Supplemental Information on Pavement Management

Pavement management, a subset of asset management focusing on roads, is based on the following principles,

- Asset lifecycle approach
- Developing cost-effective management strategies for the long-term
- Providing a defined level of service and monitoring performance
- Understanding and meeting the impact of growth
- Managing and predicting risks associated with asset failures
- Sustainable and efficient use of physical resources
- Continuous improvement of pavement management practices

Pavement management is important because it helps ensure that our roads are safe, reliable, and comfortable to travel on. In general, the Pavement Management Process steps include:

- Data collection, gathering information about the condition of roadways and related infrastructure assets using specialized vehicles and manual inspections by subject matter experts.

- Condition Assessment, data is uploaded to a pavement management application, RoadMatrix, and a condition rating is an output based on a standardized rating system. The condition rating considers the type of roadway distresses, frequency of distresses, and number or length of distresses.

- Initial Prioritization and Treatment Selection, using decision trees road segments are ranked and initial treatment is recommended based on the information gathered during the data collection and condition assessment phases. This is selecting the initial type of treatment for each road segment based on the specific condition of the pavement, the type of road, the expected traffic volume, and other factors.

- Program Development, the process of distributing resources and prioritizing projects to achieve the desired level of service while staying within budgetary constraints. It involves making trade-offs between projects, locations, or program years to meet other objectives and coordinating with other programs or development. The output from RoadMatrix is a key factor in creating the program, but subject matter experts use their expertise to adjust projects and balance the program to maximize effectiveness and practicality in program delivery.

- Program Implementation, carrying out of the maintenance, rehabilitation, and construction activities. This involves scheduling and performing the work, ensuring that it meets established quality standards, and managing costs and resources. Program implementation includes overseeing construction and maintenance activities to ensure they are done safely, effectively, and efficiently.