

Texas Transportation Institute

**Compact with The Texas A&M University System
FY 2008 – 2009**

The Texas Transportation Institute (TTI) is an agency of the State of Texas and a member of The Texas A&M University System.

MISSION

Our mission, consistent with the A&M land-grant designation, is to: 1) identify and solve transportation problems through research; 2) transfer technology and knowledge; and 3) develop diverse human resources to meet the transportation challenges of tomorrow.

VISION

Our vision is to be a premiere higher education-affiliated transportation research institute sought out by organizations from all over the world to solve transportation problems.

CEO STATEMENT

Established in 1950, TTI serves the state and nation as a focal point for transportation research. In our almost 60-year history, TTI has made fundamental research breakthroughs in many vital transportation areas, including safety, materials, structures, urban system operations, and planning.

The quality of life provided to Texans as well as state and national economic competitiveness depends on how well transportation issues are addressed. In a resource-constrained world, the need for innovation to address the many transportation challenges is crucial. Indeed, the need for what we at TTI do is as great, or perhaps greater, than it has ever been.

The Institute is, by far, the largest higher education-affiliated transportation research group in the country. TTI has a breadth and depth of staff capability that are simply unmatched. We provide leadership and innovation in virtually all aspects of transportation research. Our program of research primarily focuses on today's major transportation issues: 1) safety; 2) mobility and congestion; 3) environmental quality; 4) funding and project development; 5) infrastructure rehabilitation and maintenance; 6) security; 7) freight movement/intermodalism/globalization of trade; and 8) workforce development.

In addition to this Compact, the Texas Transportation Institute has recently updated our Strategic Plan and developed a Risk Management Plan. This Compact relates closely to both of those documents, and they provide additional supporting information.

The TTI Strategic Plan was developed with input from many individuals. It has gone through numerous iterations; it is dynamic and will be continually updated. The plan is being used to provide clear guidance to management as we establish priorities, allocate resources and make critical decisions. While accomplishment of all the Imperatives in the Strategic Plan will require several years, the plan outlines the specific activities and outcomes that will occur in the next few years, as well as identifies how those will be measured.

We have developed a clearly stated Strategic Plan that, as implemented, will help lead to: 1) a robust, growing program of research that addresses critical issues and is undertaken by a highly qualified and professional staff; 2) a reduction in the risks, both internal and external, to which the agency is exposed; 3) a more informed, qualified and diverse staff; and 4) enhanced communications, both internal and external to the agency.

We are a strong agency today. Implementation of this plan will make TTI even stronger and more strategically positioned as we move into the future.

Effective November 2006, I was named as the new TTI Director, and I established a new leadership team. The Institute was in the enviable position of being strong, giving our new leadership an opportunity to build on those strengths.

The new leadership is developing consensus agency goals and strategies. We are defining, at the outset, what constitutes “success.” We are establishing key metrics to measure our progress and success.

As part of that effort, much of our Strategic Plan calls for, in effect, quantifying where we are now, appropriately benchmarking ourselves, and beginning to formally collect the data we will use to measure our progress. Once this early work is completed, we will be in a better position to manage and lead the agency and to attain the goals we establish.

The work set forth in the Strategic Plan is ambitious. We have widespread buy-in from our staff as to what we want to accomplish, and we plan to attain the aggressive program that we have set forth.

The Strategic Plan identifies numerous specific accomplishments that we will achieve over the next two years. The specific elements included in this Compact are representative of the wide range of initiatives being pursued by the agency.

This Compact represents a commitment by the Agency Director to specific accomplishments over the next two years that will help lead to attaining some of our agency’s important strategic goals.

Priority #1: Reduce agency risk by managing circumstances that could adversely impact the viability of the agency and its research program.

Link to Strategic Plan: Imperative #2

Objective of Priority #1: Diversify the research portfolio so not more than 50% of TTI total contract expenditures originate from any single sponsor by the end of FY '10.

Strategies:

- Outline an overall plan for diversifying the research program (Year End FY '08).
- Require associate/assistant directors to sign a compact with the director specifying how their part of the organization will diversify funding between FY '08 and FY '10 (Year End FY '07).
- Implement an incentive program to encourage research staff to compete for funding from non-traditional research sponsors (3rd Q FY '08).
- Develop and implement training seminars to raise TTI staff awareness of available research opportunities (1st Q FY '08).

Performance Measures:

- Total TxDOT expenditures will account for less than the FY '06 percentage (62%) of total TTI research expenditures (Year End FY '08). (5-year historical trend: FY '02, 61%; FY '03, 68%; FY '04, 63%; FY '05, 64%; FY '06, 62%)
- Total TxDOT expenditures will be less than 58% of total TTI research expenditures (Year End FY '09).
- Performance measures 1 and 2 will be accomplished without reducing TxDOT contract research expenditures from FY '06 levels (Year End FY '08 and FY '09).

Budget Impact and/or Resources Required:

- In the longer run, this approach will actually increase revenues by increasing our overall indirect cost return. In the short run, some redistribution of funding will occur.
- The incentive program that is in place will result in up to \$500,000/year (indirect cost money) being placed into accounts controlled directly by the researchers. This program was implemented in FY '07.
- TTI staff will spend approximately three days per year in training activities, similar to those referred to in the "Strategies" section of this Priority. With limited exceptions, funding will not be allocated to cover the time spent in training; similar to proposal preparation time, that time will be charged to projects.

Challenges to Success: This Priority represents a significant change in how TTI pursues new research contracts. It will take time, and some staff resistance can be expected. It assumes an adequate amount of research funding will be available.

Collaboration/Support Needed (Internal and External to A&M System):

This Priority can be accomplished entirely within TTI with support from the Research Foundation or A&M System Research Administration Office in implementing selected contracts.

Priority #2: Enhance TTI's relationships with the academic community and expand our research partnerships with academia.

Link to Strategic Plan: Imperative #3

Note: This compact Priority addresses only the transportation certificate program aspect of Imperative #3. The Strategic Plan also lays out an approach for several additional goals that will further enhance academic programs in transportation.

1st Objective of Priority #2: Develop a transportation planning certificate program involving multiple colleges at Texas A&M University.

Strategies:

- Complete the certificate approval process within the College of Architecture (1st Q FY '08).
- Prepare marketing materials for the certificate program (3rd Q FY '08).
- Develop three new graduate courses (Year End FY '09).
- Enroll six students in the certificate program (1st Q FY '09).
- Award one graduate assistantship (LAUP), 6 UTCM fellowships, and 4 \$1,000 scholarships (LAUP) (Year End FY '09).

Performance Measures:

- 45 students will be enrolled in the certificate courses (Year End FY '09).
- 10 students will be enrolled in the certificate program (Year End FY '09).
- 6 certificates will be awarded to graduating students (Year End FY '09).

Budget Impact and/or Resources Required: The TTI University Transportation Center for Mobility (UTCM) federal funds will provide approximately \$76,000 in FY '08 and \$80,000 in FY '09 to develop and implement the certificate program.

Challenges to Success: This is a multi-college collaboration to create a new program. Many processes will need to be followed. TTI does not control the schedule for some of the processes. For example, possible delays in the approval of the certificate program may occur, and effective student advising (also a non-TTI function) is essential to ensure timely student graduation. The program is needed and will be successful; procedural issues may extend the required implementation time.

Collaboration/Support Needed (Internal and External to A&M System):

The certificate program is being developed as a partnership between the Department of Landscape Architecture and Urban Planning, TTI, the Civil Engineering Department, and the Bush School of Government and Public Service. Other Texas A&M colleges may join in the collaboration as it moves forward.

2nd Objective of Priority #2: Define and implement, in partnership with Prairie View A&M University, a program to attract top minority students into transportation with a potential pipeline to Texas A&M and possible eventual employment at TTI.

Strategies:

- Advance and expand the Summer Transportation Institute (STI) at PVAMU (4th Q FY '08).
- Host joint workshop for PVAMU and TAMU faculty and TTI staff to develop specific plans for joint research proposals (1st Q FY '08).

Performance Measures:

- The number of high schools solicited for participation in the program will increase from 100 to 110 (4th Q FY '09).
- The number of applications received for new STI students will increase from 30 to 35 (4th Q FY '09).
- Two STI students will apply to return to the STI program for a second year (4th Q FY '09). (Currently, the program does not allow for multiple years of participation.)
- Conduct a survey of STI participants who have gone through the program in the last 10 years (and can be located) to determine the rate at which participants go to college and major in engineering (4th Q FY '09).
- One joint PVAMU/TTI research proposal will be submitted for funding (4th Q FY '08).

Budget Impact and/or Resources Required: The TTI University Transportation Center for Mobility (UTCM) federal funds will provide approximately \$70,000 in FY '08 and \$50,000 in FY' 09 to develop and implement the program.

Challenges to Success: This program is a different way of doing business for Prairie View A&M. Their relatively small number of faculty limits the time that can be made available for even the most promising of opportunities. To the extent possible, TTI will provide support to help advance this program, but completion of some tasks is beyond the control of TTI.

Collaboration/Support Needed (Internal and External to A&M System)

This objective requires active participation from both Prairie View A&M faculty and Texas A&M Department of Civil Engineering faculty. The successful advancement of this initiative will be dependent on follow through from all the involved parties. The TTI Associate Director is working directly with the Head of the Department of Civil Engineering at PVAMU, who is also the TTI Regional Division Head at PVAMU. They have jointly developed these strategies and performance measures and have committed to the ongoing pursuit of them.

Priority #3: Assure that TTI employees have needed opportunities to grow professionally, and enhance the recognition we give to our employees

Link to Strategic Plan: Imperative 5

Note: This compact Priority addresses only the leadership development aspect of Imperative 5. The Strategic Plan also lays out an approach for employee training and enhanced employee recognition.

Objective of Priority #3: Establish a program of leadership development and employee training and recognition.

Strategies:

- Develop the leadership development program, which is adapted from a highly successful program of this type now being used by Trinity Industries (2nd Q FY '08).
- Develop internal procedures for selecting program participants (2nd Q FY '08).
- Implement a pilot TTI leadership group involving approximately 10-15 TTI staff (Year End FY '08).
- Review the pilot program, make modifications as necessary, and implement the second year of the program (Year End FY '09).
- Encourage program graduates to participate in promotional seminars to recruit participants for year 2. (Year End FY '08).

Performance Measures:

- 90% of the participants of the pilot program will successfully complete the program (Year End FY '09).
- Program participants will rate the program at “meets expectations” or above (Year End FY '09).

Budget Impact and/or Resources Required: From TTI funds (indirect cost), TTI has allocated up to \$40,000 annually in support of this program.

Challenges to Success: Based on the Trinity Industries' experience, we expect this to be well-received by our staff and highly successful. The process of how it is initiated and presented to the staff will need to be well-planned to help ensure a successful reception. An internal team is currently developing those plans.

Collaboration/Support Needed (Internal and External to A&M System)

The program will be implemented under the leadership and direction of TTI with possible use of leadership programs already developed and taught at Texas A&M. Trinity Industries executives are providing advice and guidance on this program at no cost to TTI.

Compact Review and Approval

Date: November 2, 2007

TAMUS Member: Texas Transportation Institute

Signature: **[ORIGINAL SIGNED BY]**

TAMUS Member CEO: Dennis L. Christiansen, Ph. D., P.E.
Director, Texas Transportation Institute

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