



SPTC Implementation Project Support

Request for Proposals

FY17.1 SPTC Funding Competition

<http://www.sptc.org>

SPTC Target Awards Notification Date: September 30, 2017

Target Earliest Contract Start Date: October 15, 2017

Contract End Date: May 30, 2018

Final Reports Due: June 30, 2018

This Solicitation may be amended by the Southern Plains Transportation Center (SPTC).

Notification will be placed on the SPTC web site.

It is the responsibility of the applicant to review any such amendments and make necessary changes in the application to meet the amended solicitation requirements.

This solicitation is available on the SPTC web site at www.sptc.org.

The *Proposals* will **only be received electronically at sptc@ou.edu**.

Application Deadline: Wednesday, August 30, 2017, 5:00 p.m. (CST)

Contact: General inquiries about this RFP should be addressed to:

Dominique Pittenger, Ph.D.

Technical Director

Southern Plains Transportation Center

The University of Oklahoma

Five Partners Place, Suite 4200

201 Stephenson Parkway

Norman, OK 73019

E-Mail: dominiquep@ou.edu

SPTC Office Phone: (405) 325-4682; E-mail: sptc@ou.edu

(Additional contacts are listed on page 4 of this RFP)

Additional Required Submission Documents are available at <http://www.sptc.org>:

Proposal Cover Page Form, SPTC17.1 Budget Form.

TABLE of CONTENTS

SPTC17.1 FUNDING COMPETITION Request for Proposals (RFP)..... 3

SPTC PROGRAM OVERVIEW..... 3

ELIGIBILITY, FUNDING LEVELS, AND LENGTH OF FUNDING 4

MATCHING REQUIREMENTS FOR FUNDING 4

DISCLAIMER..... 5

EVALUATION CRITERIA 5

REVIEW PROCESS 6

SUBMISSION REQUIREMENTS 6

REQUIRED MATERIALS 7

PREPARATION INSTRUCTIONS 7

RELEASE OF INFORMATION..... 12

REGULATORY ISSUES 12

FINANCIAL RECORDS 12

PERFORMANCE EVALUATION..... 12

PROPOSAL PREPARATION ASSISTANCE 13

Southern Plains Transportation Center (SPTC)
Implementation Project Support
SPTC17.1 FUNDING COMPETITION
Request for Proposals (RFP)

SPTC PROGRAM OVERVIEW

The Southern Plains Transportation Center (SPTC) was funded as a Regional University Transportation Center (UTC) for Region 6 on October 1, 2013. The federal funding was authorized by Congress under the Moving Ahead for Progress in the 21st Century Act (MAP-21). The SPTC consortium has received approximately \$2.59 million per year for two years (FFY2014 and 2015) and \$2.55 million for FFY2016 from the Research and Innovative Technology Administration (RITA), which coordinates the research programs of the U.S. Department of Transportation (USDOT) through the Office of the Assistant Secretary for Research and Technology (OST-R). The Oklahoma Department of Transportation (ODOT) provides match for the RITA award through its State Planning and Research (SP&R) program.

The University Transportation Centers (UTCs) support activities that directly reflect the priorities of the USDOT to promote safe, efficient and environmentally sound movement of goods and people. The SPTC consortium is led by The University of Oklahoma in partnership with Langston University, Louisiana Tech University, Oklahoma State University, Texas Tech University, The University of Arkansas, The University of New Mexico, and The University of Texas at El Paso. The SPTC programs support the USDOT's Strategic Goal of *State of Good Repair*.

The impact of weather extremes on the U.S. economy is staggering. Recent severe droughts have resulted in losses worth nearly \$9 billion annually to managed systems in Oklahoma and Texas alone, including transportation infrastructure. Extreme summer temperatures, flash floods and large numbers of freeze-thaw cycles, coupled with poor soils in Region 6 states, create monumental challenges to transportation infrastructure's service life and public safety. Increased truck traffic and limited financial resources available to transportation agencies for construction, maintenance, and preservation of infrastructure exacerbate these weather-related transportation infrastructure durability challenges. In addition, freight movements across modes - including highways, rail, and inland waterways - are significantly impacted by weather extremes. Consequently, ***Climate Adaptive Transportation and Freight Infrastructure*** is the primary focus of the SPTC's research, education and outreach activities.

The SPTC Strategic Plan emphasizes research projects which produce implementable results that are economically beneficial to the improvement of our region's and nation's transportation systems as well as increase collaboration and cooperation among the consortium members and industry partners through funding meritorious and collaborative proposals. The funded projects will advance the Strategic Plan of the SPTC and enhance the ability of our transportation and freight infrastructure to meet the needs of our stakeholders.

SPTC has one-time funding available to support small, short duration projects to develop implementable solutions to transportation problems. A small additional investment that builds on existing SPTC projects that are on the cusp of being implementable may provide the needed impetus to bring these projects to fruition. Implementation has many meanings; it could include but is not limited to bringing a product or process to market (commercialization); conducting a pilot project with the

DOT where new research materials, testing or construction methods are demonstrated; or technology implementation and training activities that bring research results to industry and engineering practice.

ELIGIBILITY, FUNDING LEVELS, AND LENGTH OF FUNDING

Additional Notes:

- The lead applicant must be a consortium member. Partnerships with additional universities and colleges as well as the private sector are encouraged.
- Purchases of equipment (items exceeding \$5,000 per unit) are not allowed.
- Proposals may include requests up to \$40,000 in SPTC support for 7-month projects.
- It is anticipated that four projects can be supported at the maximum funding level.
- No-cost extensions are NOT allowed. All project funds must be expended within the 7-month project period. Any unexpended funds remaining at the end of the project period will be forfeit.

MATCHING REQUIREMENTS FOR FUNDING

Dollar-for-dollar match is required for projects selected for funding. Each project must show qualified matching funds equal to or greater than the amount requested from the SPTC. As established in the federal grant regulations issued by the Office of Management and Budget (OMB), matching funds may be cash or in-kind. However, all matching funds must be fully documented and carefully accounted for.

Matching funds may come from the following sources: any private source such as a company or a foundation; any state agency including those from other states; a limited number of federal flow-through funds, which includes State Planning and Research funds (SPR) as well as Tribal Technical Assistance Program (TTAP) funds or Local Technical Assistance Program (LTAP).

Note: for federal funding to qualify as matching, federal funds must come from accounts under sections 503, 504(b), or 505; Title 23 of the United States Code. Caution must be exercised in using state funds as matching, since many sources of state funds are actually federal flow through funds. Questions regarding allowed sources of government matching funds may be addressed to the Technical Director.

Documentation of the original source of all matching funds must be included in the proposal.

Each proposal must demonstrate that the matching funds and the SPTC funds will be expended in a manner that will create a unified project.

The following examples are included as illustrations:

- A company provides a cash match during the course of the proposed project.
- A PI or Co-PI has secured SPR funds that will co-support the project.

- Private sector researchers work on their share of the proposed project using company funds including their salary as the cost share, while the PI and his/her team use the SPTC funds to work on the project.
- A company provides services and materials to the PI for use in the SPTC project. Personnel salaries for those who directly work on the project as well as normal fringe benefits may be included as match.
- A new faculty member has start-up funds provided by non-federal sources that can be used to co-fund the project.

DISCLAIMER

This solicitation is intended for informational purposes and reflects the current planning; it does not obligate the SPTC to make any specific number of awards. Amendments to this RFP will be posted on the official SPTC web site (<http://www.sptc.org>). All awards under the SPTC program are contingent upon the availability of funds.

It is the intent of the SPTC to notify applicants by September 30, 2017 if an award will be made with a potential project start date of October 15, 2017 for projects that are ready for contract. No delays in start date may be requested by applicants.

EVALUATION CRITERIA

Proposals must demonstrate that proposed projects will have a high likelihood of producing implementable results. Toward that end, the following review criteria is weighted heavily toward short term impacts.

Merit of the project (10%)

- The degree to which the proposal reflects an understanding of the scope listed in this RFP
- Significance of the proposed work, and the degree to which it addresses implementable solutions to transportation and freight infrastructure challenges and issues that are important to Region 6 and the nation
- The creativity and perceived benefits of the proposed project, including economic benefits
- The degree to which workforce development is addressed
- The degree to which it addresses the SPTC focus and Strategic Plan
- The degree to which SPTC funds are leveraged beyond the required match

Ability to perform the project (10%)

- The appropriateness of the proposed techniques, methods, and processes
- The qualifications of the project team
- The adequacy of the existing and/or proposed resources, including facilities

- The appropriateness of the budget and the quality of the match
- The appropriateness of proposed time schedule

Potential for long-term impact (10%)

- The degree to which the proposal advances the SPTC mission and vision
- The degree to which the proposal meets the needs of government, industry, and other key SPTC constituencies
- The degree to which the project establishes or strengthens collaboration among SPTC stakeholders
- The degree to which the project produces implementable results and actual implementation (e.g., technology, test methods, special provisions, specifications, QC/QA tools, etc.)

Potential for short-term impact (70%)

- Probability that proposed project will produce implementable results and actual implementation within the 7-month project period
- Degree to which implementation is achieved through real pilot project demonstrations, trial applications in practice, training of technology users, or other viable use of the technology in transportation enterprises
- Potential beneficial impacts of project for transportation stakeholders

REVIEW PROCESS

Proposal Review: Proposals will be reviewed by the SPTC Associate Directors at each of the eight partner institutions. Each associate director will review, score, and rank the proposals based on the evaluation criteria above using a scoring sheet provided by the SPTC. Associate Directors will review all of the submitted proposals except those submitted by their home institution. The rankings will be compiled by the SPTC Technical Director and the top ranked proposals will be selected for funding. Note that the ranking and not the scores from individual Associate Directors will be compiled and used to determine the overall rankings of individual proposals.

Because of the limited scope of this solicitation and relatively low funding levels involved, reviewer comments will not be provided to proposers.

All issues related to intellectual property rights will be the responsibility of the submitting organization(s) and will be subject to applicable state and federal laws.

SUBMISSION REQUIREMENTS

All materials must be submitted electronically to sptc@ou.edu.

Proposal Materials

Proposals must be e-mailed to sptc@ou.edu to meet the deadline. An e-mail reply will be sent during business hours (8:00 a.m. - 5:00 p.m.), Monday through Friday, as well as shortly after the deadline to affirm receipt. The submitter may telephone the SPTC at (405) 325- 4682 to affirm receipt during business hours. **Proposals will not be accepted via facsimile.**

This solicitation is available online at <http://www.sptc.org>. No supplemental materials related to the proposal will be accepted after the deadline, except at the request of the SPTC. The SPTC may return proposals that are judged to be incomplete or inappropriately completed, without review.

NO PROPOSALS WILL BE ACCEPTED AFTER THE DEADLINES. NO EXCEPTIONS WILL BE MADE.

REQUIRED MATERIALS

Send an electronic copy of the entire proposal as a single file using the Adobe Acrobat™ (.pdf). This file must be named SPTC17.1-PI Last Name.pdf, (e.g., SPTC17.1-15-Doe.pdf). Note that an individual can submit only one proposal as the PI.

One electronic file	The entire proposal including the transmittal letter in Acrobat .pdf format.
Awardees will be required to supply two additional files.	Do not send these Word files until requested. <ul style="list-style-type: none">• The Cover Page Forms, in MS Word format.• An updated Summary of the project in MS Word format addressing changes, if any, suggested by the SPTC.

PREPARATION INSTRUCTIONS

The instructions below must be followed carefully. Proposals that are difficult to read, exceed page limits, violate format requirements, or omit required sections may be returned without review. Acrobat files should be prepared using *Acrobat Pro X* or higher as direct conversions from Word or Excel and not prepared as scanned documents.

General

1. All proposal materials must be prepared on 8½ x 11-inch sheets with 1.0 inch margins on all four sides.
2. Acceptable fonts and font sizes include Arial, Helvetica and Palatino in 10 point font or larger; and Times New Roman and Computer Modern in 11 point font or larger. The font size for inserted symbols or equations must be selected to best match the text of the proposal. No less than single line spacing is allowed.
3. Material must not be appended in an effort to circumvent the page limitations.
4. Number all pages beginning with Section I (below).

Required Proposal Sections

Each proposal must include the following sections in the order indicated. If a section is not applicable it must be included, but denoted “Not Applicable.”

Cover: The first page shall be an official transmittal letter from an authorized institutional representative.

I. Cover Page Form (Items A-J) (required)

Use the Cover Page Form provided. The Cover Page Form is public information.

II. Summary (one page maximum) (required)

The summary must be a self-contained document, suitable for publication explaining the activities that will produce expected results and the impact of those results, if the project is funded. The Summary must be prepared in simple text format with no graphics, equations and tables. One must get a clear view of the proposed project from the summary. The Summary is public information, and it will be posted to the TRB Research in Progress web site.

III. Table of Contents (not exceed 1 page) (required)

The Table of Contents may be prepared in any generally accepted format.

IV. Project Description (4 pages maximum, including figures and charts, for sections A-E.) (required)

The outline below is based on a typical 10-page SPTC proposal. Given the limited scope of this solicitation, **the project description is limited to 4 pages**. Thus, while the items listed are considered important and general order of the proposal outline below should be followed, it is expected that the emphasis of these short proposals will be on discussing how proposed projects will build on current research by the PIs and result in implementation of new/improved technology in the form of methods, products, tools, and processes.

A. Introduction

A.1. Problem Statement: A paragraph that summarizes the problem to be addressed by the project as well as the collaborative approach and broader regional impact of the project.

A.2. Background: very briefly describe the background of the problem being addressed and current state-of-the-art with supporting reference citations (the actual references are placed in the Reference section), and relevance to the SPTC.

A.3. Past and Current Effort: briefly describe the relationship of the proposed project to the past or current efforts by the team.

A.4. Objectives: describe the specific objectives of this project focused on implementation. Include the expected deliverables at the end of the 7-month project.

B. Approach, Tasks, and Timeline

B.1. Approach/Tasks: describe the approach and the tasks proposed to accomplish the project objectives. Describe each task and provide specifics (e.g., the methods to be used, the number of tests to be conducted, number of training sessions held, etc.) that will allow the reviewers to evaluate the strength and innovativeness of the study.

B.2. Timeline: indicate with an X the month(s) for the tasks for the 7-month duration of the project. Use the general format below.

Task Name	Month						
	1	2	3	4	5	6	7
Task 1 (Title)	X	X					
Task 2 (Title)		X	X	X			
Task 3 (Title), and so on				X	X		
Quarterly Report				X			
Task ?? (Final Report)							X

C. Results/Impacts: clearly indicate the expected outcomes or results (e.g., technology, new test method, special provision, specification, QC/QA tools, cost effective maintenance, etc.) of the project. An itemized list of deliverables is preferable. Indicate the significance of these results.

D. SPTC Vision and Mission: explain how the project addresses the SPTC vision and mission including workforce development. In addressing the impact of the proposed work, the proposal must cite the significance of the project to key SPTC constituencies and to national transportation issues.

E. Technology Transfer and Implementation: include plans for technology transfer including papers for presentation or publication; demonstrations to agencies or other organizations; awards, patents, etc. List steps to be taken for the implementation or deployment of the expected products. Describe additional work needed beyond this project, e.g., additional training additional test procedures, or new/changed specifications.

F. Facilities available : Include a brief descriptions of facilities needed for the proposed study and their availability.

V. Matching Funding (1/2 pages maximum)

Proposals must cite the source of the matching funds and explain how the matching funds and the SPTC funds will be expended to create a unified project (see earlier discussion under MATCHING REQUIREMENTS FOR FUNDING). This section must also identify the manner in which SPTC funds will be leveraged beyond the required matching funding.

VI. Prospects for Future Funding (1/2 page maximum)

Proposals must explain how funding the proposed project would enhance the capacity of the applicant's institution to compete for external funds or make the services of the partner SPTC institutions more attractive to stake holders.

VII. References (no page limit)

References must be inserted into the proposal to meet the highest standards of scholarship, but may be cited in any generally accepted format, e.g., Transportation Research Board (preferred) or American Chemical Society for chemistry based proposal. Each reference must be complete including title, source, page number, etc. For web references the complete reference must be provided in addition to the web access point and the date of last access must be within three months of the proposal deadline. Comments or quotations must not be inserted into the Reference Section in an attempt to circumvent page limitations.

VIII. Senior Personnel (2 pages maximum for each PI and Co-PI)

A two-page National Science Foundation Style biographical sketch must be included for the PI and each Co-PI that includes their education, appointments, activities relevant to this proposal, awards, and up to ten publications (up to five most relevant publications and up to five other significant publications). Include a statement of personnel qualifications including experience, capability and past performance.

IX. Budget, Budget Footnotes, and Budget Justification (no page limit)

The budget must be prepared in the format prescribed by the Research and Innovative Technology Administration (RITA) for UTCs. The RITA budget form can be downloaded from the SPTC web site (<http://www.sptc.org>). Sources of matching funds must clearly be identified. The matching funds are detailed by budget line item.

For this solicitation, foreign travel is not allowed.

Each proposal must contain a budget for the 7-months of requested support including match. Since this RFP is for less than one year of funding, no cumulative budget is required. Include a matching funds budget form for each source (separate column but same table) if the project includes more than one source of matching funds. Any restriction on the use of SPTC funds applies equally to matching funds.

Account for all project funds – both monies requested from the SPTC and the proposed matching funds by budget line item. All amounts should be in dollars (no cents). The approved budget amount is established by the reviewers and cannot be increased after the date of the award. If obvious budget items are omitted, provide information regarding the alternative resources available to provide for these items in the budget justification.

Grantees shall comply with Uniform Guidance, 2 CFR 200 as applicable.

Carefully prepare the justification of the budget. Incomplete justification may result in an item being deleted by the reviewers. This is not a spreadsheet, but a sentence and paragraph description of how the funds will be spent. Carefully prepare the budget justification.

Account for all project funds – both monies requested from the SPTC and the proposed matching funds by budget line item. All amounts should be in dollars (no cents). The approved budget amount is established by the reviewers and cannot be increased after the date of the award. If obvious budget items are omitted, provide information regarding the alternative resources available to provide for these items in the budget justification.

Salaries. For each project employee indicate the percent of time or effort in relation to total professional activities. Where appropriate, indicate whether the amounts requested for the Principal Investigators, and other personnel are for summer salaries and/or academic year salaries. Budget fringe benefits to the extent that they are treated consistently by the applicant organization as a direct cost to all sponsors. Explain fringe benefit calculation. Overload pay is not an allowable expense.

Scholarships. Funds may be used to provide student scholarships, i.e., financial assistance which is not compensation for labor. Students, who receive financial scholarship support without compensation for labor, including those under consideration for such honorary programs as the SPTC Student of the Year Award, must be U.S. citizens or permanent residents of the United States.

Tuition. Project funds may be used to provide tuition support to any student, regardless of citizenship status, during the period that the student is actively employed on the grant.

Expendable Property, Supplies, and Services. Tangible items such as expendable laboratory supplies and services such as printing and publication are detailed in this section.

Equipment. Equipment is NOT allowed as part of this solicitation.

Domestic Travel. Divide the justification into two parts: Project Travel and Professional Meeting travel. Describe the purpose of any travel, giving the number of trips and the professional activities involved, the destination(s) and the number of individuals for whom funds are requested. The amount requested for travel must be fully explained.

Foreign Travel. No foreign travel may be requested.

Other Direct Costs. Itemize other anticipated direct costs not mentioned above. When at all possible, budgeted items should be included in a category other than Other Direct Costs.

Facilities & Administrative (Indirect) Costs. Facilities and administrative (F&A) costs, formerly referred to as “indirect” costs, are those incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular project or program. Use your institution’s federally negotiated F&A rate.

Project and Budget Changes. The Grantee shall obtain prior written approval from the SPTC before making any significant changes in the scope or objectives of the Grantee’s approved project. The Grantee shall also obtain prior written approval from the SPTC for transfers of funds among direct-cost budget categories if the cumulative amount of such transfers exceeds 10% of the approved total budget.

X. Proposal Appendices

A. Letters of commitment, e.g., state transportation agencies and private sector entities that will implement the project results. This section must not exceed 3 pages.

RELEASE OF INFORMATION

The SPTC is subject to the Oklahoma Open Meetings Act and the Oklahoma Open Records Act. When preparing proposals and as an awardee, the application team accepts the contents from the Intent to Apply, proposal summary and executive summaries from progress and final reports may be published without obtaining permission from the applicant or applicant organization. Requests for complete proposals will only be honored with notification to the Principal Investigator and in response to an Open Records request.

REGULATORY ISSUES

The PIs institution shall be responsible for assuring and documenting compliance with all State and Federal requirements including, but not limited to, human subjects, vertebrate animals, recombinant DNA, radioactive substances, narcotics and other controlled substances, export controlled technologies, and/or biological hazards, which require special approval or license, before being issued a contract for any portion of the project funded by SPTC. The PIs institution will make these records available to SPTC as requested. The proposal need only note in the “cover official transmittal letter” that approval exists or e.g., an IRB review form has been submitted to the IRB committee.

FINANCIAL RECORDS

The PI’s and Co-PI’s institutions will be responsible for maintaining records and accounts that properly document expenditures and other pertinent matters of all project funds. All such records and accounts shall be made available upon reasonable request by the SPTC for inspection and used in carrying out its responsibilities for administration of the funds.

PERFORMANCE EVALUATION

Acceptance of an SPTC award obligates the PI to submit quarterly progress reports with deadlines as detailed in the subcontract. Final reports, deliverables, diversity, workforce development, and technology transfer plans/achievement summaries are due as detailed in the sub-contract and accessible

for sight impaired readers. Accessibility assistance is provided on the SPTC web site; however, the awardee institution is responsible for preparing the documents. The Annual Impact Survey is due each December 1. This survey is extremely important since it is used to collect a data set to meet RITA reporting requirements.

Evaluation of the UTC Program requires periodic collection of information from investigators and contractors during and beyond the contract period(s). The PI and Co-PIs must provide the SPTC with the requested information during and after the funding period. This information may include, but is not limited to, Impact Survey, Site Visits, and Reverse Site Visits where the PI may be required to present his or her funded project related information to SPTC staff, the SPTC Advisory Board, the FHWA, and other interested parties.

PROPOSAL PREPARATION ASSISTANCE

Proposal preparation assistance will be provided by the SPTC at no charge. Contact the SPTC Technical Director (dominiquep@ou.edu) for assistance, if needed.

This is the last page of this Request for Proposals.