

Request for Research Proposal (RFRP) Training for Research Project Managers

FDOT Research Center
Webinar for FY2012



Today's Participants

Who is the Research Center?

- The Research Center oversees the Department's research program, projects that are requested by FDOT Offices and Districts and are contracted to universities and consultants

Who are you?

- Project managers for upcoming RFRPs
- People with research needs
- Busy people



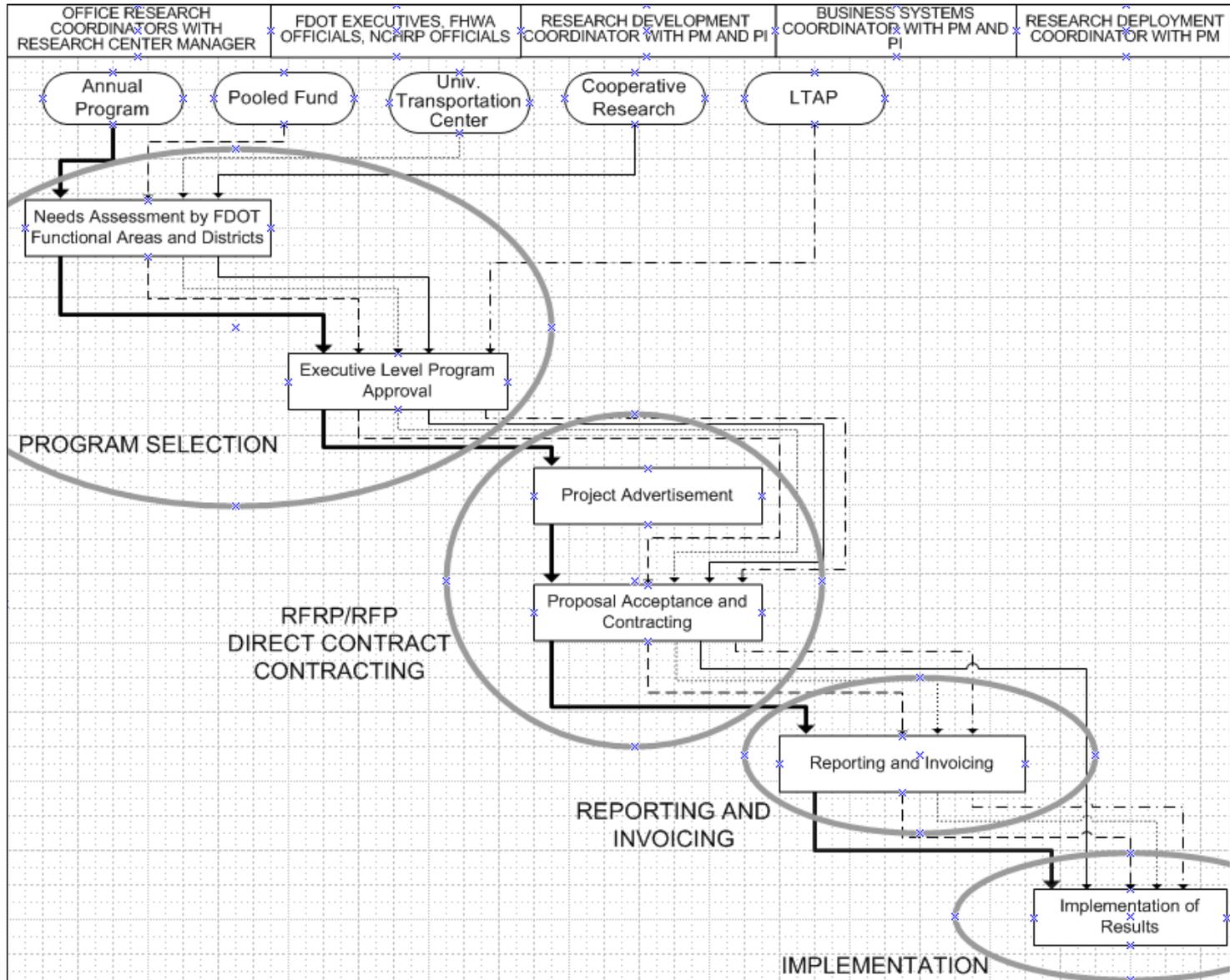
Why are you Here?

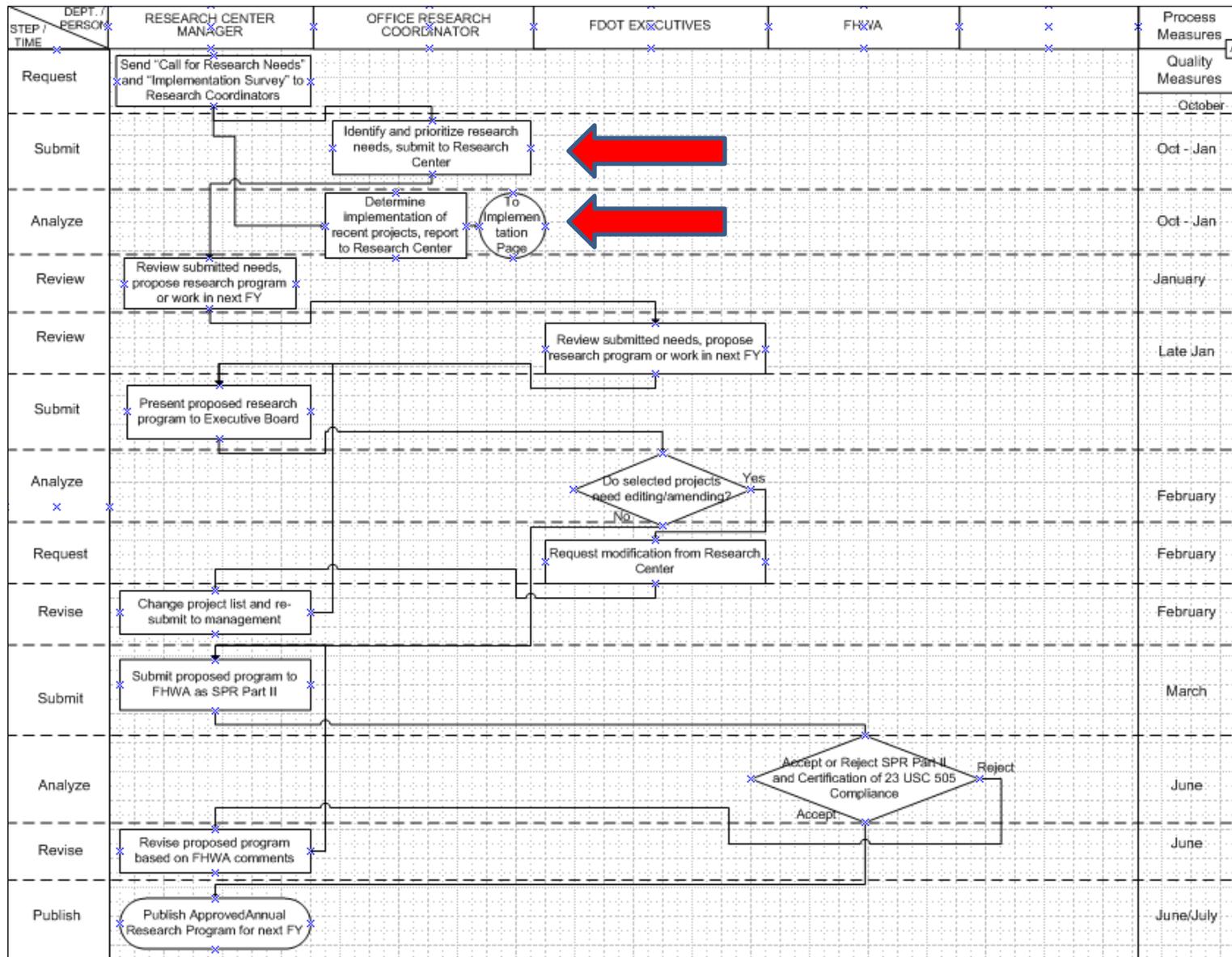
Covered in this Training

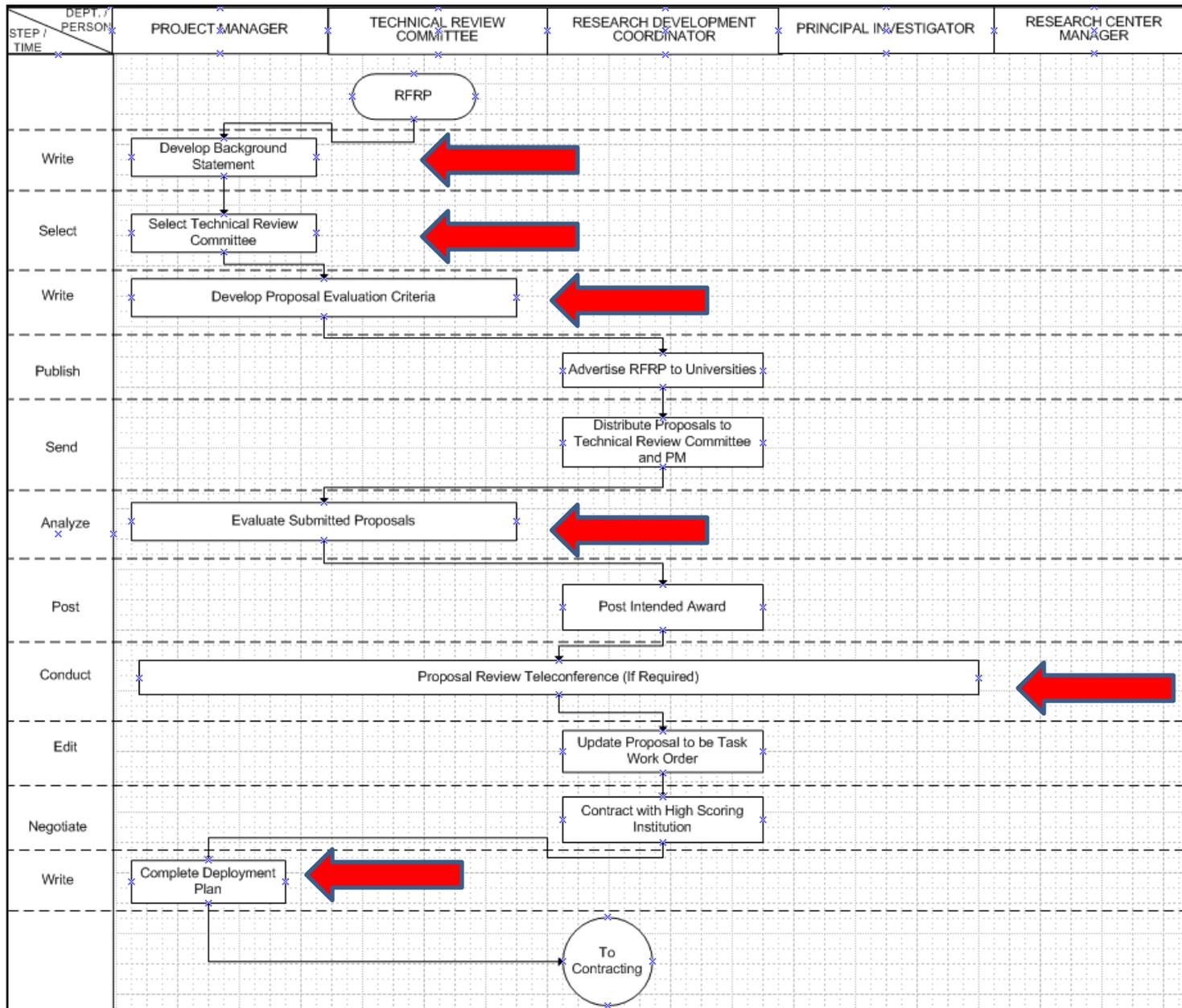
- Prior steps in the research project process;
- Do/Don't for background and objective statements;
- Technical review committees
- The Advertisement
- Awarding the contract
- Executing the Task Work Order

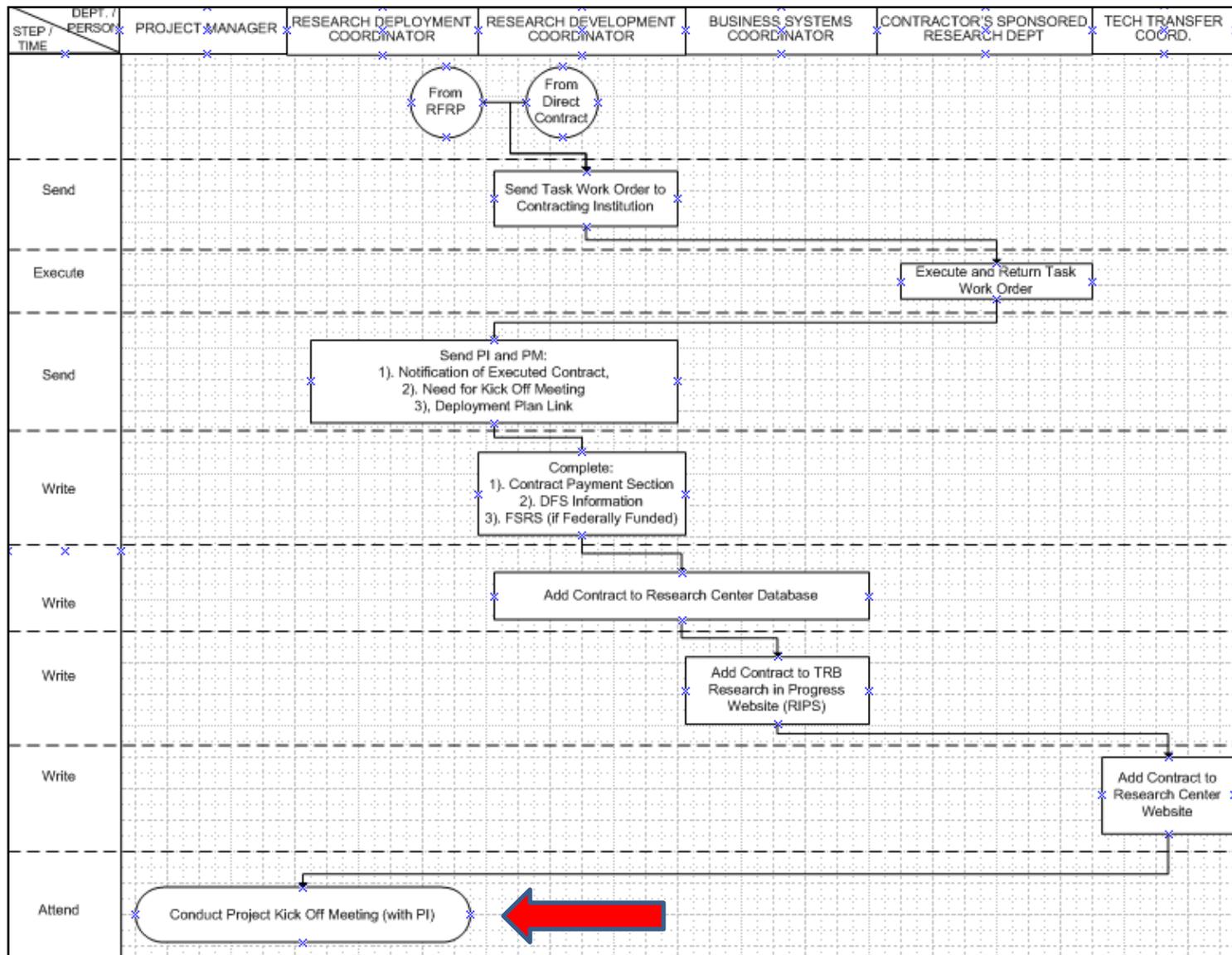
This Training Covers the Research Center's RFRP process only.

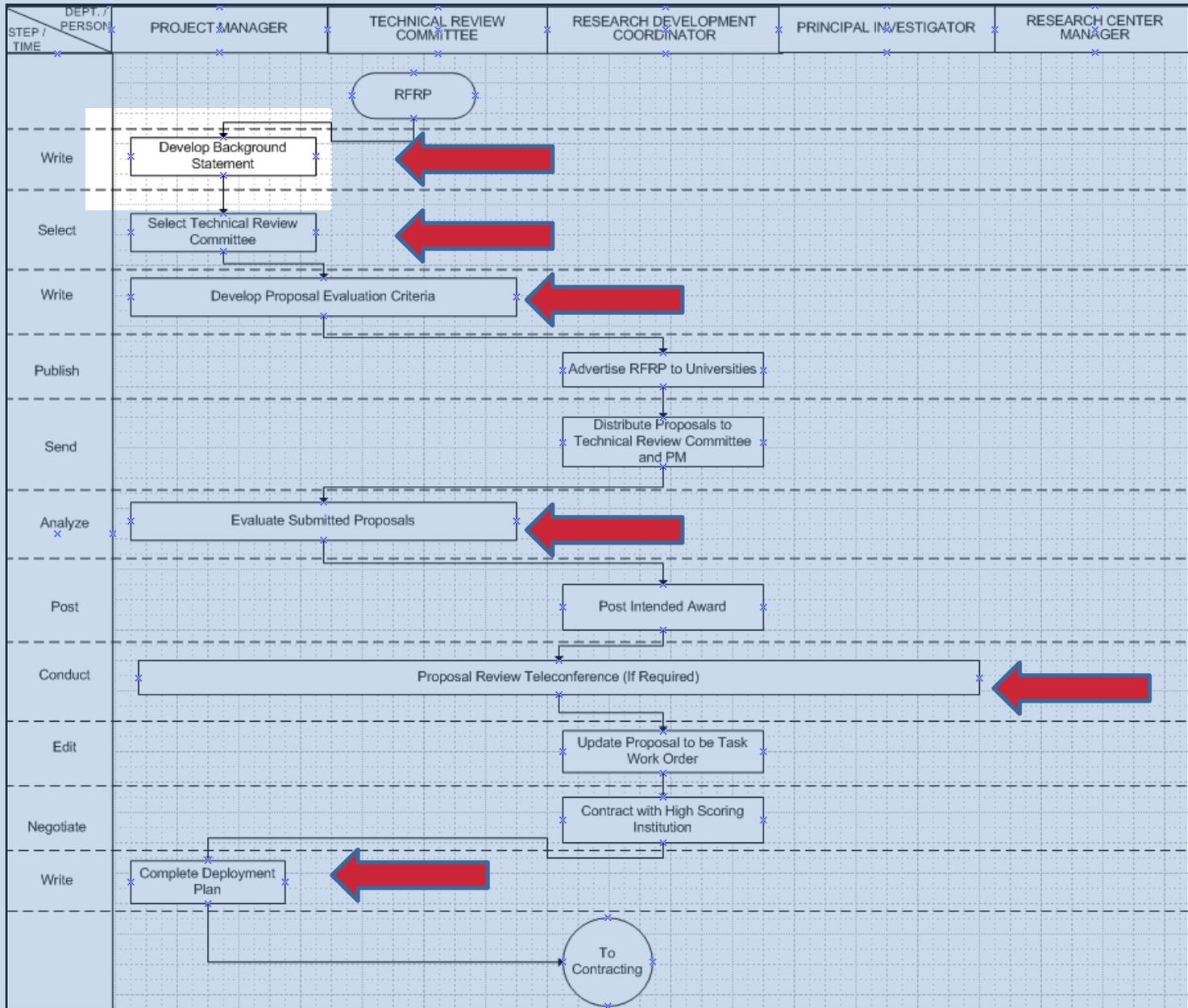












Creating a Background and Objective Statement

Background Statement – Describes what *created* the need for the research, and a description of that need

- Be as specific as you need

Objective Statement – Describes the objectives of the project

- Be as specific as you want – could limit creativity;
- Write objectives carefully, they determine your project.



Creating a Background and Objective Statement

Background

Florida's Road Ranger service patrol program is a free service offered by the Florida Department of Transportation (FDOT) and other transportation agency partners. This program was initially used to manage vehicle incidents in construction zones and has since expanded to all types of incident responses, becoming one of the most effective elements of the FDOT Traffic Incident Management (TIM) Program. Road Ranger service patrols (Road Rangers) provide a direct service to motorists by quickly clearing minor incidents from travel lanes in close coordination with the Florida Highway Patrol (FHP) and other law enforcement agencies. They also assist disabled motorists with basic services, such as furnishing a limited amount of fuel, assisting with tire changes, and helping with other types of minor vehicle repairs. Road Rangers typically patrol Florida's interstates, other major freeways, and construction zones on these facilities.

FDOT began funding this statewide program in December 1999. Documented program benefits include the following:

- Decrease in accidents;
- Decrease in incident durations;
- Assistance to disabled or stranded motorists;
- Removal of road debris;
- Decrease in air pollutants related to congestion;
- Increase in safety at incident scenes .

The program is managed at the local District level and as a contracted service provided by private vendors. Central Office TIM personnel facilitate program issues of statewide interest. Since the program's inception, the Road Rangers have made over 2.8 million service assists.

Objective

The objective of this research is to examine and evaluate the benefits of the Road Ranger program against the operating cost, looking at the cost-benefit ratio from statewide, district perspectives and with respect to vehicle types used to run the program.



Creating a Background and Objective Statement

Background

FC-5 is the open graded friction course (OGFC) used on all of FDOT's high speed multi-lane facilities. This mixture type is advantageous compared to dense graded friction courses in that it reduces road spray and hydroplaning potential. The drawback is that its life span is less than dense graded friction courses. Primary distresses are raveling and top-down cracking.

FC-5 mixtures are typically composed of two or three component virgin aggregates (FDOT does not allow RAP), fibers, asphalt binder, and an anti-stripping agent. FDOT designs FC-5 mixtures using a pie-plate visual method developed by FHWA (<http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/methods/fm5-588.pdf>).

FC-5 mixtures are constructed with only two binder types: asphalt rubber binder (12% rubber by weight of binder) for lower traffic levels and PG 76-22 for higher traffic levels. Since there are no volumetric properties and no performance tests performed at mix design, the selection of the binder content is based solely on the visible draindown on the pie plate. In summary, the mix design is not based on performance other than to limit the potential for draindown/bleeding during construction. Consequently, the current system has performed adequately. However, there is a desire to determine specifically how FDOT could increase the lifespan of its FC-5 mixtures in a practical/realistic manner by optimizing the quantities of the component materials to improve raveling and cracking resistance.

Objectives

1. Examine and summarize what other states are doing related to optimizing OGFC performance. This would entail a literature review and telephone/e-mail correspondence.
2. Conduct laboratory testing using procedures suitable for OGFC mixtures that would characterize the mixture's ability to resist raveling and top-down cracking. No new testing methods are to be developed. It is understood that the tack coat type and quantity may affect the raveling and cracking of an OGFC. This topic is being researched separately. This project is to focus solely on the OGFC mixture.
3. Working within the constraints of the aggregate types and binder types available to Florida contractors and the current pie-plate method of mix design, determine how FDOT can optimize FC-5 mixtures to maximize their lifespan. It is anticipated that varying design binder contents, binder types, gradations, etc. will be examined.
4. Based on the results of the objectives above, develop guidelines defining when reduced payment or removal and replacement of as-constructed FC-5 mixtures would be recommended based on deviations from the mix design. In other words, quantify the effects of deviations in component quantities from mix design quantities on the expected performance life of FC-5 mixtures.



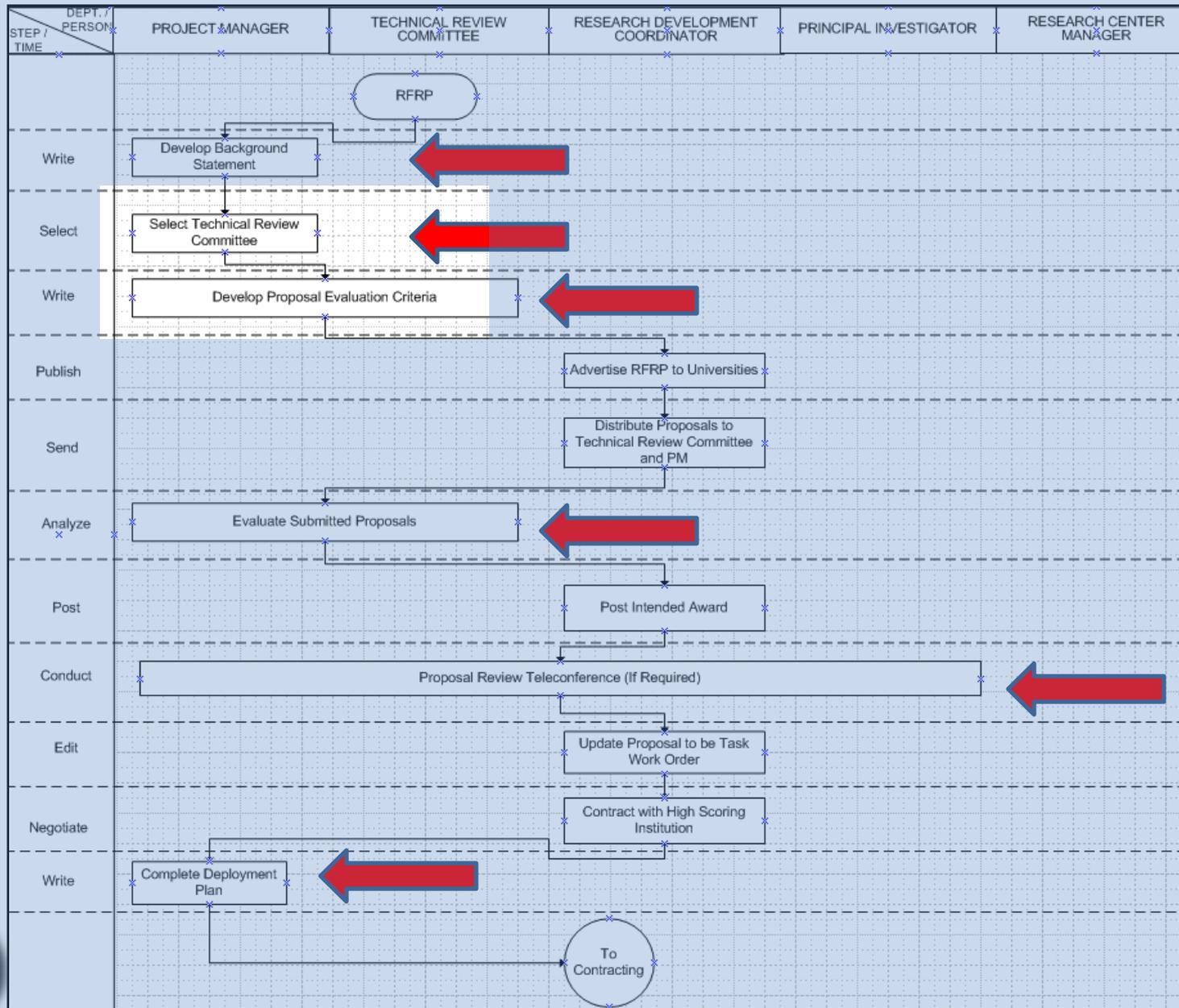
Creating a Background and Objective Statement

Sending the Background and Objective to the Research Center (Patti Brannon) indicates you are ready for this project to be advertised

Patti will then request:

- Request for Technical Review Committee member list;
- Request for evaluation criteria list;
- Pre-proposal teleconference y/n;
- Public meeting for proposals?





Forming a Technical Review Committee (TRC)

Who to Include

- FDOT Offices directly affected by the research;
- Subject area experts;
- Recommend PM plus 3 people.

Who to exclude

- Anyone not directly affected or needed



Technical Review Committee Tasks

Discuss the following:

- Attend the pre-proposal teleconference (if held);
- Determine weights of evaluation criteria based on review and discussion of Background and Objectives.
 - Six standard weighted categories
 1. Understanding the Problem;
 2. Proposed Research Approach;
 3. Qualification of Staff and Firm;
 4. Adequacy of Resources;
 5. Time Requirements;
 6. Budget.



Technical Review Committee Tasks

Proposal Evaluation

Proposals must be scored individually

- Normal process is for the TRC to NOT meet after proposals are distributed, *members score proposals individually* then return them to Patti Brannon;
- Alternative process is for PM to decide BEFORE THE PROJECT IS ADVERTISED that the TRC will meet to discuss only the strengths and weaknesses of proposals. Meeting is advertised with the project, anyone can attend. *Team members must still score proposals individually.*

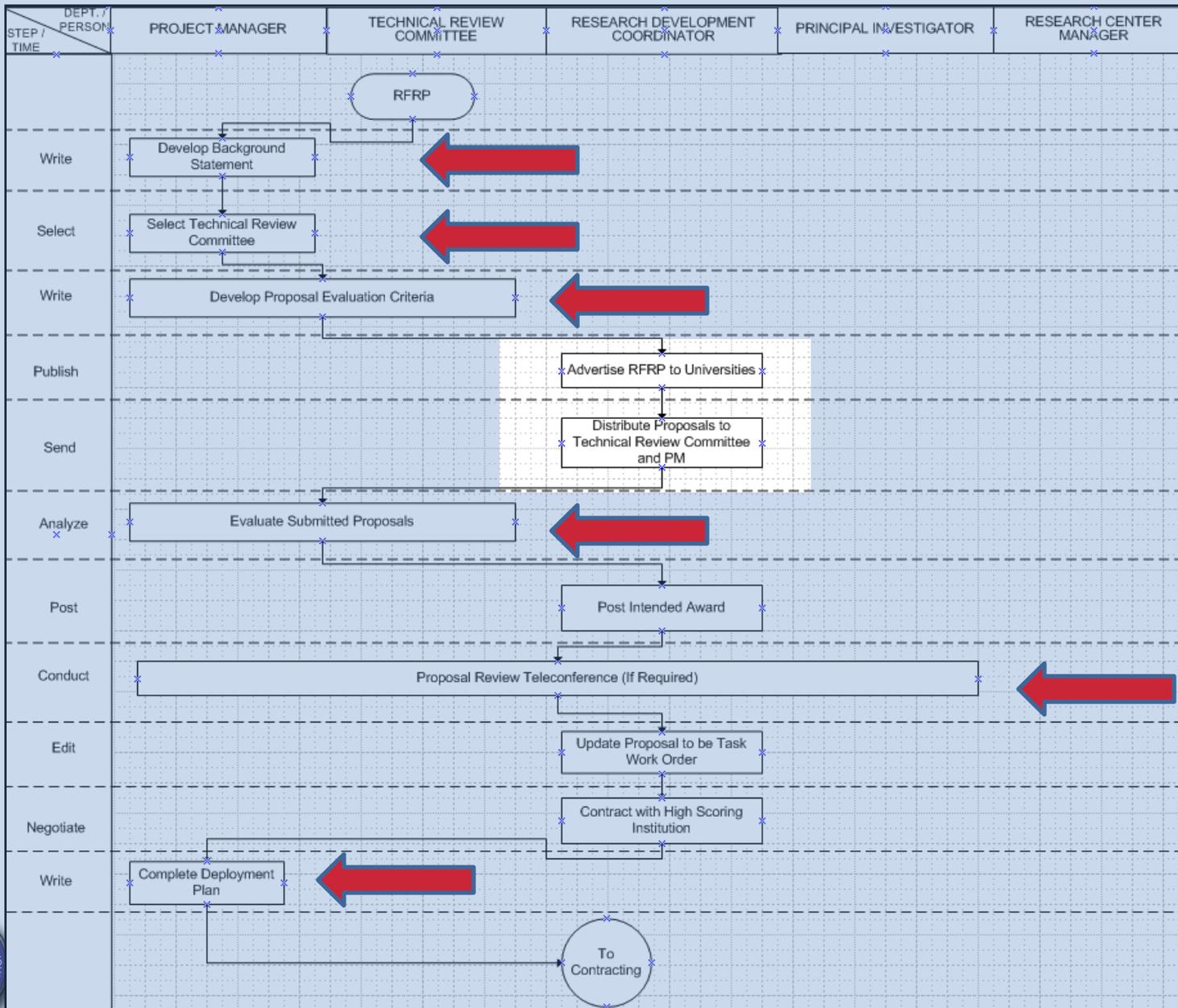


Technical Review Committee Tasks

Understand when what can be said to who

- **Before Advertisement** – Avoid discussing the project with anyone who may be submitting. Can create a conflict of interest and exclude that PI from proposing;
- **After Advertisement** – Refer all questions to the Research Center contact noted in the advertisement. All technical questions submitted in writing by the deadline will be answered publically on the Research Center website, administrative questions can be answered at any time;
- You will get calls from PIs! Know what to do.





The Advertisement

Research Center Tasks

- Coordinate submission/review dates with PM
 - Post date;
 - Pre-proposal teleconference (5-7 days after post);
 - Technical question due date (4-5 days after teleconference);
 - Advertisement closing date (14-21 days after technical questions);
 - Date for evaluations to be returned from PM and TRC, totaled, and intended award posted.
- Write advertisement
- Post to Research Center website



The Advertisement

Contents of RFRP Advertisement

- Qualification and restrictions;
- Required components of proposals;
- **Evaluation criteria;**
- **Due Dates;**
- **Background and Objectives;**
- Method of compensation.

Write objectives carefully, they determine your project



Pre-proposal Teleconference

Purpose of teleconference

- At PM's discretion, typical when objectives are complex

What should be covered

- Review advertisement, answer questions

Who can attend, who must attend

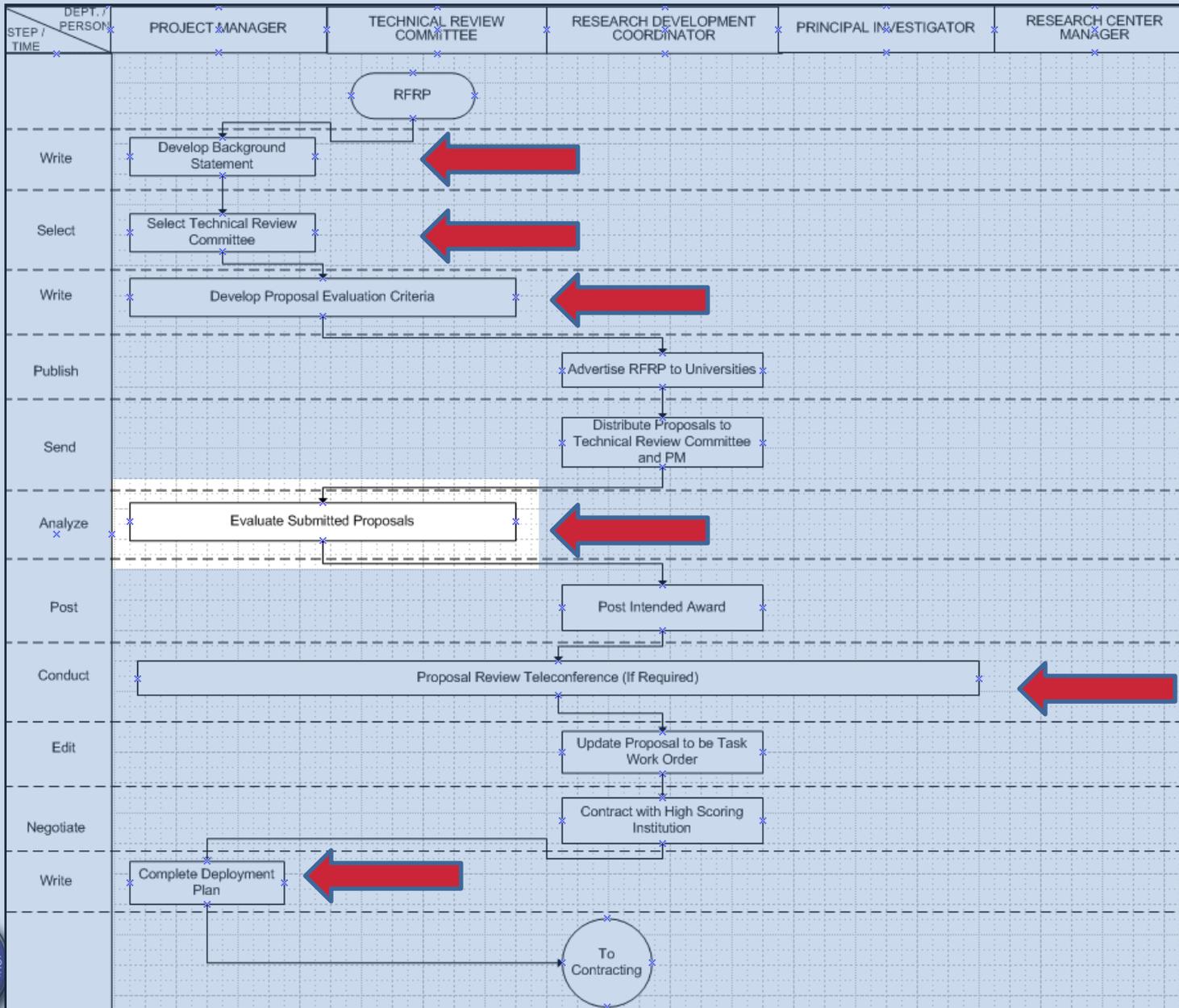
- The teleconference can be mandatory for all potential proposers at PM's discretion



Collection and Distribution of Proposals

- Research Center reviews for administrative requirements (budget, schedule, etc.)
- Notifies PM and TRC who has proposed, what will be sent out, and when it is due back;
- Conflict of interest form to all Technical Review Committee members who do not have one on file.





Technical Review of Submissions

Don't review proposals as a group! Can discuss them in an advertised public meeting, but can't score them!

Understanding of the Problem	Score = <u>9.5</u> (10 points maximum)
<i>The proposal must demonstrate a solid knowledge of the problem and its background. It should not be a duplication of the RFRP.</i>	
Proposed Research Approach	Score = <u>23.5</u> (25 points maximum)
<i>A scientific and practical approach to the resolution of the problem should include an experimental design, data collection procedures, analytical procedures, cooperative features (if necessary) and innovative concepts.</i>	
Qualification of Staff and Firm	Score = <u>23.5</u> (25 points maximum)
<i>The experience and expertise of the staff should be considered, including the technical disciplines of the Principal Investigator and the support staff. The relative effort of the staff is important.</i>	
Adequacy of Resources	Score = <u>9</u> (10 points maximum)
<i>If the project requires support facilities, the degree of availability, the laboratory, computing and testing equipment, and any other resources must be evaluated.</i>	
Time Requirements	Score = <u>10</u> (10 points maximum)
<i>Percent of time devoted to project is sufficient for task completion. Project Schedule identifies appropriate time for completion of tasks and submittal of required deliverables.</i>	
Budget	Score = <u>18</u> (20 points maximum)
<i>Budget identified salaries, expenses, equipment and tuition. Any research specific items are fully explained and identified.</i>	
Total	Score = <u>93.5</u> (100 points maximum)

Understanding of the Problem	Score = <u>13</u> (20 points maximum)
<i>The proposal must demonstrate a solid knowledge of the problem and its background. It should not be a duplication of the RFRP.</i>	
Fair understanding of problem, but shortcomings with understanding of background.	
Proposed Research Approach	Score = <u>12</u> (20 points maximum)
<i>A scientific and practical approach to the resolution of the problem should include an experimental design, data collection procedures, analytical procedures, cooperative features (if necessary) and innovative concepts.</i>	
Approach (proposal) relies more on added services rather than focus on the problem at hand.	
Qualification of Staff and Firm	Score = <u>12</u> (15 points maximum)
<i>The experience and expertise of the staff should be considered, including the technical disciplines of the Principal Investigator and the support staff. The relative effort of the staff is important.</i>	
Experienced in this general area.	
Adequacy of Resources	Score = <u>14</u> (15 points maximum)
<i>If the project requires support facilities, the degree of availability, the laboratory, computing and testing equipment, and any other resources must be evaluated.</i>	
More than adequate.	
Time Requirements	Score = <u>12</u> (15 points maximum)
<i>Percent of time devoted to project is sufficient for task completion. Project Schedule identifies appropriate time for completion of tasks and submittal of required deliverables.</i>	
Nine months is one of the longer time lengths.	
Budget	Score = <u>7</u> (15 points maximum)
<i>Budget identified salaries, expenses, equipment and tuition. Any research specific items are fully explained and identified.</i>	
Second highest cost.	
Total	Score = <u>70</u>

Determining Award

Proposal Tabulation

RFRP# 10/11-004

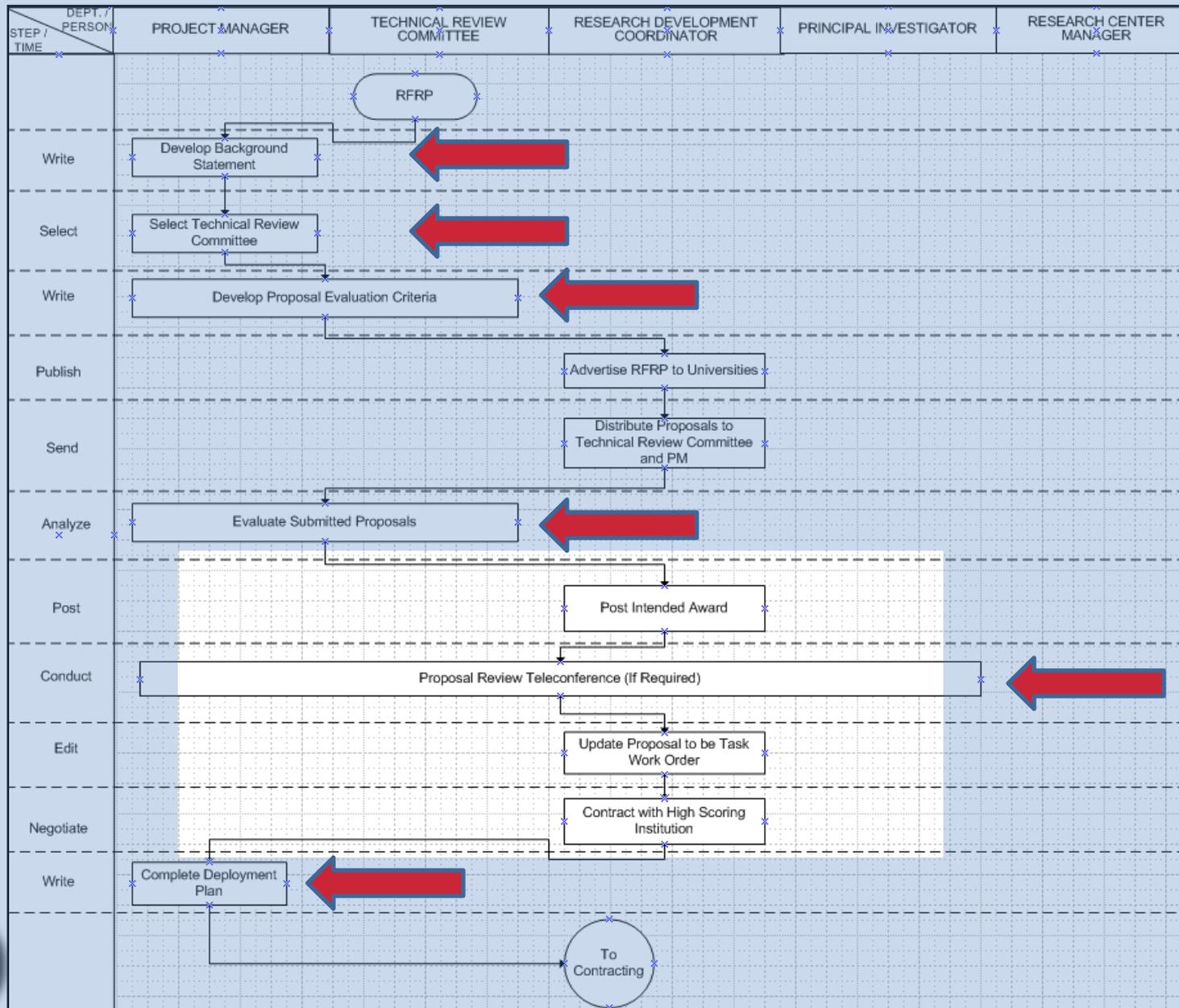
Improved Inspection Techniques for Steel Prestressing/Post Tensioning Strands

Proposer	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Total Score	Intended Award
Florida International University	9.84	23.84	23.84	9.00	9.34	18.00	93.86	X
University of North Florida	8.17	20.00	20.00	7.17	9.34	15.34	80.02	
University of Florida	8.17	20.34	20.67	8.00	9.67	16.34	83.19	
University of Miami	7.84	19.00	19.34	8.00	9.34	18.34	81.86	

Criteria	Maximum Points	Description	Technical Committee Members
1	10	Understanding of the Problem	Fallaha, Sam
2	25	Proposed Research Approach	Lasa, Ivan
3	25	Qualification of Staff and Firm	Pouliotte, Jeff
4	10	Adequacy of Resources	
5	10	Time Requirement	
6	20	Budget	

X Indicates apparent award, but does not constitute a Notice to Proceed.



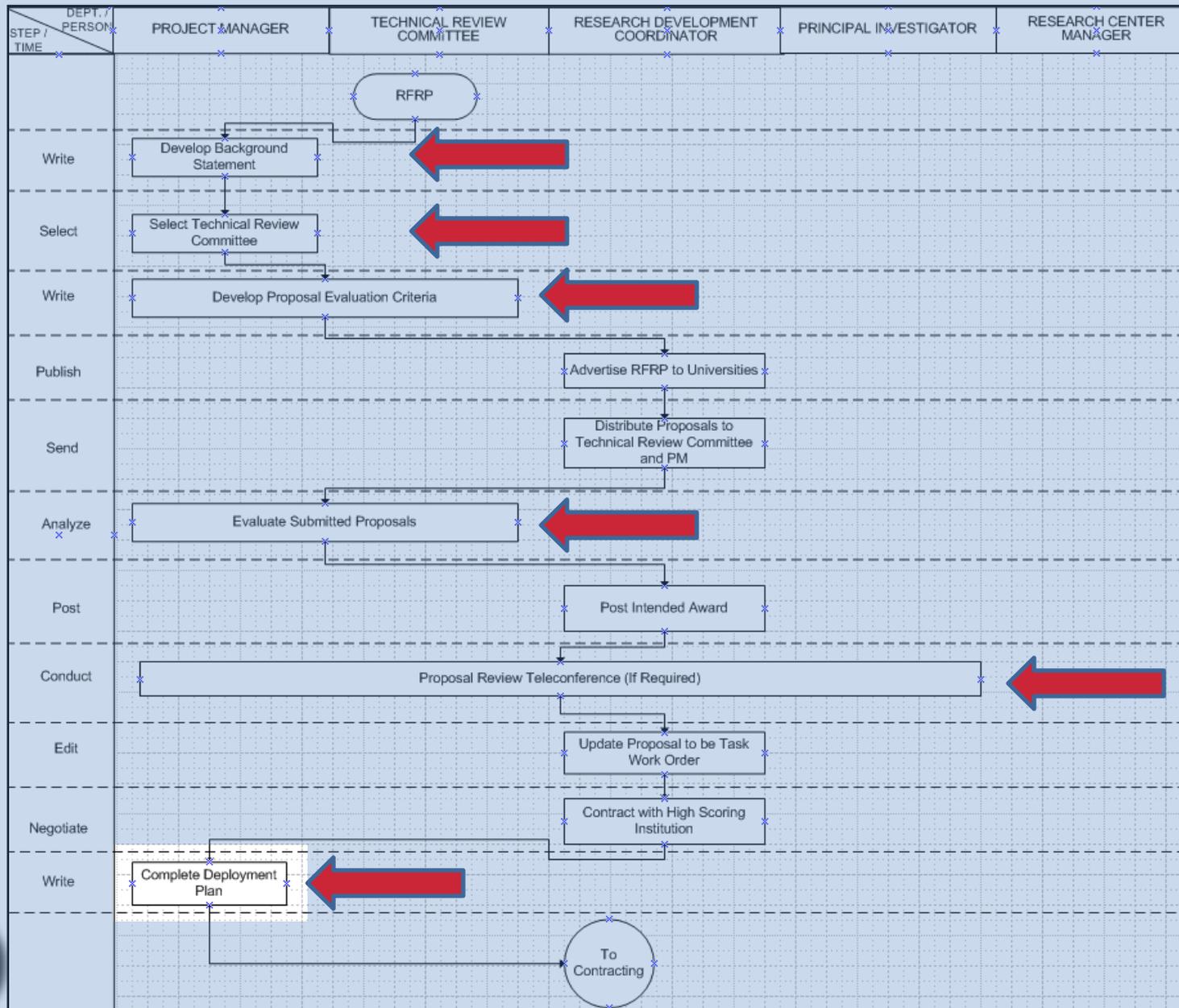


Contracting with Intended Awardee

- Intended award is posted to Research Center website;
- Contact PM to verify if clarifications are needed in the intended award's proposal (recall – you have not talked to the PI yet!):
 - If technical or administrative clarifications are needed a proposal review teleconference will be scheduled, after which a modified proposal can be submitted;
- After agreements are reached the modified proposal becomes the Scope of Work for your project.

Cannot deviate from advertised objectives (write objectives carefully, they determine your project).

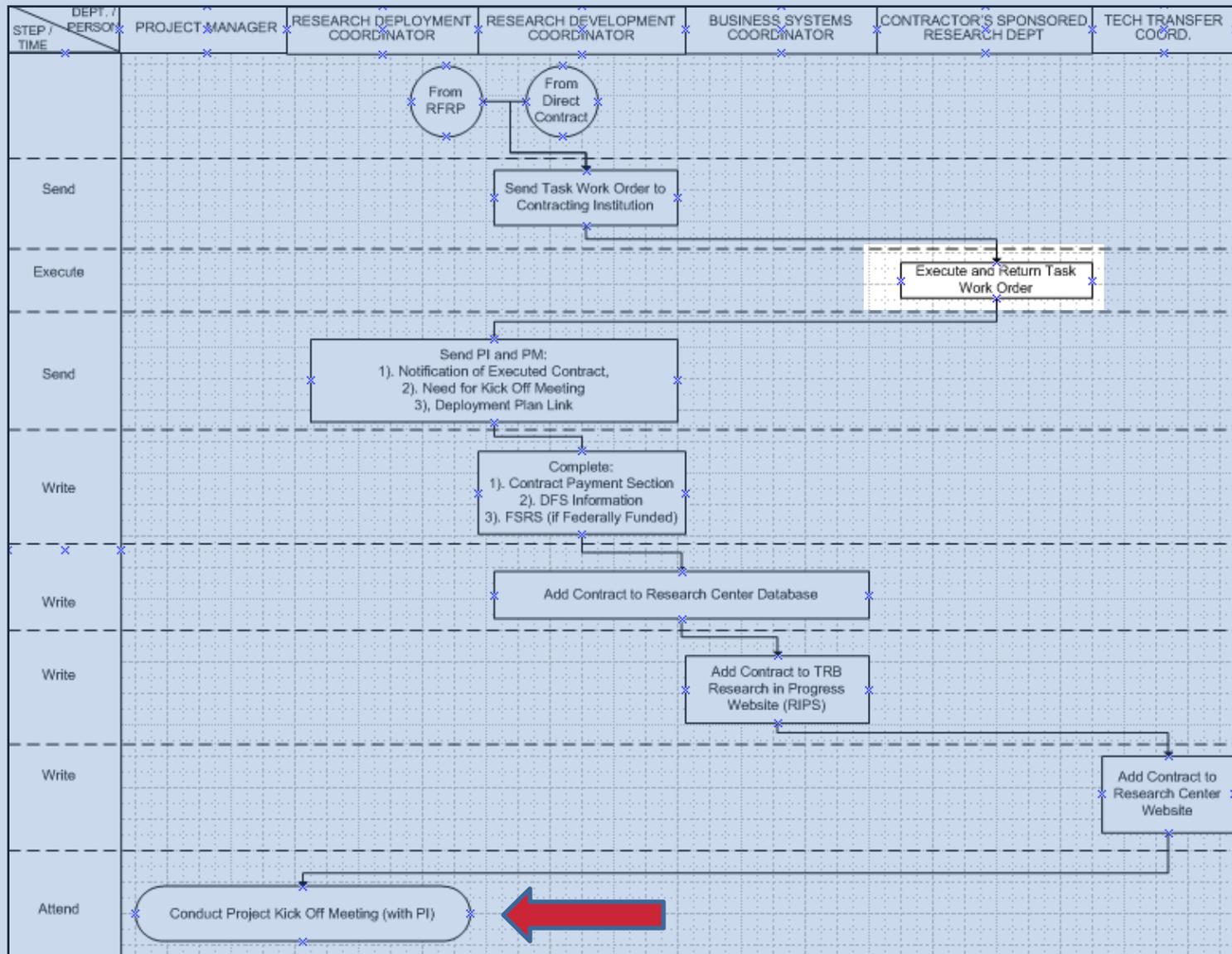




Deployment Plan

- Via Survey Monkey;
- Completed after proposal review teleconference;
- Think critically about how the project will be implemented at the end.





Task Work Order (TWO) Written and Executed

- TWO is Scope of Work with a few additional pages;
- Start date is when the PI's organization executes the contract.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE C. KOPELOUSOS
SECRETARY

TASK WORK ORDER (TWO)

January 5, 2011

Ms. Roslyn Heath
Assistant Director of Research
University of Florida
339 Weil Hall
Gainesville, FL 32611

Re: Task Work Order #977-41
Research Center
Contract #BDK75

TWO Description: "Field Testing of a Jet-Grouted Pile"

In accordance with the above referenced agreement, upon your execution you are authorized to perform the tasks detailed in the attached Exhibit "A".

For the required services, compensation shall be \$194,354.00 as described in the attached Exhibit "B". All services required by this task work order will be completed on or before October 30, 2012.

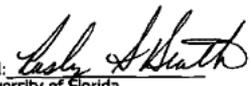
This project is funded with DC – State Primary PE Consultant funds.

Please acknowledge receipt of and agreement with this task work order by signing and dating both originals and returning one of the signed originals to:

Patti Brannon
Florida Department of Transportation
Research Center
605 Suwannee Street, MS 30
Tallahassee, FL 32399-0450

Sincerely,


J. Daniel Dockstader
Manager, Research Center

Accepted: 
By: University of Florida
Name: Roslyn S. Heath
Title: Assistant Director for Research
Date: February 3, 2011

www.dot.state.fl.us



Addressed in Additional Trainings

- Kick off meeting
- Quarterly reports and invoicing;
- Project closeout meeting;
- Implementation;
- Other contract types (RFP, Direct Contract, etc).



Do

Follow Florida open meeting rules

Communicate clearly in the Background and Objectives the deliverables you want

Write objectives carefully, they determine your project

Don't

Don't talk to potential proposers before or after advertisement

Don't evaluate proposals as a group

Don't be afraid to ask questions



Thank You for Managing Research Projects

Questions?

Research Center Personnel

- Darryll Dockstader – Manager x-4617
- Sandra Bell – Business Systems Coordinator x-4614
- Patti Brannon – Research Development Coordinator x-4616
- Mark Greeley – Research Performance Coordinator x-4613
- Vicki Morrison – Technology Transfer Coordinator x-4631

