INTERNATIONAL SUSTAINABLE PAVEMENTS WORKSHOP

Fostering US-European Research Collaboration

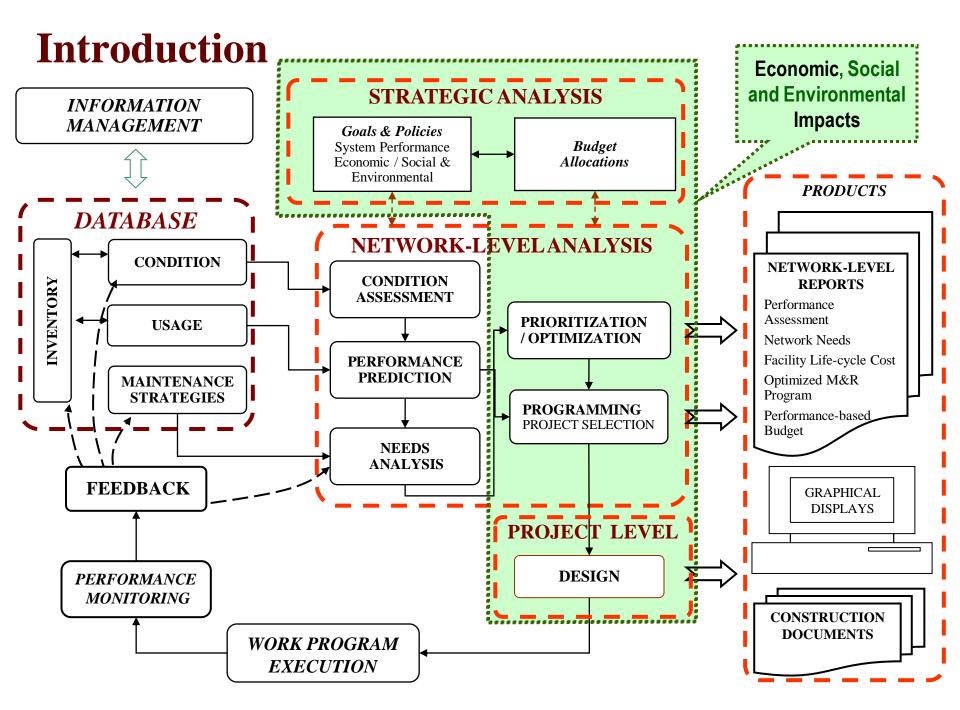
Sustainable Pavement/Asset Management



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How does it contribute to the development of more sustainable pavement solutions?

- Finding policies/ strategies with lower lifecycle cost
 - Perpetual pavements
 - Preservation vs. rehabilitation
 - > Use of existing pavement, etc.
- Link level of investment to performance (including sustainability measures)
- Measuring the impact of the new approaches, materials, and systems



Gaps in Knowledge

- Approaches & tools to facilitate the use of economic analysis at the network level
 - Better links between condition and user cost
 - Effects of preservation treatments, etc.
- Approaches to consider environmental (and social?) factors at the network and project levels
- Robust and Practical tools to incorporate noneconomic effects into the decision-making process
- Approaches & tools to include multiple performance measures at the network and strategic levels
 - Multi-objective optimization

Cross asset tradeoffs and resource allocation



Research Questions

- What do we need to measure?
 - Choose the correct sustainability factors and appropriate metrics
- How do we quantify the impacts of the use of alternative materials/ systems/ M&R approaches?
 - Document actual performance through demonstration projects/ test sections
 - Develop models, and tools to apply these models
- How do we practically incorporate the selected factors into the decision making process?
 - Compatible scales across performance indicators and asset classes