

FLORIDA DEPARTMENT OF TRANSPORTATION

Research Center Procedures

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ABBREVIATIONS

AASHTO	American Association of State Highway Transportation Officials
CFR	Code of Federal Regulations
DSR	Division of Sponsored Research
FHWA	Federal Highway Administration
LTAP	Local Technical Assistance Program
NCHRP	National Cooperative Highway Research Program
PI	Principal Investigator
PM	Project Manager
RAC	Research Advisory Committee
RRF	Request for Research Funding
RFP	Request for Proposal
RIP	Research in Progress (web-based database)
RPC	Research Policy Committee
SCOR	Standing Committee on Research
SDOT	State Department of Transportation
SPR	State Planning and Research
RC	Research Coordinator
T2	Technology Transfer
TRB	Transportation Research Board
TRIS	Transportation Research Information Service

Introduction

This document provides information about the Florida Department of Transportation's research program. Specifically, it addresses the methodology used to administer the research program, the process for contracting research services, the project manager's responsibilities for managing research projects, and the various responsibilities of the Research Center at the program and project levels. The procedures and processes described herein shall apply to all research contracts, whether state or federally funded, unless otherwise noted.

The authority for Research Program is found in Sections 337.105 and 337.106, Florida Statutes, and in Title 23 CFR, Part 420, and Title 49, Part 18.

Program Administration

This chapter covers coordination with the FHWA, TRB and other organizations, the annual selection process, proposal submission, and contract administration.

The functions of the Research Center might broadly be broken into several general categories: program administration, project management, technology transfer, and implementation. This chapter deals with the tasks required to sustain and support a functional and valuable research program. The frontline customer-partner of the Research Center is the group of functional areas within the Department that utilize research to improve the goods and services that they provide to the traveling public. However, the Research Center maintains vital and productive relationships with a host of other entities, including the Federal Highway Administration (FHWA), the Transportation Research Board (TRB), research universities within Florida, other universities and research institutions, other state agencies, and private sector Contractors. Many of these relationships are ongoing and continuous, and the Research Center serves as primary point of contact for the Department.

The Research Center as Liaison

The Department has relationships with local, state, and national organizations. This section will deal primarily with the Research Center's relationships with FHWA and TRB. Other relationships will be dealt with in other sections of this guide.

The American Association of State Highway and Transportation Officials (AASHTO) AASHTO is a non-profit, nonpartisan association that represents the highway and transportation departments of the 50 states, the District of Columbia, and Puerto Rico. It represents all five transportation modes. AASHTO's primary goal is to foster the development, operation, and maintenance of an integrated national transportation system (<http://www.transportation.org/aashto/organization.nsf/homepage/overview>).

Standing Committee on Research (SCOR)

SCOR is the AASHTO Committee charged with staying informed of all transportation research programs in the United States. Sixteen member departments are represented on SCOR. SCOR's responsibilities include soliciting, screening, and prioritizing research proposals for the annual NCHRP project selection. All AASHTO research activities are channeled through SCOR, which makes and reports recommendations to the Association. For more information on SCOR, visit the following website: <http://www.transportation.org/community/committees.nsf/allpages/Research?opendocument>.

Research Advisory Committee (RAC)

RAC is a subcommittee of SCOR. It was established in 1987, subsequent to the establishment of SCOR (which replaced the Select Committee on Research). Unlike SCOR, all 52 member departments are represented on RAC. RAC's general function is to facilitate SCOR's work. Specific responsibilities include the following:

- rate the annual NCHRP research proposals and make recommendations to SCOR
- assist AASHTO member departments with the development of research problem statements for inclusion in the annual NCHRP program
- stay informed of all State-related transportation research utilizing federal funds and advise and make recommendations as necessary
- provide advice, as needed, to SCOR and AASHTO on transportation research issues
- serve on SCOR: the Chair of RAC serves as the Vice-Chair of SCOR, and the Chairs of the four RAC regions serve as non-voting members of SCOR

Research Center staff represent FDOT on RAC. As such, the Research Center mediates FDOT voting on annual NCHRP projects and facilitates the distribution of RAC (i.e., SCOR) generated surveys and other information to the appropriate persons within the Department. The Research Center Director has served as RAC Region II Chair and currently serves as the Vice-Chair of RAC.

Federal Highway Administration Each year, FHWA provides funding for a significant portion of the research program. The basis of this funding is set forth in 23 CFR, Part 420.107, according to which at least 25 percent of the State Planning and Research (SPR) funds apportioned to a State for a fiscal year is to be expended for RD&T activities relating to highway, public transportation, and intermodal transportation systems.

It is the responsibility of the Research Center to ensure that the provisions and requirements set forth in 23 CFR, Part 420, State Planning and Research Program Administration are met (23 CFR 420 may be accessed online at http://www.access.gpo.gov/nara/cfr/waisidx_02/23cfr420_02.html). Key responsibilities include annually providing to the FHWA for approval a list of research projects that utilize federal funding and annually reporting project activity and status.

Peer Exchanges

As a condition of the certification of the Research Program, FHWA requires *peer exchanges* per 23 CFR 420 (Sections 205(b) and 209(5)(7)(b)). Peer exchanges are structured sessions designed to allow the staff of a State's Research Program to engage peers from other states in dialogue in order to discuss the research process and to explore the effectiveness of some particular aspect of the program, or the program generally, and ideas for improving operations. In addition to FHWA representation, other State DOT representatives, project managers, principal investigators, and others may also be asked to participate.

Peer exchanges are to be convened at regular intervals. FDOT held its first two exchanges in 1998 and 2002. Copies of the resulting final reports may be obtained upon request. The results of exchanges are used to create an action plan for improvements to the program's processes. The final report and the action plan are thereafter presented to the Research Policy Committee (RPC) and others, as appropriate.

Transportation Research Board The Transportation Research Board (TRB) is a unit of the National Research Council, which is the principal working arm of the corporate institution that includes the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

Founded in the early 1920s as the Highway Research Board, TRB was renamed in 1974 in recognition of its broadened approach to transportation problems. TRB's purpose today is to bring scientific and technical knowledge to bear on transportation problems by encouraging and conducting research and by disseminating information in the following areas:

- the planning, design, construction, operation, safety, and maintenance of transportation facilities and their components
- the economics, financing, and administration of transportation facilities and services
- the interaction of transportation systems with one another and with the physical, economic, and social environment that they are designed to serve

The TRB also hosts an annual meeting which facilitates the exchange of information and is attended by over 9,000 transportation professionals from around the world.

The Director of the Research Center shall serve as the Department's representative to the TRB and have the following general responsibilities:

- maintain an awareness of general procedures concerning the operation of TRB committees, NCHRP, TRIS, and other special activities
- recommend qualified people for participation on TRB committees and panels
- update and return information on ongoing and new state research to TRIS and RIP
- supply TRB with copies of the Department's research reports
- coordinate responses to TRB initiated solicitations and questionnaires
- serve as liaison between the Department and the TRB

TRB is online at <http://www.trb.org/>

The National Cooperative Highway Research Program

The National Cooperative Highway Research Program (NCHRP) is funded on a continuing basis through the contribution of funds from the AASHTO Member Departments (i.e., SDOTs). Annually, the Department contributes 5.5% of the funds available through the SPR allocation.

NCHRP was created in 1962 to research critical problems that affect highway planning, design, construction, operation, and maintenance nationwide. NCHRP is sponsored by AASHTO, in cooperation with FHWA, and administered by the Cooperative Research Programs Division of TRB. The underlying idea is that major problems that are of concern to the member Departments can effectively be tackled by pooling and applying state resources through the NCHRP concept.

NCHRP is structured as follows: The AASHTO Standing Committee on Research (SCOR), with input from the Research Advisory Committee (RAC), is responsible for the program. Each year, AASHTO Standing Committees, Member Departments, and FHWA propose for selection candidate research problems from a host of highway transportation technical areas (8 research fields subdivided into 25 technical problem areas). The proposals are then placed on a ballot, and member Departments vote on which ones to fund. Within FDOT, the Research Center coordinates the process for responding to the NCHRP ballot for ranking new and continuing NCHRP projects.

The Research Center also coordinates the nominations of employees to serve on NCHRP Project Panels and maintains a listing of all Department employees who serve on TRB Committees, subcommittees, and so forth. The Research Center also maintains a lending library of all NCHRP publications (Reports,

Syntheses, Legal Digests, and Research Results Digests) for use by FDOT employees.

Information about the NCHRP project process or NCHRP committees and panels, or about the Transit Cooperative Research Program, may be found on the Cooperative Research Programs web page, <http://www4.trb.org/trb/crp.nsf>

Transportation Research Information Service (TRIS) and Research in Progress (RIP)

TRB maintains and operates TRIS and RIP, online databases that list completed and ongoing transportation research studies. TRIS contains over 485,000 abstracts of published transportation research articles and reports. Many of these reports are provided as online documents. Information is provided for obtaining copies of reports that are not available online. The RIP database is a sister resource to TRIS. RIP provides listings and abstracts for ongoing transportation research—currently over 7,400 entries, with some 100 new projects added each month. These two resources should be used for the minimal literature search conducted for each Request for Research Funding proposal; wider searches utilizing subject-specific resources are recommended.

The use of the TRIS database for program development, reporting of current RD&T activities, and input of final report information is currently a requirement of the FHWA SPR Program Management Process.

TRIS is online at <http://199.79.179.82/sundev/search.cfm>

RIP is online at <http://rip.trb.org/>

Research Partners Typically, the research programmed through the Research Center is contracted with state universities. Consequently, the Research Center deals with both principal investigators (PI) and Divisions of Sponsored Research (DSR) of the universities. The PIs perform the research and submit progress and final reports to the Research Center. The DSRs are responsible for representing the universities on such issues as contract language, invoicing (in coordination with the PIs), receiving RFPs, and so forth. The Research Center maintains active relationships with these and other representatives of the universities as appropriate. In addition to state universities, however, other state agencies, private and out-of-state universities, and private companies, organizations, associations, and research foundations also are contracted to perform research. The Research Center is the primary Departmental liaison to such organizations.

The Project Selection Process

Program Emphasis There are many ways to categorize research. One of the fundamental divisions distinguishes basic research from applied research. The former generally refers to research that, in simplified terms, is interested more in the increase of knowledge generally than in the immediate application of findings. Applied research, on the other hand, is research whose results are intended for a particular purpose; it is pursued to react to day-to-day needs and intended to be put into practice in a short period of time. And, of course, like basic research, it may enhance the state of knowledge in a given area. Applied Research is the kind of research supported by the Research Program.

The subject matter that may be investigated, applied or basic, is practically limitless. Transportation research may address local, statewide, or national issues. The Department's research program primarily supports research that addresses statewide needs. National issues are best addressed by organizations or collectives of national scope or with national agenda, such as the Federal Highway Administration (FHWA), the American Association of State Highway Transportation Officials (AASHTO), the Transportation Research Board (TRB), and the Transportation Pooled Fund Programs. The FDOT Research Program supports national efforts through departmental participation in cooperative programs and employee participation on national committees and panels, as well as through other forms of partnering.

Program Orientation While research in general may be performed either in-house or by contractors, the research funded through the Research Center is entirely contract research. Within these procedures, a research project contracted for the performance of a defined scope of service refers to a research contract written with a non-FDOT research service provider. In addition, the research program operates in a decentralized environment, the goal of which is to maximize the use of Contractors and to manage research contracts through a network of project managers located in functional areas throughout the Department.

The FDOT Research Program categorizes each research project according to the functional area that requests and manages it. When a project involves more than one functional area, the Research Center facilitates cross-communication to ensure that all interested parties are aware and involved, as appropriate.

The selection process strives to achieve a fair and consistent distribution of contracts among qualified universities, firms, individuals, and among the functional offices within the Department, provided that such distribution does not violate the principles of selecting the most qualified researcher and of funding the most needed projects. With regard to projects posted as Requests for Proposals, due consideration is to be given to the factors that permit a complete and objective evaluation of all qualified universities, firms, and individuals that respond.

The Selection Process All research initiatives begin with a Request for Research Funding (RRF). Each fall, the Research Center sends a general request for research proposals to the Research Coordinators in each of the functional areas. This solicitation, which includes submission requirements and deadlines, is subsequently posted to the Program Information section of the Research Website (<http://www.dot.state.fl.us/research-center/ProgramInformation.htm>). The Research Coordinators distribute the solicitation to the appropriate personnel in their sections, according to their respective processes. In preparing proposals, project managers (or prospective PMs) may work with researchers; however, the Research Center will accept proposals only from FDOT personnel. Proposals developed by researchers must be received and processed by FDOT employees, and they must be evaluated with regard to relevance and potential benefit to FDOT. Whether high or low in priority, proposals that FDOT employees accept from prospective researchers should be forwarded to the Research Center *unless* an appropriate FDOT employee (e.g., the employee who received the proposal, the research coordinator) contacts the submitting researcher to reject the proposal and offer feedback, as appropriate; in these cases, FDOT employees should keep a record of the contact. Each functional area will create a ranked list of project proposals and submit it to the Research Center by the deadline published in the solicitation. Projects that the functional area does not desire to pursue should either be returned to the submitter with appropriate feedback or included with the list of prioritized projects as an unranked entry. Unranked entries should contain a brief explanation of the reason the project is not to be considered (e.g., not a priority issue, would constitute redundant effort).

Review copies of the prioritized strategic issues and funding request summaries, according to functional area, will be sent to the Research Policy Committee (RPC). At a minimum, that the RPC will be represented by the State Highway Engineer (SHE) and the Assistant Secretary, Intermodal Systems Development, but may also include the Assistant Secretary, Engineering and Operations, the Public Transportation and Modal Administrator, the State Planning and Environmental Administrator, and the Manager of the Project Management, Research and Development Office. The Director of the Research Center will meet with representatives of the RPC to discuss, modify, and approve a list of projects for the research program. Once the list is finalized, the Research Center will notify each of the Research Coordinators of the results.

In addition to the annual solicitation, the Research Center will accept RRFs throughout the year. Subject to the availability of contingency funding, the Research Center will attempt to satisfy such *off-cycle* requests according to need.

The Request for Research Funding (RRF)

A Request for Research Funding statement must be developed for any research initiative to be considered. The request may be generated by any Department employee, but it must be reviewed according to the processes established by the appropriate functional area and then submitted with the prioritized project listing to

be considered during annual selection. RRFs may also be submitted as *off-cycle* requests (i.e., outside of the annual RRF process), but approval will be subject to available funds and other needs.

In order for an RRF to be considered, both the RRF form and the Summary form must be completed. These forms provide the basis for selection (e.g., literature search results, need, expected benefits), and they will facilitate the implementation and performance measurement processes, as well. Thorough, understandable, and realistic responses to the items on these forms are necessary for effective decision-making and for maximizing the benefits of the research program. ([Appendix A](#) and [Appendix B](#))

Strategic Issues Research

Often, short- and long-term desirable outcomes cannot be distilled into a specific Scope of Service. Examples might include the following: “reduce the number of fatalities at highway-railroad grade crossings by 10%,” “reduce the number of pedestrian/bicycle fatalities (perhaps within a given geographical area),” or “increase the effectiveness of intermodal connections.” When the functional areas and/or the RPC develop(s) such strategic issues, a Request for Proposals (RFP) will be issued and researchers will be competitively selected to perform research that best meets the stated desired outcomes.

Review and Selection of Projects

The Research Policy Committee has the overall responsibility to judge the appropriateness of the intended research and the potential impact the research will have on the Department and within their areas of responsibility. Through their deliberations, the RPC will prioritize RRFs for inclusion in the annual work program. The RPC is authorized to recommend modifications to the intended scope of work, the schedule, and the proposed budget in order to make the research effort more beneficial to the Department, and the committee will also approve the suggested principal investigators.

It is the responsibility of the respective functional areas to prioritize proposals. Per the RRF process requirements, each proposal should be subjected to a literature search to avoid duplicating research efforts. As a minimum, the TRB’s Research in Progress (RIP) and Transportation Research Information Services (TRIS) online databases should be checked for similar active or completed research. Other general or subject-specific databases may also be consulted, as appropriate. The development of funding priorities will consider each project’s potential benefits to the Department; the past performance and present workload of proposed principal investigators; and the distribution of funds between functional areas and between universities.

Following the funding approval process, the Research Center will program approved research projects in the work program, negotiate (with the assistance of

the PM, as appropriate) any issues that need resolution, and execute contracts between the Department and the Contractor. Research Coordinators will be notified upon the approval of the projects, and PMs and PIs will be notified when the project contract is executed.

Selection of Researchers The selection of researchers may occur in one of two ways: through internal recommendation or through a Request for Proposals (RFP).

Internal Recommendation

The PM (or the employee developing the RRF, if different) or the Research Center can recommend a researcher for a proposed project. It is very important to note that this step is only a recommendation and that the RPC may override any suggestion based upon the proposed PI's past work performance or for other reasons. Employees developing RRFs should make this point very clear to researchers who may be assisting them in the development of the request. However, proposals and research ideas developed solely by researchers and submitted to the Department for consideration will be treated with respect with regard to intellectual property rights.

Request for Proposals (RFP)

When a project has no designated researcher or when private laboratory or Contractor services are desired, services will be solicited through RFPs. The employee submitting the proposal shall supply as much information in the RRF as possible. There are two options for handling RFPs. In the first option, the Research Center will send the information provided in the RRF to the Divisions of Sponsored Research (DSR) within the Florida State University System. The RFP will also be posted on the Research Center website, which may be found at <http://www.dot.state.fl.us/research-center/ProgramInformation.htm>. Under this option, the RFP will be addressed only to Florida universities.

Under the second option, which solicits responses from any eligible and qualified Contractors, the Research Center will forward the proposal information to the Procurement Office, which will administer the RFP process. This type of RFP will be advertised only by title on the Research Center's web page. Such RFPs will be managed according to the processes established by the Procurement Office and all questions regarding solicitations and evaluation procedures should be directed to that office (<http://www.dot.state.fl.us/procurement/>). All RFPs will contain an upset funding limit and respondents will be judged on criteria other than price (e.g., qualifications, experience, fit of proposal to request).

Based on the option selected, questions regarding the RFP during the development stage will be referred, as appropriate, either to the Procurement Office or to the submitter or PM, who must keep a log of each contact, which should contain the following information: date of contact, the person calling, and questions asked during the conversation. This log should be sent to the Research Center along with the evaluation package (described below).

RFP Evaluation

A committee of no less than three employees who have good working knowledge and expertise in the subject area shall evaluate the proposals received in response to an RFP. It is important that this committee, *prior to reading any of the proposals*, meet to review and discuss the important aspects of the research to be conducted and the qualities and strengths that a selected researcher should possess. Notes and decisions made at this meeting should be recorded and submitted to the Research Center along with the completed evaluation package.

Following the deadline established in the RFP (Option 1, University only), the Research Center will forward to the evaluation committee all received responses, along with any applicable Project Assessment grades on file for the intended researchers being considered. The evaluation committee will independently evaluate each proposal based on the technical content of each package and assign grades in accordance with the criteria listed in the Research Proposal Evaluation Form and agreements made at the pre-evaluation meeting. Evaluators **must not** compare the submittals.

The committee Chairperson (usually the PM) is responsible for the providing the Research Proposal Evaluation Forms to committee members, collecting completed forms, and submitting a completed evaluation package, including a written justification for the evaluation points awarded, to the Research Center. The PM should keep a copy of this package in case unsuccessful applicants request a debriefing on their proposals.

The Research Center will review the completed evaluation package for proper content before the selection is finalized. In most cases, the recommendation of the evaluation committee will be accepted. In those instances in which an administrative irregularity is determined to have occurred, the Research Center will consult first with the PM. If an acceptable solution is not available, then the appropriate Department head (e.g., State Highway Engineer, Assistant Secretary) shall arbitrate the final selection.

After the final selection has been made, the Research Center will provide the selection results to each person who responded to the RFP and will finalize remaining contract requirements.

Note

While the PM may, upon request, supply the raw evaluation scores to individual respondents, he/she must also indicate that until the selection is finalized, the awarding of the project is not official.

Selection Process Summary The following outlines the selection process:

1. The Research Center sends Research Coordinators a call for proposals with an established deadline for submission.
2. The Research Coordinators distribute the call for proposals within their respective functional areas.
3. Project Managers and other FDOT personnel submit proposals to be prioritized within their respective functional areas according to their respective processes.
4. Each Research Coordinator submits a list of prioritized proposals to the Research Center; any proposal received from a Contractor that is not forwarded with the list of prepared proposals should be returned to the Contractor with appropriate feedback. Such correspondence should be documented. Proposals that are determined to be unsuitable to Department needs and that are not returned to the Contractor should be included with the prioritized proposals as unranked.
5. The Research Center prepares and submits to the Research Policy Committee the list of prioritized projects and corresponding Summary statements for review.
6. Research Center staff meet with the Research Policy Committee to determine the list of projects to be approved for funding for the subject fiscal year.
7. The Research Coordinators are advised which projects are approved.
8. Contracts are written in the following fiscal year pending availability of funds. Project Managers and Principal Investigators are advised once contracts are executed.

From Proposal to Project Research project proposals are generated in a variety of ways. Ideally, proposals for research projects should be generated from within FDOT (by an employee, a committee, etc.). However, FDOT employees may request a researcher to assist in the preparation of a proposal, with a greater or lesser degree of immediate involvement, or, as often happens, researchers may submit unsolicited proposals. However they are generated, proposals that are submitted for funding need to be reviewed by the appropriate FDOT personnel (some employee or group in the appropriate functional area), who can work with the submitter to tailor the request as necessary to ensure that it addresses legitimate and viable FDOT needs. Research proposals that only approximately meet a need or that are not genuinely desired should not be submitted for funding. Such proposals should be returned to the submitting researcher with appropriate feedback, and such correspondence should be documented. If such a proposal is not returned to the submitting researcher, it should

be forwarded (unranked) with the prioritized proposals with an explanation as to why it is not needed.

Ranked proposals should be submitted in the proper format, which includes a Request for Research Funding form and a Proposal Summary ([Appendices A](#) and [B](#)). The summaries are the chief documents used to present the proposals in the selection meetings with upper management. Consequently, compelling but realistic information, as appropriate for the ranking, should be provided in the “Needs Statement,” “Reason for Priority Ranking,” and “What are the problems/issues if this project is not funded this year” sections. Submitters may want to consider the “Reason for Priority Ranking” with regard to benefit and implementation issues and then provide their responses in layman’s terms. Summaries should be no more than two pages. The Requests for Research Funding are more detailed descriptions of the project proposals that may be referenced as needed and that will be closely reviewed by the Research Center prior to the selection meetings. They will be available to upper management as necessary. This portion of the annual research cycle occurs in February-March.

Following the selection meetings, Research Coordinators will be advised which projects have been funded. It will then be their responsibility to advise their Project Managers. Projects may begin to be funded, according to funding availability and priority need, as early as July. Typically, federal funding is available in October, when the remainder of the projects may be programmed. **Please be advised**, complete and updated proposals, approved by the Project Manager, must be received by the Research Center by January following approval to be funded. These proposals **must** follow the required format ([Appendix C](#)). The funding reserved for projects approved for the current fiscal year will be redirected to meet other pressing needs or it will be carried forward for the development of the following year’s program (i.e., the selection process mentioned above) if updated proposals or requests to proceed with the original proposals as scopes are not received by January.

Upon receiving the updated proposals, approved by the PM, the Research Center will provide a final review and proceed to contract the project or request further modifications, if necessary. Once the contract is executed, copies of the Notice to Proceed will be sent to the Division of Sponsored Research, the PI, the PM, and the FDOT Comptroller’s Office. Work may commence **only following** the issuance of a Notice to Proceed.

Contract Administration

There are three general methods for contracting services for the conduct of research projects: Requests for Proposals (RFPs), purchase orders, and Master Agreement Work Orders. RFPs that are directed to Florida universities only are posted to the Research Center website and will be contracted as work orders. RFPs open to all

eligible and qualified vendors are processed through the Procurement according to their standard procedures (<http://www.dot.state.fl.us/procurement/>).

Purchase orders have become a more common form of contracting research following the implementation of the State's e-procurement system. Purchase orders are written for all contracts that are not Master Agreement Work Orders. With the exception of RFP contracts handled through the Procurement Office, all POs will be initiated by the Research Center. Standard research contracts are attached to and override the provisions of the PO. Contractors must agree to the language of the research contract before a PO will be written. Exceptions to the use of standard contract language will be addressed on a case by case basis and will require legal review.

The majority of contracts are written as Master Agreement Work Orders. Master Agreements were developed to facilitate the ease and speed with which contracts can be written. Whereas non-work order contracts typically took several weeks to write, once work orders were employed, the time to execute was reduced to as little as three days—significantly streamlining the process. The Research Center has Master Agreements with the Florida universities with which it regularly does business.

All research contracts are written as “lump sum” contracts, sometimes referred to as “fixed fee” contracts. In this type of contract, a Contractor agrees to deliver specified services within a specified period of time for a stated fee. The lump contract eliminates the need for supporting documentation invoices, time sheets, travel requests, and reimbursement documentation to be submitted with invoices. The single exception to this process is the purchase of equipment, which is either purchased by the Research Center, as in the case of computers, or is cost reimbursable. While the lump sum method saves both time and money for the Department and the Contractor, it also entails risk for both parties. The Department must do a good job reviewing the reasonableness of the costs associated with the work to be performed, and the Contractor must be sure that the services and time requirements can be met for the agreed price.

Note

Until a contract has been fully executed by both parties and a Notice to Proceed written, the Contractor cannot begin work. Invoices for work performed outside of the times specified in the contract cannot be paid.

Whichever of the aforementioned methods for writing contracts is used, all contracts will include a Scope of Services (i.e., [Exhibit A](#) of the contract) and a Method of Compensation (i.e., [Exhibit B](#) of the contract).

Scope of Services (i.e., “Exhibit A”) Once a project has been approved for funding, the PM shall submit a Scope of Services based on the RRF submitted during the

selection process. The scope shall be finalized with the Contractor by the PM and the Research Center. When this scope has been approved and accepted, it shall be attached to the contract as “Exhibit A..” All tasks, deliverables, and schedules expected to be performed and/or delivered by the Contractor must be included in the scope. **Thereafter, any change to the Scope of Service must be accomplished through a contract amendment.**

As part of the negotiation process, the Contractor shall develop a detailed project budget based on the final Scope of Service. This budget shall include the following:

- salaries, benefits, and tuition (in-state tuition fees only) for all project personnel, including any subcontractors
- details for all equipment over \$1,000.00
- miscellaneous expenses, including software, mainframe time fees, telephone expenses, photocopying, etc.
- travel details—all travel planned for the duration of the contract must be identified (a detailed list of all trips and justification for the travel must be included on a separate sheet); please note that travel to conferences (e.g., TRB Annual Meeting) are not paid for by FDOT

An amount for implementation plan costs, including brief justification for plan activities/costs, should be included in the Implementation Plan section of the Scope of Services. *Scopes of Service must follow the format of the sample provided in Appendix C.*

Method of Compensation (i.e., “Exhibit B”) A Method of Compensation plan shall be prepared and attached by the Research Center to each contract. This document provides details per the maximum amount of compensation, progress and final payment requirements, and equipment purchases.

Equipment Any equipment requested for use on a contract must be acquired in the most cost-effective manner possible. It is the policy of the Research Center not to approve departmental purchases of equipment for research projects, although exceptions may be made on a case-by-case basis. The preferred arrangement is for the Contractor either to lease the needed equipment or to purchase it outright and have the Department pay a rental fee for its use during the life of the contract. When equipment is required but rental or leasing infeasible (e.g., not possible, practical, or cost-effective), Contractors may purchase the equipment (excluding computers). Reimbursement will only occur upon receipt of and only for the amount of the purchasing invoice for the subject equipment. The Research Center will then issue a Property Management Report and send an inventory identification tag to the Contractor. It is the responsibility of the Contractor to attach the tag to the equipment. For inventory purposes, each year the Research Center shall secure a

certified list of property from each Contractor. Purchases made for FDOT contracts are subject to Florida Administration Code 60A-1.016 and Florida Statutes 216.011(1)(x), 240.241(9), and 287(entire).

For the purchase of computers, the researcher needs to submit to the Research Center the desired configuration. The Research Center will then purchase the required system(s) according to departmental procedures, which include obtaining quotes, receiving Information Resource Request approval, and requesting and applying property decals.

At the conclusion of each contract for which equipment (property) has been purchased, the Research Center shall make proper disposition in accordance with the procedures in effect at the time. If the equipment is a computer that may be used on another approved contract being performed by the same Contractor, then the property may be transferred from the completed contract to the approved contract. Otherwise, the Research Center will relinquish the property to the Office of Information Systems.

If the equipment is not a computer, then the Department will consider disposal of the property based on the following considerations:

1. Does the Department need the equipment? If so, then the Department will take possession of the equipment.
2. Will leaving the equipment at the university benefit the Department, such as for the conduct of future research? If so, then the university may retain possession of the equipment, which will remain in the Department's inventory and continue to be certified on an annual basis until the subject equipment is deemed to have no value.
3. If neither (1) nor (2) applies, the Research Center will transfer the equipment to another state agency, with first priority given to the university.

Contract Execution Upon receipt of a completed and approved Scope of Service for an approved project, the Research Center will encumber the necessary funds and assemble a contract document to include the Scope of Service and Exhibits A and B. The contract will be circulated for internal review and approval, and then six copies will be submitted to the Contractor for signature. Upon return receipt of the signed documents, the Research Center will enter the contract into its tracking database. Exception: RFPs processed through the Procurement Office will be handled according to that Procurement Office procedures.

Once the contract is executed, the Research Center shall send the Contractor a Notice to Proceed and notify the PM in writing that the Notice to Proceed has been sent. The Notice to Proceed **must** be issued before the Contractor may incur charges on the project. No work must be done prior to the issuance of the Notice to Proceed.

Contract Performance The Department recognizes that research activities conducted in a university environment may be affected by the availability of students to conduct many of the research activities. Consequently, the Research Center has set the schedule for the selection process so as to allow Principal Investigators of approved projects as much lead time as possible to make commitments to new and returning research assistants.

The Research Center will develop contract documents with begin and end dates as specified in the Scope of Service. If a project does not begin on time or if steady progress is not made according to the time frames established in the contract, the Research Center will notify the PM of the inactivity. If a satisfactory explanation is not given for the delay, the Research Center will take action to terminate the contract and apply the remaining funds to other prioritized needs. It should be noted that contracts with extended periods of inactivity are also targeted by the Comptroller for termination pending justification for continuation.

Contract Amendments Contracts are amended by means of **supplemental agreements**, which are the forms that are processed when the terms of the original contract are modified. Contracts may be amended for a number of reasons: when the terms of the original contract need to be changed (e.g., the scope of work warrants modification), when additional funds need to be added to the original contract amount, or when additional time is required to complete the project. When the terms of a contract require modification, whether it be a change in the work to be performed or a change in the budget, an updated scope of service must be submitted. Modifications requiring only a change of end date (i.e., No Cost Time Extensions or NCTE's) do not require an updated scope. However, all supplemental agreements, including NCTE's, must be requested and approved in writing (which includes e-mail correspondence) prior to being processed. Both the Project Manager and the Research Center will review and approve all contract amendment requests. Signature approval is required of the Director of the Research Center and the Division of Sponsored Research for the supplemental agreement to take effect.

Note

Unauthorized modification to a Scope of Service outlined in a contract is known as "scope creep." The performance of unauthorized work may result in the termination of the subject contract. Agreements between the Project Manager and the Principal Investigator do not constitute legitimate grounds for a change in the Scope of Service: all changes must be processed by the Research Center as contract amendments.

Project Management

This chapter covers the approval process, contracting research, meetings with researchers, reports and invoices, contract amendments, and project deliverables.

The research program at FDOT is decentralized. Projects are selected and prioritized from within the various functional areas, and Project Managers are provided by the functional areas with primary jurisdiction over the subject projects. Every project must have a Project Manager (PM), or technical overseer. The PM may or may not initially request a given project (e.g., a panel within a functional area may decide to submit an RFP or accept a proposal developed by a researcher with the intention of later assigning someone to manage the project). However, it is desirable that a PM be identified as early in the project development process as possible, and it is necessary that one be identified prior to writing a contract. The person assigned as PM should have an excellent working knowledge of and expertise in the area to be researched. The PM will need to be able to understand the problems associated with the issue to be researched. Without a solid understanding of the issues and knowledge of prior research done on the subject, the PM may not be able to provide sufficient direction to the Contractor. While each project will have unique requirements, the following sections provide information regarding the minimum requirements of a PM for a research project.

Meetings and Progress Assessment

Meetings It is strongly recommended that Project Managers conduct kick-off meetings with the Principal Investigators. At a kick-off meeting, the PM and the PI should review the work to be completed, deadlines, expectations, and other issues appropriate to the project. Regular follow-up meetings should follow, on a quarterly (recommended) or bi-annual basis, as appropriate to the project (e.g., duration, scope). Project Managers should document the results of such meetings.

Progress Reports For most projects, Progress Reports will be required on a quarterly basis. Progress Reports must be submitted to the Research Center, not the Project Manager, for processing. They may be sent as printed reports (2 copies) or as electronic documents (**in MS Word**). Upon receiving **printed progress reports**, the Research Center files one copy in the project contract file and sends the other, with a Report Evaluation form, to the Project Manager, who has 10 working days to complete and return it. When Principal Investigators submit progress reports as **electronic files**, which is the preferred method, they should e-mail them to both the Research Center (Sandra.Bell@dot.state.fl.us) and the Project Manager. The Research Center will thereafter send the Project Manager a Report Evaluation form to complete and return within 10 working days. When Progress Reports are not submitted per the schedule outlined in the contract, the project in question is subject to cancellation due to lack of activity. Progress reports document activity; therefore, it is important to thoroughly and accurately provide feedback on the period of research being evaluated.

Invoices As with Progress Reports, Invoices must be sent directly to the Research Center, where they will be time-stamped upon receipt. The Research Center will promptly send Invoice Approval forms to the Project Managers, who, pursuant to **FS 215.422(8) and FDOT Directive 250-012-020-a**, must return them within 10 working days for timely processing. Invoices must include the following information:

Contact Information

FDOT Contract Number

Total Contract Amount

Billing period

Total percentage of completion previously invoiced, % done/\$ billed

Percentage of completion for current billing period, % done/\$ billed

Total percentage of work completed, % done/\$ billed

Please note: The Research Center will process invoices only after it has received a Progress Report for the billing period and an approved Progress Report Evaluation form from the Project Manager. Contractors may only bill through 90% of the total contract amount prior to the submission and subsequent approval of the final deliverables. Invoices will not be paid for work performed outside of the contract start and end dates: all work for a given project must be carried out between the start and end dates written in the contract.

If a PI determines that a contract needs to be amended or extended, the PI must request the amendment or extension in a timely manner (i.e., before the contract expires). Either the PI or the PM may contact the Research Center to formally request the amendment. However, the Research Center will only process contract amendment requests that have been approved by the PM (See “Contract Amendments,” p. 15).

Deliverables

As a minimum, the final product is the completed final report, which is often a compilation of revised segments (i.e., progress reports). Sometimes, software, websites, and/or devices are produced. Whatever the contractually stipulated products are, the final versions must be received and approved before the final 10% of the contract amount will be paid. Typically, the following are the required deliverables:

- 12 hard copies of the final report
- 1 electronic copy (MS Word*) of the final report, including
 - Disclaimer: “The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Florida Department of Transportation.”
 - Technical Report Documentation Page (obtainable through the Research Center)
- 1 electronic copy (MS Word) of the summary, to include the following sections:
 - Problem Statement—background information
 - Objectives—concise description of what is to be undertaken
 - Findings and Conclusions—description of results, lessons learned
 - Benefits--discussion of how results/implementation will benefit
- FDOT
 - (samples may be obtained through the Research Center)
- Any other contractually required products (e.g., software or device)

Contractors should be aware that their final reports are not only made available to the general public online but are actively marketed to other local, state, and federal transportation organizations. The final reports, both with regard to the quality of the data and findings and the quality of presentation, represent the professionalism of the Contractor.

T2 and Implementation

This chapter covers implementation of research and Technology Transfer (T2), from contractual obligations to post-project assessments.

The conduct of research increases knowledge and understanding. Sometimes it develops new technologies or processes. The benefit of research results ranges from negligible to significant. However, unless technology transfer, implementation, and performance measurement activities are employed, the utility of the results will either be neglected or have an unnecessarily limited impact, and the value of using the results will be undetermined (e.g., does implementation result in added value or in an unacceptable return on invested resources?). Because the Department conducts chiefly applied research, the effective application of the research is of greater importance than the research itself (i.e., increase in knowledge), which is why T2, implementation, and performance measurement are vital elements of the research program. This chapter will address T2, implementation, and the development of performance measures.

Technology Transfer (T2)

The most basic and requisite form of technology transfer is the publication of research results, and the most immediate and significant customers of FDOT research publications are the users of research within the Department. The first goal of this program is to facilitate the improvement of Department processes and products in order to improve the facilities and services delivered to the traveling public in Florida. However, wider distribution of research results is vital for the effective use of both federal and state research funds. Feeding national databases such as RIP and TRIS, for example, promotes communication among peer agencies with the ultimate goals of maximizing the benefits of available and usable research and of avoiding wasting limited resources (i.e., by duplicating work efforts or engaging in research that has been shown to be infeasible or unusable). Participating in technology transfer

efforts, both within the state (with industry and local government partners) and in the larger national and international communities, maximizes the usefulness of any given research program's efforts. Moreover, such participation contributes to a process by which the Department also gains by obtaining access to a larger pool of available research and resources and by forming useful partnerships. It is in the best interest of the entire research community to make research results known to as wide an audience as possible and in ways that are efficient and accessible.

By preparing/approving the Request for Research Funding and by refining/approving the Scope of Services, the PM is in the best position to understand the importance of the research to be undertaken, how the results of the research will be used, and who (groups, individuals, organizations) will have an interest in or need to understand the research and the results. Time spent developing an Implementation Plan before the research project begins will improve the processes of implementing the research and of transferring the results to others.

Internal T2 Efforts Internal (Research Center) T2 efforts include making final reports, corresponding summaries, and other information available on the Research Center website; feeding national databases, including RIP and TRIS, that may be used by FDOT and others; publishing articles in transportation journals, magazines, and other appropriate forums; coordinating training, seminars, and other information exchange sessions, as appropriate; and conducting other marketing and outreach efforts.

The immediate target audience for the Research Center's T2 activities are the practitioners within the Department. However, other audiences include local governments, peer DOTs, FHWA, other agencies, industry, and other partners and organizations that may benefit from the use of the research.

Local Technical Assistance Program (LTAP) LTAP is authorized by federal law; the minimum requirements for this program are listed in 420 Subpart B, 23 CFR. LTAP is structured to move innovative technologies out of the lab and off of the shelf, and into the hands of people who maintain local, rural, and tribal streets and roads. A network of LTAP Centers across the country provides T2 services, technical assistance, training, products, advice, and educational resources to meet the varied needs of the local transportation workforces.

Florida's LTAP Program is administered by the University of Florida. It is part of that University's Transportation Research Center. The program is funded through federal LTAP funds (which supports 50% of the program) and FDOT matching funds (50%).

The Research Center serves as a technical advisor and Project Manager for the LTAP program. Research Center staff provide management with summary presentations regarding the program's performance. The matching funds provided by FDOT (from the research program) are reviewed by and subject to the approval of the Research Policy Committee as part of the annual research program development process.

Implementation of Research

By preparing a Request for Research Funding and then developing/approving a Scope of Service, a Project Manager is in the best position to understand the importance of the research to be undertaken, how the results of the research will be used, and who (groups, individuals, organizations) will have an interest in or need to understand the research/results. The most current funding request forms require that some thought be given to the implementation of a project—well before the project ever begins. There are research projects whose findings cannot be implemented because the research produced unexpected results; this possibility is intrinsic to research. Research that is not implemented because of poor planning, however, is costly and largely avoidable. A discussion of implementation and potential barriers to implementation is required for a Request for Research Funding to be considered. If a project is approved, an Implementation Plan must be included with the Scope of Service. The Research Center will also request from the PM indicators that can be used to determine whether the research, near or following completion of the project, has been implemented. Implementation may consist of both the facilitation of deployment (i.e., T2 activities) and actual deployment. The following sections address each of these facets of implementation.

Implementation Plan Prior to the finalization of the Scope of Services, the PM shall develop an Implementation Plan that includes the best way to share the anticipated results with others, who may include persons and organizations beyond the appropriate Department personnel, such as local government partners, federal partners, other SDOTs, industry, and others. During the development of the plan, the PM should consult with the Research Center and with the Principal Investigator (PI) for additional input. Based on the anticipated significance of the research being conducted, the Implementation Plan could consist of a technical paper (final report), a strategy for deployment, workshops, seminars, presentations to technical or professional groups, and/or the production of slides, videos, electronic media, or other methods suitable to convey information.

Normally, the PI will produce the implementation media and will play an important role in the presentation of this information. However, the ultimate

presentation of information regarding research results may be done by anyone, including those not associated with the actual research effort. If activities designed to facilitate implementation are built into the contract, it is important that the Scope of Service and the budget identify them.

Implementation (Deployment) Test The PM will provide to the Research Center an indication of what measurable performance indicators should be used to verify that the results of the research have been used. Examples could include, but are not limited to, specification changes, statute revision, procedural changes, process changes, and services or goods delivered. Such information should already have been indicated on the RRF as being an expected outcome. Therefore, the test should, in the majority of cases, simply corroborate or supplement previous information, except for projects for which the scope has been modified or for which the outcome was not as expected. This test should also identify the office within the Department responsible for implementation and for setting a time when a performance review should be done. The Research Center will maintain this information and schedule and perform performance review(s) based on this recommendation. Please note: This activity is not a part of the contract and should, therefore, not be addressed within the contract Scope of Services or budget.

Performance Measurement The Research Center is in the process of validating a set of performance measures developed through a research project. It is expected that the developed process will be modified as part of an overall system for measuring project and program performance. The Research Center is also closely involved in the NCHRP 20-63 project, which is designed to produce a Performance Measures Toolbox. There is a strong commitment to the development of a Performance Measurement system to improve overall effectiveness.

APPENDIX A

FLORIDA DEPARTMENT OF TRANSPORTATION REQUEST FOR RESEARCH FUNDING

- I. PROJECT TRACKING NUMBER**
- II. PROBLEM TITLE**
- III. CLASSIFICATION**
- IV. RESEARCH NEED STATEMENT**
- V. LITERATURE SEARCH SUMMARY**
- VI. RESEARCH OBJECTIVE**
- VII. ESTIMATE OF FUNDING, RESEARCH PERIOD and EQUIPMENT**
 - Recommended Funding:**

 - Research Period:**

 - Equipment:**
- VIII. URGENCY, PAYOFF POTENTIAL, AND IMPLEMENTATION**
- IX. PERSON(S) DEVELOPING THE PROBLEM**
- X. PROBLEM MONITOR**
- XI. PROPOSED RESEARCHER**
- XII. DATE AND SUBMITTED BY**

APPENDIX B

SUMMARY

Title:

Projected Cost:

Needs Statement (from request package):

Your priority ranking:

Reason for Priority Ranking:

Please classify this project:

Provides NEW knowledge (basic research)	YES.....NO
Enhances EXISTING knowledge (applied research)	YES.....NO
Technology Transfer (not research)	YES.....NO
Provides clarification of an issue(s)	YES.....NO

What, is the expected application of the results (most appropriate)

Localized eg. Project level
 Regionalized (within the state)
 Statewide
 Regionalized (multiple states)
 National

Does this project include (all that apply):

Software development
 New products/materials development
 Patentable products

Who will be affected by this project?

Your office (only)
 Other functional unit(s) within the Department (please list):
 Other identifiable group(s) outside the Department (please list):

Level of impact on those most affected by this project (most appropriate):

Little/minor
 Somewhat important
 Very important

Level of impact on the traveling public will they see a difference (most appropriate):

None
 Minor
 Major

Implementation will (all that apply):

Save the Department money
 Require more money
 Save time
 Require more time

- Reduce other resources
- Require more other resources

How will the results be implemented (all that apply):

- Policy changes
- Specification changes
- Procedure modification/development
- Process changes
- Other (please specify):

OR

- It is anticipated that there will need to be more research before implementation can occur

What are the problems/issues if this project is not funded this year:

APPENDIX C

Sample Scope of Service, Exhibit A

Research Proposal

Title of Project

Submitted to

The Florida Department of Transportation

Research Center

605 Suwannee Street, MS 30

Tallahassee FL 32399

c/o Name of Project Manager

Submitted by

Name of Principal Investigator (or Co-PIs)

Name of College/Department

Name of University

University Address

Date

Title of Proposal

Problem Statement

This section includes background information that briefly describes what created the need for the research and a description of that need. This section should not include project objectives, nor should it begin with a statement such as “The FDOT contracted University X to study the adverse effects of ...” This information may be used to explain to others why the research is being done.

Objectives/ Tasks

This section describes the objectives of the project and, in as much detail as possible, all of the tasks that will be followed to achieve them. Objectives should be clear and well-defined, and they should direct the course of the research. Findings and conclusions should address the objectives—only work defined within the scope and by the objectives/tasks is to be performed.

Deliverables

This section addresses all deliverable resulting from this project. As a minimum, it should mention the required 12 hard copies of the final report, electronic version of the final, and electronic version of the summary. Other deliverables should be described in detail, including descriptions of the product and of the method of transfer.

Schedule

A Gantt Chart or similar method of outlining all of the defined tasks in relation to their expected completion dates. Each schedule should include a three month period at the end of the work period to allow time for the preparation, submission, FDOT review, and revision of the draft final report.

Budget Sheet

A budget sheet that follows the proper format (page 29) must be included with the scope. Failure to provide all required information will result in a delay in the processing of the contract.

Equipment

This section provides justification for any equipment needed to conduct the proposed research. Any equipment requested for use on a contract must be acquired in the most cost-effective manner possible. It is the policy of the Research Center not to approve departmental purchases of equipment for research projects, although exceptions may be made on a case-by-case basis. The preferred arrangement is for the Contractor either to lease the needed equipment or to purchase it outright and have the Department pay a rental fee for its use during the life of the contract. When equipment is required but rental or leasing infeasible (e.g., not possible, practical, or cost-effective), Contractors may purchase the equipment (excluding computers). Reimbursement will only occur upon receipt of and only for the amount of the purchasing invoice for the subject equipment.

Implementation

This section describes and implementation plan and any potential barriers to implementation.

Contact Information

Contact information should be provided for the Principal Investigator and the Project Manager.

PROPOSED BUDGET
DATE

OFFICE/SECTION OR DEPT:

DURATION OF CONTRACT: (in mos)

PRINCIPAL INVESTIGATOR:

ESTIMATED START DATE:

TITLE:

	% Time	Period Covered (mos)	Amount
A. SALARIES:			
Academic (Name):			
List All			
USPS Personnel (Name):			
List All			
			TOTAL SALARIES \$0 _____

B. OTHER PERSONNEL SERVICES (OPS):			
# Grad. Students			
Consultants			
			TOTAL OPS \$0 _____

C. FRINGE BENEFITS:			
Retirement			
Insurance			
Worker's Comp			
			TOTAL FRINGE BENEFITS \$0 _____

TOTAL SALARIES, OPS & FRINGE BENEFITS \$0 _____

D. TOTAL PERMANENT EQUIPMENT:

List All (\$1000 or more/each purchase item; and any camera/video equipment of any cost)

OCO \$0 _____

E. TOTAL OPERATING EXPENSES:

Reports

Office Supplies

Rentals

Tuition

In-State Travel

trips (number of trips)

Destination (details)

Persons Traveling (number of persons traveling)

Duration (length of trip/s)

Out-of-State Travel

trips (number of trips)

Destination (details)

Persons Traveling (number of persons traveling)

Duration (length of trip/s)

TOTAL EXPENSES \$0 _____

F. TOTAL DIRECT COSTS:

\$0 _____

G. TOTAL INDIRECT COSTS: (5%)

\$0 _____

H. TOTAL BUDGET:

\$0

APPENDIX D

EXHIBIT "B"

METHOD OF COMPENSATION

1.0 PURPOSE

This exhibit defines the limits and method of compensation to be made to the Contractor for the services set forth in Exhibit "A" and the method by which payments shall be made.

2.0 COMPENSATION

For the satisfactory completion of the services detailed in Exhibit "A", the Contractor shall be paid a Maximum Amount of \$.

The Maximum Amount consist of the following:

Basic Services (Lump Sum)	\$
Equipment (Limiting Amount)	\$
Total Maximum Amount	\$

3.0 PROGRESS PAYMENTS

The Contractor shall submit invoices in the form of an original and three copies in a format acceptable to the Department. Payment shall be made to the Contractor for a portion of the Lump Sum Amount equal to the percentage of work completed, as supported by the progress report and verified by the Department. Receipt by the Department of the Draft Final Report described in Section III of the Contract will constitute 90% of the Lump Sum Amount to be paid to the Contractor.

EQUIPMENT – Equipment authorized and listed in Exhibit “A”, will be paid for at the actual cost of the equipment, or the amount identified for equipment in Exhibit “A”, whichever is less. Payment shall be made to the Contractor for such equipment once the Contractor has met the conditions of Section X of the contract.

The Progress Report referenced in Section II, Paragraph A, must be submitted with the invoice. The invoice must identify the period of time that it covers and the percentage of work complete. Invoices received without a progress report will be returned to the Contractor. All invoices and progress reports must prominently display the Contract number, which will be incorporated into the Notice To Proceed.

4.0 FINAL PAYMENT

The Contractor should submit all outstanding invoice(s) with the final deliverables. The invoice(s) should be marked “Final Invoice”. A final invoice can not be accepted without the final deliverable.