

AASHTO Technology Implementation Group
Nomination of Technology Ready for Implementation
2005 NOMINATIONS DUE BY FRIDAY, SEPTEMBER 9, 2005

Sponsoring DOT	1. Sponsoring DOT (State): California								
Primary Technical Contact	2. Name: George M. Jenkinson Organization: Caltrans Address: 1227 O Street, MS 83 City: Sacramento State: CA Zipcode: 95814 E-mail: mjenkins@dot.ca.gov Phone: (916)657-3867 Fax: (916) 657-4580								
Technology Description	3. Name of Technology: Positive Work Zone Protection Device (Balsi Beam)								
	4. Briefly describe the technology. The Balsi Beam is a barrier system that provides positive protection for a 30' moveable work zone. The Balsi Beam can be moved to the worksite at normal traffic speeds under its own power and once at the work site can be deployed in as little as 10 minutes. Once deployed the Balsi Beam provides 3 sides of positive protection for a 30' work zone. The Balsi Beam has the capability of providing positive protection that allows access from either the left or right side.								
	5. Briefly describe the history of its development. In response to a work zone accident Caltrans designed and contracted with the Murry Trailer Company to manufacture the Balsi Beam. Caltrans then performed accident testing with the Balsi Beam to demonstrate the capabilities for redirection of errant vehicles without intrusion into the work zone. The Balsi Beam has been in use within Caltrans by bridge maintenance crews since 2004.								
State of Development	6. For how long and in approximately how many applications has your organization used this technology? The Balsi Beam entered service on July 25, 2003 and has been used as a pool vehicle throughout the state since that date.								
	7. What additional development is necessary to enable routine deployment of the technology? Caltrans is presently performing a Risk Assessment and Cost/Benefit Research project for the Balsi Beam to provide managers with a decision matrix on how to assign the limited number of units for the most beneficial effect. Caltrans is also evaluating different opportunities such as modifying the basic Balsi Beam to be more than just a barrier vehicle but as a work vehicle that provides barrier protection.								
	8. Have other organizations used this technology? If so, please list organization names and contacts. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Organization</th> <th style="text-align: left;">Name</th> <th style="text-align: left;">Phone</th> <th style="text-align: left;">E-mail</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Organization	Name	Phone	E-mail				
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Potential for Payoff	9. What benefits has your organization realized from using this technology? Include cost savings, safety improvements, transportation efficiency or effectiveness, environmental benefits, or other advantages over other existing technologies. Quantitative results will be available at the end of the cost/benefit study but non-quantitative responses from workers that use the Balsi Beam are very positive and they have the impression of greater efficiency and safety.								
Implementation Potential	10. Please describe what actions another transportation agency would need to take to adopt this technology. Apply for license from Caltrans to build and use their own Positive Work Zone Protection Device (Balsi Beam).								

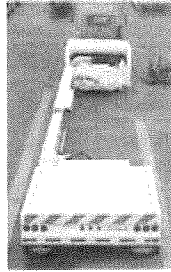
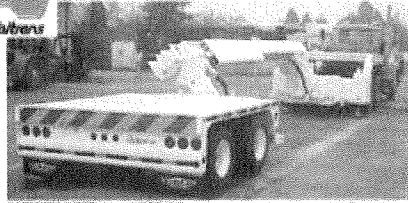
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	<p>11. What is the estimated cost, effort, and length of time required for procurement or adoption by another transportation agency? Present cost for manufacture in California by the Murry Trailer Company is approximately \$300,000 including a tractor. Cost most likely will be lower in other states. The time required to build the trailer by Murry Trailer Company is approximately 4 months.</p> <p>12. What organization(s) currently supply and provide technical support for this technology? Murry Trailer Company has built all 2 trailers to date.</p> <p>13. Please describe any legal, regulatory, social, intellectual property, or other issues that could affect ease of implementation. Caltrans has an application filed for a patent on the technology and will provide license for production and use of the technology.</p>
Willingness to Champion	14. Is the sponsoring DOT willing to promote this technology to other states, if partially supported by the AASHTO Task Force on Technology Implementation? X Yes <input type="checkbox"/> No
Date Submitted	15. Date: September 8, 2005

16. Please include image(s) of sketches or photographs, if available 2 image(s) are attached.



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Patent Pending

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