## **Transportation Industry Solutions**

**Operations, Maintenance and Support Services** 





# Rest Areas and Interstate Commerce

Interstate Rest Areas provide a valuable resource and are fundamental to the efficient and safe operations of Interstate Commerce. They provide travelers and heavy vehicle operators with a safe environment to stop and use the restroom, have a meal, sleep or rest for a period. In addition, Welcome Centers and Safety Rest Areas provide the State an opportunity to drive additional revenue by having Tourist Information Centers located inside the facilities providing travelers with information about the local sites or events and places to visit within the state.





### Rest Areas and Sustainability

- In today's world, sustainability is of paramount importance in transportation. Rest Areas can significantly contribute to creating a more sustainable transportation system. Here are some key approaches to achieving sustainability in Rest Area maintenance:
- Utilizing sustainable LEED (Leadership in Energy and Environmental Design) and Green Certified chemicals helps minimize the environmental impact of cleaning and maintenance activities.
- Implementing recycling programs within Rest Areas can significantly reduce the amount of waste going to landfills, promoting a greener approach.
- Developing and implementing Preventative and Predictive maintenance programs is critical for extending the life of Rest Area assets, reducing the need for resource-intensive renovations or replacements.
- Upgrading outdated lighting fixtures to energy-efficient LEDs not only saves on electricity but also enhances safety and visibility.
- Collaborating with organizations that hire disadvantaged workers for janitorial duties contributes to social sustainability by providing employment opportunities to underprivileged individuals.
- Implementing smart building technologies that adjust overall building power consumption based on occupancy and usage helps optimize energy use, further reducing the environmental footprint of Rest Areas.

# Performance-Based Contracting for Rest Area Maintenance

#### There are 3 methods used to maintain Welcome Centers and Rest Areas in the United States:

- In-House Method- The State or other local agencies use their own staff and equipment to perform maintenance task. This can provide the DOT with some degree of flexibility as they are free to plan and execute projects based upon their own resource and personnel. However, that flexibility can be several reduced depending on budget requirements and allocation of resources.
- Method Based Contracting (MBC)- contractor is bound for 'what to do', 'when to do', and 'how to do' works (Stankevich et al. 2009). This often used when the DOT is unable to self-perform due to capacity, lack of skilled workforce or time constraints or procurement laws. This method also implements the 'Lowest-Bid Method' to select a contractor for public projects, and the DOT pays the contracted party based on the bid unit rate of the task and the measurement of the work that has been completed (Shrestha, 2016)
- Performance Based Contracting (PBC)- In contrast to the In-House method and MBC, PBC is an output-based method and uses Performance-Based specification, which focuses on the output of the work performed (Stankevich et al., 2009). A contractor I selected utilizing either the "Best Value" or "Qualification-Based" they are required to submit a technical proposal that outlines the methods and of how the work will be performed and the value they bring the agency should they be selected. This method allows the Agencies to incentive and disincentives the contractor based upon performance metrics as outline in the contract. Studies have shown that the PBC method yields lower costs and increased level of satisfaction and is suitable for large-scale works, bundling of maintenance activities, and transferring risk from DOT to the contractors (NCHRP 2003, NCHRP 2009, Ribreau 2003, Zietlow 2004, Anastasopoulos et al. 2014, Zietsman 2004).



## **Contracting Data**

• In 2017 Montana Tech put out a study that showed that 15 states use the PBC method to maintain their rest area stops, and the results from switching to this method of contracting has been beneficial. (Powers M.,2017). 80% oof all states responded a questionnaire and provided data on how their Rest Areas Programs were maintained. Seven states used only the In-House method, eight states used strictly the MBC method, 10 states used a combination of the In-House and MBC methods, and 15 states around the country used the PBC method (Figure 1).

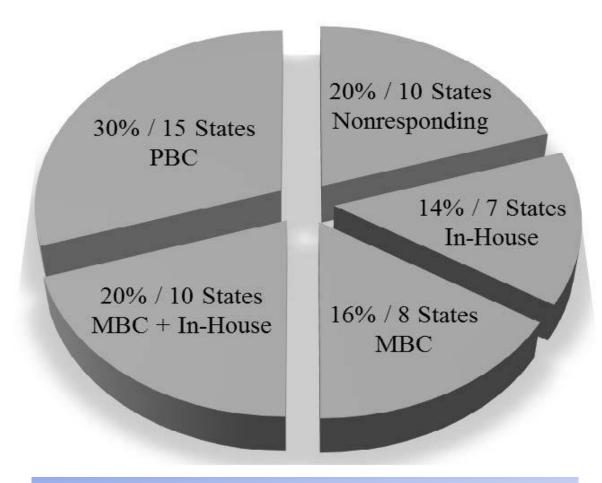


Figure 1: Use of In-House, MBC, PBC and their combination to maintain rest area stops.

## Evaluating Rest Area Management

There are several ways that states use to evaluate maintenance performance:

- Detailed Contracts: These contracts clearly define the methods and specify consequences for failure to perform. They offer a transparent process for both the contractor and the DOT to evaluate performance effectively.
- Criteria-Based Inspections: These inspections often employ point-based or percentage-based rating systems that allow DOT personnel to grade performance objectively. Figure 2 provides a glimpse of general criteria used for rest area inspections.
- Pass/Fail Scoring: This method offers simplicity and clarity, as there are no intermediate grades. The
  facility either passes or fails based on predefined criteria. It leaves no room for subjectivity in the evaluation
  process.
- Customer Service Surveys: Utilizing tools like Opiniator, closed-loop systems provide traveling individuals
  with a real-time platform to report on the overall cleanliness and operational functionality of Rest Areas.
   These surveys offer valuable insights from the end-users' perspective, ensuring a high level of service quality.



# And all Good Things Must Come to an End



I hope this has helped to provide a greater insight into the need for a robust and strong WC/SRA program. And in closing I would like to leave you with this:



The very basic function of a safety rest area is to encourage motorists to take a break from driving and subsequently increase traffic safety.



Increasing traffic safety reduces accidents and fatalities in short, the work we do at the Rest Areas save Lives!

### References

- Powers, Michael, "Performance-Based Contracting for Rest Area Maintenance" (2017). Graduate Theses & Non-Theses. 137. http://digitalcommons.mtech.edu/grad\_rsch/137
- Stankevich, N., N. Qureshi, and C. Queiroz. (2009). Performance-based Contracting for Preservation and Improvement of Road Assets. (Transport note. TN-27). The World Bank, Washington, D.C. <a href="http://www.esd.worldbank.org/pbc">http://www.esd.worldbank.org/pbc</a> resource guide/Docslatest%20edition/PBC/trn 27 PBC Eng final 2005.pdf
- National Cooperative Highway Research Program. (2003). State DOT Outsourcing and Private Sector Utilization, A Synthesis of Highway Practice. Synthesis 313. Washington. D.C.
- Anastasopoulos, P. C., R. J. G. M. Florax, S. Labi, M. G. Karlaftis. (2010a). "Contracting in highway maintenance and rehabilitation: Are spatial effects important?" Transportation Research Part A: Polity and Practice, Elsevier, Vol. 44, pp. 136-146. Anastasopoulos, P. C., J. Haddock, S. Peeta. (2014). "Cost overrun in public-private partnerships: Toward sustainable highway maintenance rehabilitation." Journal of Construction Engineering and Management, ASCE, 140(6), 04014018.
- Zietlow, G. (2004). Implementing Performance-based Road Management and Maintenance Contracts in Developing Countries An Instrument of German Technical Cooperation. German Development Cooperation.
- Zietsman, J. (2004). Performance Measures for Performance Based Maintenance Contracts. Texas Transportation Institute.