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**TxDOT Implementation Status**

January 2001

The research program developed more than 150 products. Many of these products have been or are being implemented by TxDOT. Some of the products will be implemented in the future.

An Implementation Plan and Recommendation (IPR) has been approved to assist with further implementation of these products.

The TxDOT funds will be used to continue to implement these products in the districts and divisions. Some of the tasks included in the IPR are:

- developing and presenting workshops to TxDOT personnel,
- developing design guides for specific products and applications,
- providing technical assistance with field implementation at specific district locations, and
- maintaining a record of site-specific applications and posting them on the TxDOT intranet for reference and use by the districts and divisions.

For more information, please contact Dan Maupin, P.E., RTI Research Engineer, (512) 302-2363 or email dmaupin@dot.state.tx.us.

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Traditional research projects often have limited scopes and budgets resulting in less than optimum results. The ITS Research Center of Excellence provided a long-term commitment to several themes that allowed sustained effort on several initiatives, fostering an opportunity for creative investigation. This approach allowed researchers the opportunity to solve problems identified in the research in a timely fashion.

The best example of the value of this research approach is the work relating to railroad preemption of traffic signals. It became apparent from the collaboration of several efforts, two outside the ITS Research Center of Excellence, that a serious safety issue existed. Building on the knowledge developed in several projects, the ITS Research Center of Excellence developed a comprehensive training module to help traffic engineers understand the complex issues.

Another benefit of this type of project resulted from the partnership structure of the project that allowed for leverage of both ideas and resources. Joint funding allows sharing of resources. Perhaps more important, the partnerships enable the sharing of ideas. Transportation system operation is a complex issue involving multiple agencies, multiple disciplines, and multiple jurisdictions. Solutions that provide maximum customer satisfaction require bridging the differences this institutional complexity brings to transportation system operation. The Texas A&M Research Center of Excellence was successful in developing solutions that bridge institutional boundaries because of the nature of the partnerships.

The Researchers Recommend . . .
The research team recommends that TxDOT consider opportunities in the future to focus project funding on topically oriented programs that require sustained effort and diverse resources to:

- achieve mission-critical goals
- take advantage of the benefits of research partnerships.

The many products developed in the project will be delivered directly to districts using research implementation funding. The picture shows how a railroad preemption workshop might be delivered using actual field equipment.

### PRINCIPAL RESEARCH EFFORTS

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<thead>
<tr>
<th>Project</th>
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<tr>
<td>TM-01</td>
<td>Develop Real-Time, Multimodal Traffic Adaptive Diamond Bi-level Change Control System</td>
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<td>Enhance Transit Operations and Innovative Services</td>
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<td>Develop an Intelligent Bus Priority Algorithm for Arterial Street Systems</td>
<td>IH-01</td>
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<td>Screen New Technologies for Traffic Detection</td>
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<td>IH-01</td>
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