

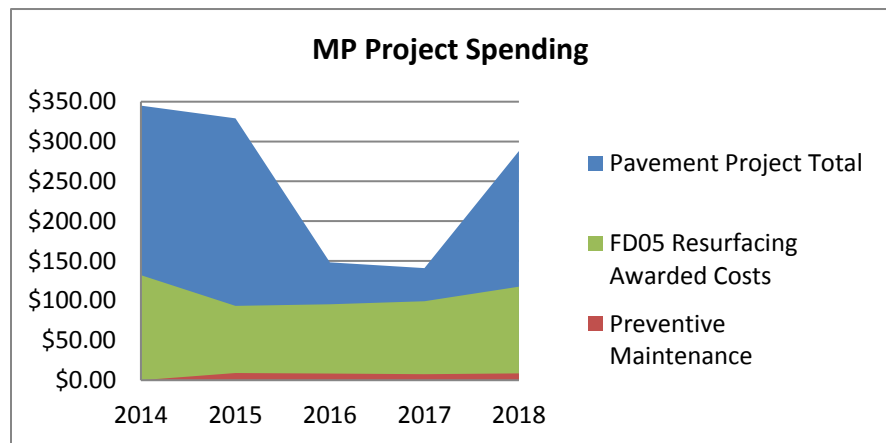
2018 MP PAVEMENT CONDITION REPORT

The Kentucky Transportation Cabinet (KYTC) maintains 31,769 lane miles of MP system pavement. The MP system is comprised of non-Interstate and Parkway State Primary pavement, State Secondary pavement and Supplemental pavement. MP pavements are important for the economic wellbeing and safety of Kentucky. These pavements carry vehicular traffic, commercial traffic and are essential to the daily lives of residents.

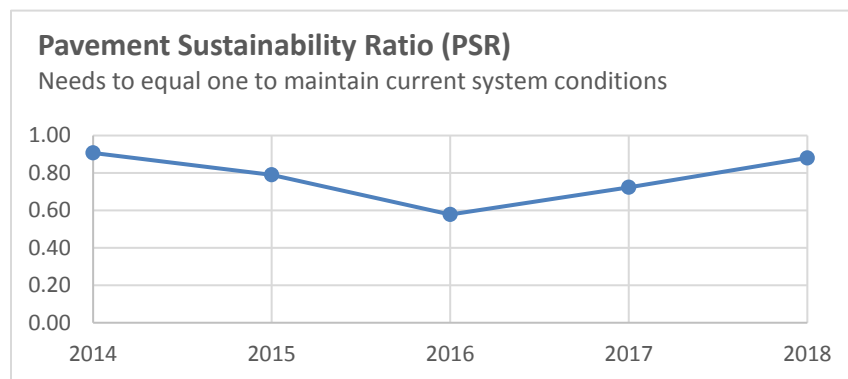
The annual condition survey quantifies distress and determines when a pavement is due for preventive maintenance, resurfacing, or rehabilitation. This data is combined with project spending to express pavement condition as performance measures.

Investment

The KYTC increased funding levels for MP pavements in 2018. During this time, the Cabinet spent \$288 million to provide treatments for roughly 2,700 lane miles of the system. This level of investment requires pavements on the MP network to last 12 years on average between treatments.



Pavement Sustainability Ratio



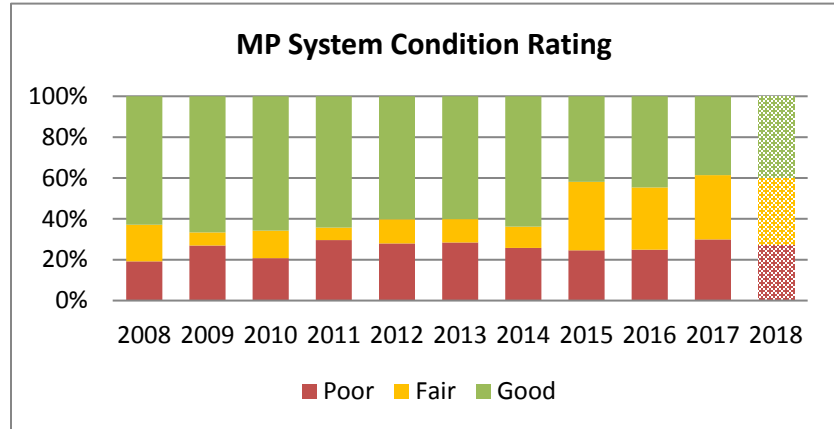
The Pavement Sustainability Ratio (PSR) measures the effectiveness of KYTC pavement investments. The PSR helps the agency determine if pavements are replaced or renewed at the same rate as they are wearing out.

In 2018, 42% of the pavement budget was spent on traditional thin asphalt overlays and concrete

repair and grind, 50% went to rehabilitative treatments, capacity or safety improvements, and 8% was used for lower cost preventive maintenance treatments.

Pavement Condition

KYTC utilizes a sliding scale that holds high-traffic roadways to a higher standard of performance, rating the roadways as **good**, **fair** or **poor** depending upon the overall level of distress and the total traffic volume. A good pavement is smooth with few defects while a poor condition pavement is characterized by a rough ride and moderate to severe distresses.



Overall, the increased focus on asset management has sustained the network condition without additional spending. The increased investments in 2018 will have a minimal positive impact on network pavement condition because the spending was largely focused on more expensive projects, such as widenings and safety improvements.

Preservation Liability

If funding is inadequate, some pavement preservation is deferred, incurring a future financial liability. The consequence of deferring pavement preservation becomes more severe as pavements age and require costlier interventions than if addressed earlier.

The asset management focus of the MP investments continues to

drive down the pavement preservation liability. The increased focus on preventive maintenance is allowing the Cabinet to pursue higher cost projects without sacrificing network condition. Assuming a sustained current budget level with a similar focus on preservation and preventive maintenance, the preservation liability will still continue to grow. Projections indicate the MP network pavement liability will be nearly \$800 million by 2022. Additional preservation investments in the pavement network are required to reduce the backlog and begin improving system conditions.

