

UTC Project Information	
Project Title	An Overview of System Design Issues Related To Safety Aspects of Bicycle Infrastructure (Former titles: Safety Aspects of the Design of Bicycle Transportation Infrastructure AND THEN Design of Bicycle Infrastructure for Safety)
University	San José State University Mineta National Transit Research Consortium
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Funding Source(s) and Amounts Provided (by each agency or organization)	Research and Innovative Technology Administration University Transportation Centers Program (\$9,400) California Department of Transportation Office of Research—MS42 (\$9,400)
Total Project Cost	\$18,800
Agency ID or Contract Number	DTRT12-G-UTC21
Start and End Dates	June 2012 – January 2016
Brief Description of Research Project	<p>The purpose of this report is to provide a critical review of the current practices and policies regarding infrastructure design for bicycling. The infrastructure is discussed primarily from a system perspective.</p> <p>The wide range of bicyclists' physical characteristics (such as size, power, skill, response to road and traffic conditions) makes it challenging for the designer to design bicycle facilities with the same sophistication and safety as facilities for motor vehicles. An attempt should be made to integrate the design standards for motor vehicles and bicycles into common design manuals. Incompatibility of the standards may make it clear when separate facilities for bicyclists should be considered and when bicyclists should not be allowed on a road.</p> <p>Bicycling has been promoted based substantially on health benefits and the reduction of environmental impact without stating the risks of injury and death as well as musculoskeletal injuries resulting from overuse. This has led to an increase in the provision of bike paths and bicycle lanes, including re-designating general traffic lanes to exclusive use by bicyclists. A</p>

	<p>study1 showed that it is more cost-efficient to remove pollutants by allocating funds to improve traffic flow and public transportation than allocating those funds to some bicycle facilities. Re-designating general-use traffic lanes as bike lanes could also cause congestion, which could increase air pollution. Consideration should be given to promote bicycling for exercise and recreation on trails and to prohibit bicycling in areas where large differences in speed and crossing maneuvers at high speed could occur, such as in the vicinity of busy traffic interchanges.</p> <p>It is the author's view that the way in which safety improvements for bicyclists is approached should be fundamentally changed. Decreasing fatalities and injuries should be considered for the transportation system as a whole instead of trying to decrease the fatalities and injuries to bicyclists alone by implementing countermeasures.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	 <p>http://images.smh.com.au/2012/10/03/3684400/jabike1_20121003140913255963-620x349.jpg</p>
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links	Final report (MNTRC Website):

<ul style="list-style-type: none">• Reports• Project Website	http://transweb.sjsu.edu/project/1125.html
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