

ODOT Pavement Preventive Maintenance Guidelines

Executive Summary:

The Office of Pavement Engineering assembled a team of experts from the Federal Highway Administration, the Ohio Pavement Preservation Association, the American Concrete Pavement Association, and Flexible Pavements of Ohio, to develop guidelines and training specifically for ODOT concerning pavement preventive maintenance. These guidelines, dated May 1, 2001, are titled "ODOT Pavement Preventive Maintenance Guidelines". Training was offered and provided to every District and County in the spring of 2001.

In addition to the Guidelines, distress condition logic was developed based on the ODOT PCR method, to create a series of GQL queries to use as a tool to determine candidate pavement preventive maintenance projects that exist in each District or County. A list can be generated using this GQL tool to aid Districts in determining their pavement preventive maintenance program.

The Guidelines and the Pavement Design & Selection Process (Policy575-002(P)) define the various terms as follows:

Preventive Maintenance - A planned strategy of cost effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, extends the service life, and maintains or improves the functional condition of the system without substantially increasing structural capacity.

Reactive Maintenance - Activities undertaken to correct defects and extend the life of the pavement until such a time that a proper rehabilitation or reconstruction project may be undertaken. Reactive maintenance is frequently performed on a failing pavement. It is a stop gap measure that keeps the road at an acceptable serviceability, and is seldom cost-effective.

Minor Rehabilitation - Worked performed on a pavement intended to restore functional characteristics and protect the structural integrity.

Major Rehabilitation - Worked performed on a pavement intended to restore structural integrity and functional characteristics.

Pavement Preservation - The sum of all activities undertaken to provide and maintain serviceable roadways; this includes Reactive and Preventive Maintenance as well as Minor and Major Rehabilitation.

The guidelines showcase the available pavement preventive maintenance treatments which are approved for use by a current specification. For each treatment available, the guidelines discuss: "Description and Purpose", "Pavement Condition Considerations", "Traffic Constraints", "Design Considerations", "Seasonal Construction Limitations", "Unit Cost for Estimating" and the "Anticipated Performance and Service Life" broken down for each specification.

The guidelines are available via Intranet at
<http://www.dot.state.oh.us/pavement/publications.htm>

Questions on the Pavement Preventive Maintenance Guidelines should be directed to Aric Morse at 614-614-995-5994 with the Office of Pavement Engineering.