufficiently studied, there is reason to suspect—from anecdotal data, from engineering data, and from field studies—that the newer, so-called "high-rise" bicycle may be a more hazardous overall design than the conventional style. Part of the increased hazard—if it is ultimately established to be real—may be due to its attractiveness as a vehicle with which to engage in acrobatics, precisely because of its greater maneuverability—thus decreased stability. It is very important that specific design features be studied with respect to their accident/injury potential, as well as the kinds of operator behavior associated with given design features.
- 10. The National Highway Traffic Safety Administration has conducted a preliminary examination of the bicycle safety problem, but has not assigned it a sufficiently high priority to result in a program of action. The Administration does not have authority to regulate bicycle design, but does have authority to promulgate Highway Safety Program Standards with respect to bicycles and driver education.
- 11. The Department of Health, Education and Welfare, by virtue of the Child Protection and Toy Safety Act of 1969 (effective Jan. 1970) does have authority to regulate bicycle design—ban from the market those which are determined to present a "... mechanical ... hazard."
- 12. There is reason to suspect that a braking system which is superior for older cyclists may disadvantage the younger ones. Other design features may also be differentially optimal for different age groups, different sizes of children, and different sexes.
- 13. The great majority of bicycle fatalities occur in collisions with motorcars.

14. The increasing use of bicycles by adults can be expected to increase the magnitude of the bicycle safety problem.

VIII. RECOMMENDATIONS

The National Transportation Safety Board recommends that:

- 1. The National Highway Traffic Safety Administration employ part of its research funds to explore and develop effective methods of integrating training for bicycle operation and automobile driving. The effort should be directed to the needs and capabilities of children and young people as they pass successively through the ages typical of bicycle riding and into automobile driving.
- 2. The National Highway Traffic Safety Administration, when and if it develops a method of bicycle training which can support later driver education, reconsider the desirability of a highway safety program standard for bicycle safety in light of the potential value of bicycle training for safe motor vehicle operation.
- 3. The National Highway Traffic Safety Administration coordinate its activities in bicycle safety research and possible program standards with the Department of Health, Education and Welfare, particularly with respect to design characteristics of bicycles.
- 4. The Department of Health, Education and Welfare, in its research on bicycle safety, focus on specific design features and their combinations with respect to accident/injury potential, as well as the kinds of operators and operator behavior associated with given design features.⁷²⁻⁹
- 5. In the Department of Transportation's efforts to encourage the use of bicycles for reasons of reduction of traffic congestion and air pollution and promotion of healthful exercise, the National Highway Traffic Safety Administration and Federal Highway Administration be actively involved to assure that safety is given full consideration.