


UTC Project Information	
Project Title	The Challenge of Protecting Transit and Passenger Rail: Understanding How Security Works Against Terrorism (Former Title: Transit and Rail Security: A Critical Assessment of What Works)
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 (\$32,469) California Department of Transportation Office of Research—MS42 (\$32,469)
Total Project Cost	\$64,938
Agency ID or Contract Number	DTRT12-G-UTC21
Start and End Dates	June 2012 – December 2016
Brief Description of Research Project	<p>Terrorists see transit and passenger rail as an attractive target. Designed for public convenience, trains and stations offer terrorists easy access to crowds of people in confined environments where there are minimal security risks and attacks can cause high casualties. This report examines the unique attributes of the terrorist threat, how security measures against terrorism have evolved over the years, and their overall effectiveness.</p> <p>Does security work? Empirical evidence is hard to come by. Terrorist incidents are statistically rare and random, making it difficult to discern effects. The fact that terrorists focus most of their attacks on targets with little or no security suggests that security influences their choice of targets. Increased security does not reduce terrorism overall, but appears to push terrorists toward softer targets. These indirect effects are visible only over long periods of time.</p> <p>Public surface transportation poses unique challenges. It is not easy to increase security without causing inconvenience, unreasonably slowing travel times, adding significant costs, and creating vulnerable queues of people waiting to pass through</p>

	<p>security checkpoints. This has compelled rail operators to explore other options: enlisting passengers and staff in alerting authorities to suspicious objects or behavior, random passenger screening, designing new stations to facilitate surveillance and reduce potential casualties from explosions or fire, and ensuring rapid intervention.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p>	<p>Jenkins, Brian. "Transit and Passenger Rail Security: A Critical Assessment of What Works." Presentation at the Conference of Minority Transportation Officials Transit Executives, Jacksonville, FL, July 15, 2013.</p> <p>Jenkins, Brian. "How Safe is America Today?" Presentation at the California Commonwealth Club, San Francisco, CA, June, 2013.</p> <p>Jenkins, Brian. "Coping with Terrorism in Transportation: The Role of Human Factors." Presentation at the International Union of Railways Workshop, Paris, France, June 16, 2015.</p> <p>Jenkins, Brian. "Passenger Rail Security." Presentation at the AMTRAK Security Meeting, Philadelphia, PA, December 9, 2015.</p> <p>Jenkins, Brian. "Mass Transit and Passenger Rail Security." Presentation at the 2016 Security and Emergency Management Roundtable, Phoenix, AZ, June 17, 2016.</p>

<p>Place Any Photos Here</p>	 <p>http://www.metro-magazine.com/images/articles/M-MET7Rail-LAMetro.jpg</p>
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>Final report (MNTRC Website): http://transweb.sjsu.edu/project/1130.html</p>