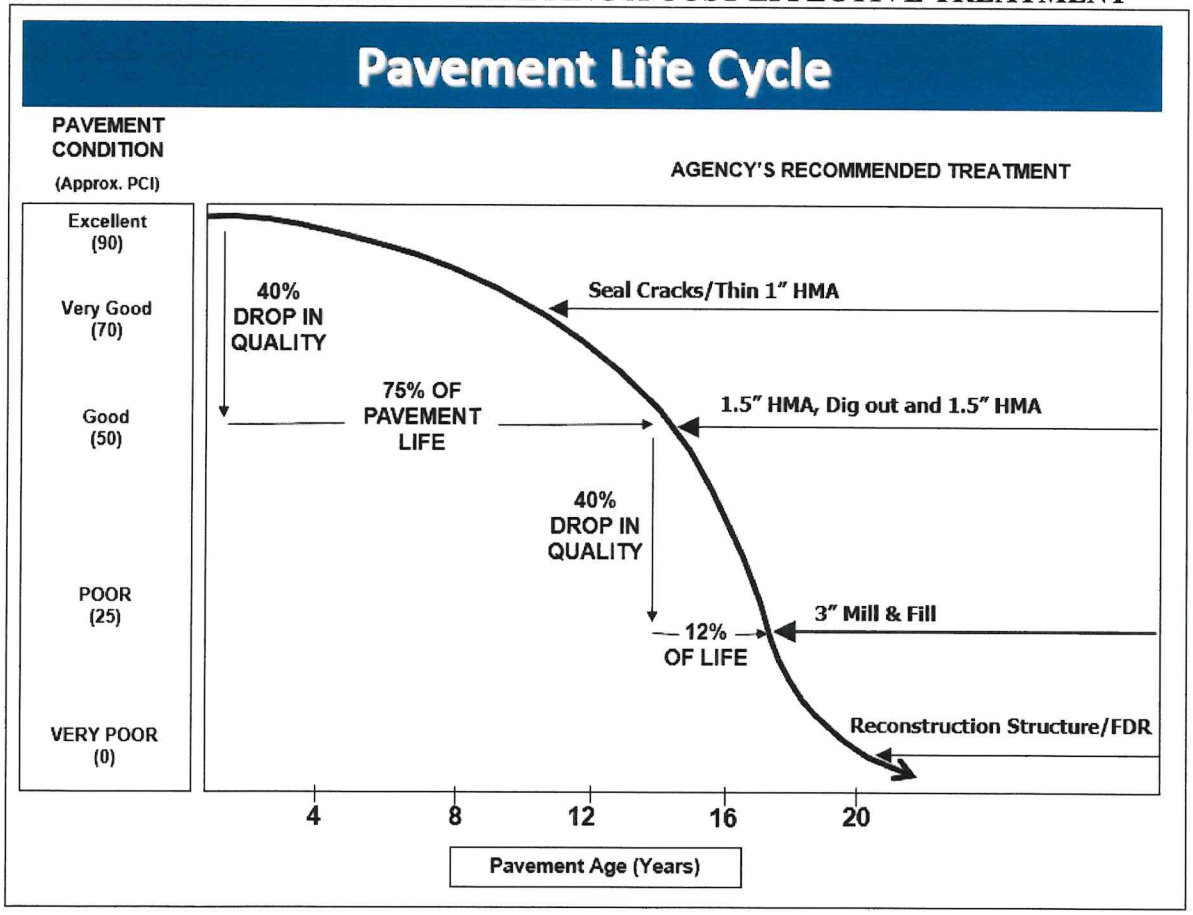
VI. PAVEMENT MANAGEMENT STRATEGIES

Once the Pavement Condition Index (PCI) was calculated for all PMP segments, budget analyses and workload predictions could be initiated. These predictions relied on a pavement deterioration curve developed by the MTC. This curve outlines how a pavement's PCI changes as it ages.

Research has shown that the life cycle of pavement follows a specific pattern over time (refer to Figure 5 (below), although it's not to scale). Pavement typically starts its life in excellent condition and remains that way for a few years without needing maintenance. However, as time goes on, the pavement condition gradually deteriorates, with the rate of deterioration increasing significantly after the pavement reaches its halfway point of life. This continued deterioration leads to an increase in the quantity and cost of maintenance needed to rehabilitate the pavement. It's at this halfway point that the County must carefully consider options for pavement repair and maintenance.

Figure 5
PAVEMENT MANAGEMENT – APPLYING A COST EFFECTIVE TREATMENT



We need to consider essential questions: Is the investment in preventive maintenance justified when compared to the potential costs of not making these repairs? Should we wait until the pavement reaches a severe state of disrepair before taking action? The answers to these questions, as well as the questions themselves, depend on the specific pavement segment in question. As illustrated in Figure 4 above, there are clear benefits to addressing pavement issues before they