think harder.

PUBLIC-PRIVATE PARTNERSHIPS

INTEGRATED PAVING SOLUTIONS

WHAT IS IT?

Increasingly, states are turning to public-private partnerships (P3) to fund future transportation projects. P3 allows a private sector company to lease a public road for a specified period of time, usually several decades. In return, the company agrees to pay the public agency for the lease of that road. The company handles operations, maintenance, improvements and expansion of the road.

With each year, the number of vehicles on the road increases while lane capacity remains relatively stagnant. State revenues are often insufficient to preserve roadway systems let alone to add significant capacity.

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Why do it?

As stewards of the taxpayer dollar, roadway agencies have a responsibility to make sure that constituents get the best deal possible.

P3 allows the public sector and the private sector to combine their best features for the benefit of taxpayers. Taxpayers receive payment for the lease of the road up front. The company typically receives toll revenues over the period of the lease.

Motorists also benefit because the private company is financially motivated to provide an efficient and reliable roadway.

Concrete Benefits

Reliable pavements are essential for the long-term success of public-private partnerships. To maximize the return on investment associated with roadway construction and operation, it is critical to minimize risk.

Financial risk can be managed by employing materials that have stable and predictable prices. According to the Bureau of Labor Statistics, the price of asphalt has increased 82% in the past five years or an average of 16.4% annually. Meanwhile, the price of concrete has largely kept pace with the 4% annual inflation curve.

Risk can be further managed by employing materials that are durable and require less frequent rehabilitation and repair. Due to concrete's durability, maintenance isn't required as often. Concrete pavements have an average service life of 30 to 50 years. Concrete's maintenance requirements and costs are also low — there is no need for repeated resurfacing, frequent spot repairs, or patching.

A recent PCA survey of DOT specifiers concludes that concrete pavement lasts 29.4 years on average before a major rehabilitation is required. Asphalt pavements required a major rehabilitation after 13.8 years. Over time, the





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average asphalt pavement can cost up to 3 times more than an equivalent concrete pavement. Rising prices increase asphalt's life-cycle costs and make it more unpredictable.

Finally, risk can be managed by employing materials that encourage uninterrupted traffic flow. In turn, this maintains a steady stream of revenue from tolls.

The construction of concrete pavements does not require lengthy lane closures. In fact, roads can be reopened in as short as 12 hours. When precast concrete panels are used the reopening time is even less. Because concrete pavements provide a reliable riding surface and minimize performance risk, there will be less construction-related congestion.

The Bottom Line

Public-private partnerships are an innovative way to stretch road funds by embracing the best of the public and private sectors.

However, if the road is in a constant state of disrepair or constantly under construction, the taxpayers get



shortchanged. Ultimately, the road should be in as good, if not better, shape when it is returned to the taxpayers.

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