

Florida Department of Transportation Research

Florida Maintenance Rating Program (MRP): Assessment and Enhancement
BD548-28

The Florida Department of Transportation (FDOT) has used its maintenance rating program (MRP) to evaluate the state's highway maintenance conditions and determine asset maintenance needs since 1985. Periodic evaluation of the program is valuable for determining whether and in what manner updating the MRP could enhance its performance.

Researchers from the University of Central Florida analyzed the methods and procedures the MRP uses to gather and evaluate data. They compared their findings to national best practices in road maintenance needs assessment.

The MRP resides within a mainframe computer environment that currently limits the assessment of entered data to true/false or yes/no choices. It has limited flexibility for including new data elements (e.g., new roadway characteristics) and currently cannot evaluate data on a graduated rating scale. The mainframe system would have to be rewritten to accommodate this type of evaluation. However, FDOT currently has a supplemental, Excel-based system to address additional data elements.

The researchers recommended the following:

- Developing a new version of the MRP that is adaptable and able to evaluate new road maintenance features as they develop
- Determining methods to link MRP evaluations to maintenance budget allocations and resources

- Streamlining maintenance evaluations and verifications of contractor performance
- Investigating the use of new technologies for data collection, such as high-speed cameras and image analysis

Implementation of these recommendations could provide the basis for more sophisticated evaluation system. The use of advanced technologies could facilitate increased data collection for larger statistical samples. However, the potential of a graduated scale improving contractor performance and the feasibility of more advanced technologies providing more accurate sampling (i.e., than current physical inspection approach) is undetermined.

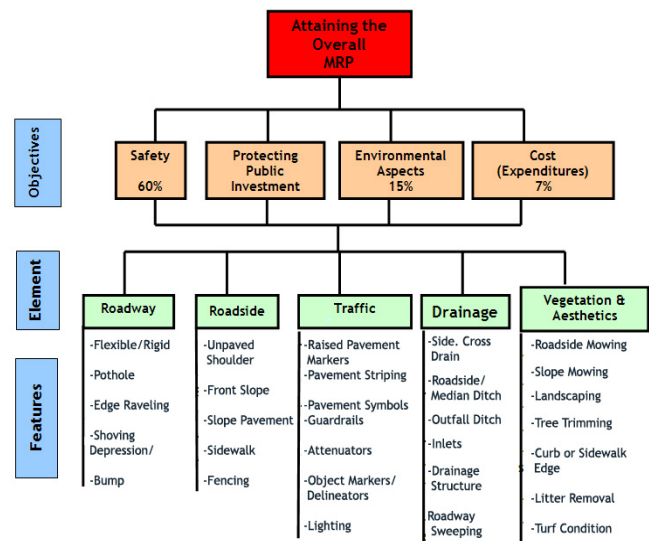


Diagram overview of the Maintenance Rating Program.

Project Manager: Timothy Allen, Maintenance Office
Principal Investigator: Yasser Hosni, University of Central Florida
For more information, visit <http://dot.state.fl.us/research-center>.