Lessons Learned in Performance-Based Maintenance Contracting

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Overview

- Introduction
- Project Development and Award
- Performance Standards
- Measuring Performance
- Partnering
- Managing the Process
- Planning for Follow-on/Transition Efforts
Intro – What is Performance-Based Maintenance Contracting?

- A maintenance approach where a private contractor assumes responsibility for managing the condition of transportation assets to predefined conditions
  - Performance standards are specified instead of maintenance techniques
  - Shifts the risk from the owner agency to the contractor
  - Contractor receives a schedule of payments in return for an agreed upon level of performance
Objectives of Performance-Based Maintenance Contracts

- To stabilize and improve the condition of assets (better level of service for our customers)
- To reduce overall maintenance costs
- To promote and encourage the development of innovative asset preservation practices
Project Development and Award

- Take advantage of the experience of others – don’t start from scratch
- Work with FHWA – some of the contract might be eligible for federal funding
- Use Best-Value award if allowed (SEP process)
- Determine compatibility with your contracting regulations
- Be innovative in making the contract fit the regulations
Project Development and Award

- Allow enough time for RFP development, approval, advertising, and award
- Determine and specify the level of work included – maintenance/rehab/both?
- Determine who needs to review/approve the RFP and involve them early in the process
- Specify how innovative methods/technologies will be approved if they are different from the standard specifications
Project Development and Award

- Specify the relationship between contract signing and NTP and what are the payment implications of this relationship
- Plan out and specify what happens if the project doesn’t work
- Identify the PM/PE/COTR and involve him/her throughout the entire process
Project Development and Award

- The following contract structure issues must be considered by the contracting agency:
  - Proposal or bid?
  - Which contract type?
  - What will be the method of payment?
  - How much asset condition data will be included and where will this information come from?
  - Which assets are included?
  - What happens to existing contracts?
  - What happens to existing workers?
Incentives and Disincentives

- Make incentives achievable (and worthwhile)
- Include disincentives to push performance
- Incentives and disincentives should be equal
- While including disincentives is appropriate, realize that you are going to pay for that risk up front
Performance Standards - Lingo

- **Performance Measure**
  - Outcome based measure used to evaluate performance. Performance measures can be made up of multiple levels of service. Performance measures may be quantitative or qualitative, objective or subjective.

- **Performance Standard**
  - The minimum acceptable level of service for a given performance measure. The performance standard is considered a “pass”.
Performance Standards

- Form the basis of the contract
- Must be SMART
  - S – Specific
  - M – Measurable
  - A – Achievable
  - R – Results-Oriented
  - T - Timely
Sources of Performance Measures/Standards

- Agency Goals
- Common industry standards
- Research
- Measures/standards from other agencies/contracts
- Subject matter experts
- Brainstorming/working sessions
Performance Standards  - Lessons Learned

- Make sure that you cover everything
- Focus on what to achieve, not how to achieve it
- Include time-response standards for each condition standard
- 5-level measures are more informative than pass/fail measures
- Test the standards in the field before advertising your RFP/IFB
Performance Standards – Lessons Learned

- When nearing completion of the draft set of measures/standards, it is important to sit back and think, “What have we missed?”
- Defining performance measures/standards is an iterative process
- Getting reviews/approval/buy-in from the offices that will be impacted is very important
- Need to clearly define what it means to meet the performance standards – average versus absolute argument
Performance Standards – Lessons Learned

When developing Performance Standards, it is important to consider how they will be measured/evaluated and define this in the solicitation:

- Who will collect and analyze the information?
- Is specialized equipment required?
- How often will performance be evaluated?
- Will the evaluation be subjective or objective?
- Who pays?
- What happens if a performance standard isn’t met?
Measuring Performance

First need to answer a philosophical question - Is the purpose of the performance evaluation to:

- Provide an indicator of the contractor’s performance, or
- To drive the contractor’s work plan at the detailed level

The answer is a key driver to your performance-measurement process.
Measuring Performance

- Specify the process clearly in your RFP/IFB – it will impact the price
- Need to choose between sampling and 100% reviews
- If sampling, choose the samples randomly – resist the temptation of only looking at the problems
Measuring Performance

- Capture the performance reviews on video
- Generate reports from the review that will be shared with all project partners
- Present the results in a variety of ways to satisfy different interest levels
Overall – Management Level

Overall Evaluation Score by Month

Score

0 10 20 30 40 50 60 70 80 90 100

Month

0 1 2 3 4 5 6
Maintenance Category Level – Project Staff

- Pavement Structure
- Roadway Cleaning
- Roadside Cleaning
- Traffic/Safety - Guiderail, Barriers, Attenuators
- Tunnels
- Roadside - Curb, Sidewalk, Fencing, Retaining Walls
Measuring Performance

- Weighted averages work for combining scores across multiple samples and categories, but can hide problems.
- Don’t focus too long on the overall score – it is just an indicator.
- Be fair.
Partnering

- It works – Use it, but don’t abuse it!

- Dispute Resolution
  - These contracts can’t cover every conceivable issue – work them out through partnering
Managing the Process

- Manage expectations over the course of the contract
- You will need to actively monitor the contract
  - Plan for appropriate resources
- While these contracts provide nice planned spending, budget some discretionary funds for out of scope emergencies
- Use consultant staff for specialized expertise and testing
Managing the Process - Communications

- Regular meetings help to keep issues on the table until they are solved.
- A centralized communications hub in the form of a web portal is very useful.
- You will need a means of submitting service requests and tracking responses.
- The agency PM/COTR and the contractor PM must have a good working relationship.
Planning for Follow-On/Transition Efforts

- Start Early!
- Bring stakeholders back together to determine the future direction
- Re-design your solicitation based on lessons learned and new industry information
- Be realistic with budget estimates – must reflect scope changes and inflation
- Advertise early – leave time for negotiations, award, mobilization, and transition
Summary

- More and more agencies have gone to performance-based maintenance contracts over the past 5 years to improve the condition of their assets and/or to save money.
- Take advantage of their lessons learned when developing a performance-based maintenance contract.
- Most of this information also applies if you are considering performance-based in-house maintenance.
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