ASSET MAINTENANCE OUTSOURCING: HOW WILL DOT’S OPERATE IN THE FUTURE?

DAVID RADER, DBI SERVICES
Focus is shifting from new and additional capacity, but doing more with less.

HOW WILL DOT’s OPERATE IN THE FUTURE?

PARTNERSHIPS UTILIZING AN ASSET MANAGEMENT APPROACH
Asset management recognizes that significant cost savings can be achieved if an asset’s whole life costs are taken into account.
Operations and Maintenance Strategies
Quality does not Cost More
Evolution of the Asset Maintenance Model in US

The Past and Present
- In-House Maintenance
  - All Work Performed In-House by Agency Crews
- Traditional Contracting
- Short Duration
- Unit Price
- Single Activity
- Low Bid

The Future
- Comprehensive Asset Management
- Mid-term (5–10 yr)
- Lump-Sum Contracts
- Performance-Based
- Bundled Services
- Qualifications

Alternative Delivery / Capital Maintenance
- Long-term (20–30 yr)
- Private Financing
- Incentive Alignment
- Risk Transfer
- Qualifications-based
Asset Maintenance Contract Model - “Full Service”

- Comprehensive Maintenance Operations
- Performance Based Contracts
- Lump-sum / Fixed Priced
- Long-term Contracts
- Risk Sharing
Performance Based Approach to Maintenance Contracting
Drivers of Performance-Based Contracting

- Accomplish More with Less – Getting the work done
- Cost Savings
- Possible reduction in staffing and equipment
- Alignment - Investment Mentality vs. “Worst First.”
- Consistency of Service – Outcome based
- Better Consistent Budgeting
- Less Administration than piecemeal outsourcing
Roadways

- Over 19,000 Lane Miles
- Almost 5,000 Centerline Miles
- 60 Contracts
- 1,600 Employees
Structures

- Maintenance Services on over 5,000 Structures and Bridges, Florida Arizona, Georgia, Virginia, Texas and South Carolina.
- Inspection Services on 4,000 Bridges
- Includes 45 Movable Structures
Facilities

100% Rest Areas and Welcome Centers
- Virginia
- Utah
- Missouri
- Arizona

Vast Majority of Florida
- Rest Areas
- WIM Facilities
- Welcome Centers

Roughly 50% in Michigan
### Typical Contract Procurements

#### STANDARD

- **Corridor**
  - Highways/Interstates/Toll Roads

- **Geographic**
  - Area Collection of Roadways/Facilities/
    - Structures

- **Asset Components**
  - Rest Areas/Welcome Centers
  - Bridges – Stationary/Moveable
  - Weigh Stations

#### PPP

- **Alternative / PPP**
  - Roadways
  - Toll Facilities – Mainline/Ramp Plazas
  - Structure Rehabilitation and Maintenance
# Florida Department of Transportation Comparison

## FDOT Comparison of Methods

Estimated Levels by FY 07/08

<table>
<thead>
<tr>
<th></th>
<th>In-House</th>
<th>Traditional Maintenance Contracts</th>
<th>Asset Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Maintenance Costs</td>
<td>173.2 mil</td>
<td>$162.1 mil</td>
<td>$145.9 mil</td>
</tr>
<tr>
<td>Percentage Cost Savings</td>
<td>0</td>
<td>6%</td>
<td>13%</td>
</tr>
<tr>
<td>Number of Contracts</td>
<td>0</td>
<td>993</td>
<td>28</td>
</tr>
<tr>
<td>Number of Invoices to Process Annually</td>
<td>0</td>
<td>11,916</td>
<td>336</td>
</tr>
<tr>
<td>Contract Advertisements and Lettings or Renewals Annually</td>
<td>0</td>
<td>962</td>
<td>4</td>
</tr>
<tr>
<td>In-House Maintenance Staffing</td>
<td>3,049</td>
<td>124</td>
<td>38</td>
</tr>
<tr>
<td>In-House Non-Maintenance Staffing</td>
<td>123</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Performance or Task-oriented</td>
<td>Performance /Task</td>
<td>Task</td>
<td>Performance</td>
</tr>
</tbody>
</table>
Asset Maintenance Contracts tend to lead to statistically significant better MRP scores than non-AMCs. These results are statistically significant within the 95% confidence level.

The Asset Maintenance Contract program was 21.7% more efficient than the non-AMC program from 2009-2015.

The scope of any performance-based agreement needs to be clear, measurable, and unambiguous.
Flexible Asset Management Services (FAMS) – New Model
Interviews with State DOTs and Industry Survey

- Florida DOT, Texas DOT, Georgia DOT, South Carolina DOT, Arizona DOT and Utah DOT were interviewed.

<table>
<thead>
<tr>
<th>Existing State DOTs</th>
<th>Progressing State DOTs</th>
<th>Considering State DOTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida DOT</td>
<td>Georgia</td>
<td>Arizona</td>
</tr>
<tr>
<td>Texas DOT</td>
<td>South Carolina</td>
<td>Utah</td>
</tr>
</tbody>
</table>

**Industry Survey**

The survey was designed to focus on the Study’s key areas asking targeted questions to assess industry sentiment on the PBC market.
# Summary of Market Study Findings

## Important Findings

- DOTs see outsourcing of maintenance activities as an important part of their success.
- DOTs are interested in finding a better way to contract out maintenance to meet their needs.
- Best value rather than low-bid contracts are preferred by DOTs but there are restrictions.
- DOTs desire to retain flexibility to direct specific work as required.
- DOTs deemed it important to establish regular partnering sessions as part of contract.
- DOTs are focused on service delivery above all factors.

## Industry Insights

- Strong interest in a new contracting model to grow the market.
- Prefer lump sum contracts.
- Recommend longer duration contracts.
- Appropriate level of risk sharing needs to be defined for each contract.
- Believes in the Partnering Process.
## Innovative Model: Flexible Asset Maintenance Services (FAMS)

<table>
<thead>
<tr>
<th>FAMS Contracting Elements</th>
<th>Unit of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Based</td>
<td>Fixed monthly payment amount for continuous delivery of performance meeting or exceeding established performance targets</td>
</tr>
<tr>
<td>Unit / Cycle</td>
<td>Production units typically measured in tons, acres, gallons, square feet, or lane miles, pricing may be per unit or per cycle</td>
</tr>
<tr>
<td>Staff Augmentation</td>
<td>2/3/4 Person Crew, including transportation to worksite</td>
</tr>
<tr>
<td>Individual Staff Hour</td>
<td>Staff hour for engineering, inspection, and management personnel</td>
</tr>
</tbody>
</table>
Critical Success Factors

- Project Champion is Critical
- Partnering is Paramount
- Professional Services RFP Procurement
- Bonding – Annual Bond at Annual Amount
- Realistic Risk Transfer
  - 3rd Party Damage
  - Natural Disasters
  - Snow and Ice
QUESTIONS