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BALANCED PROGRAM

INTEGRATED PAVING SOLUTIONS

WHAT IS IT?

The concrete paving industry supports a balanced program—a mix of concrete and asphalt pavements—for roadway agencies across the nation. A two-pavement system encourages a healthy and viable paving industry. A balanced approach also comprises short-term, medium-term, and long-term fixes that will assure an overall healthy road system.

Economists and business professionals agree – competition is good for the consumer. Ultimately, taxpayers benefit when there is a balanced program spearheaded by vigorous competition. When consumers are presented with choices, they select the preferred product or service, evaluating their decision based on a number of factors, chiefly quality and price.

The Issues

For true competition in the roadway paving industry, transportation agencies should consider all proven viable paving technologies for all road projects. The engineer should decide which pavement application is best.

- **Alternate Design/Alternate Bidding (ADAB)** – To allow for a balanced program, ADAB should be employed. This practice requires equivalent designs for a proposed pavement project from both concrete and asphalt contractors.
- **Escalator Clauses** – A fair alternate bidding system implies that there are no price escalators. However, many bids include these clauses, which provide for price increases based on fluctuation in costs for production, materials, fuel, etc.

  The concrete paving industry contends that the competitive marketplace will ultimately result in the best pavement application at the best value. Both industries can compete with their best products. While cost escalators are a sensible approach to address the volatility of material costs, they are not equally applied to the entire paving industry. Currently, forty-one states have escalator clauses for asphalt projects.
- **Pavement Asset Management** – Asset management is a proactive, systematic process of maintaining, upgrading, and operating physical assets, such as roadways and bridges, in a cost-effective manner.

  A balanced program will benefit from a thorough pavement asset management process. This will help roadway agencies to use asset performance information in the short- and long-term decision-making, planning, budgeting, and operating functions. This will help ensure that the physical assets stay at the highest condition level. Considering needs for the entire network allows agencies to make project-level decisions that optimize the system.

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- **Life-Cycle Cost Analysis (LCCA)** – LCCA is an economic analysis tool that considers initial cost and discounted future cost including maintenance, user cost, reconstruction, rehabilitation, restoration, resurfacing and salvage value. Choosing the most cost-effective pavement across a roadway system can save taxpayers millions of dollars.

  LCCA looks beyond the initial price tag and considers the service life of a pavement.

When to Choose Concrete

A balanced program considers and evaluates all pavement options. The question remains why choose concrete? Here are a few of the reasons concrete should be considered a major part of a healthy and balanced roadway system:

- **Comparable First Costs** – Concrete pavements have an initial cost on par with most asphalt options.
- **Durability** – Due to concrete's superior durability, maintenance isn't required as often.
- **Sustainability** – Concrete pavements consume minimal materials, energy, and other resources for construction, maintenance, and rehabilitation activities over its lifetime.
- **Energy Savings** – Concrete pavements exhibit a lower energy footprint associated with production, delivery, and maintenance than asphalt pavements.
- **Cool Pavements** – Concrete's lighter color reduces the amount of power necessary for illumination and mitigates the urban heat island effect.
- **Fuel Efficiency** – Driving on concrete pavements is the most fuel-efficient option.
- **Improve Remaining Service Life** – Concrete pavements can dramatically increase network service life, cutting the amount of yearly repairs and spreading them out over longer time periods.
- **Locally Produced** – Concrete is typically produced regionally from abundant resources.
- **Renewable** – Concrete can be 100% recycled at the end of its service life.
- **Recycling Waste** – The use of industrial byproducts in concrete improves pavement longevity, saves money, lowers energy usage, and reduces the generation of greenhouse gases.

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