

### WHAT IS IT?

Alternate design/alternate bidding (ADAB) is a contracting process used in an increasing number of state departments of transportation (DOTs). The process gives the contractor a choice to bid on either a concrete or an asphalt option, thereby increasing the number of bidders on each job enhancing competition.

#### Why do it?

Economists and business professionals agree – competition is good for the consumer. When consumers are presented with choices, they can select the product or service of preference, evaluating their decision based on a number of factors, chiefly quality and value.

In recent years, concerns have risen regarding the effectiveness and equity of pavement-type selection processes used by DOTs. Ideally, the pavement-type selection process should use some form of life-cycle cost analysis (LCCA) to model the cost of pavement alternatives during a performance period and combine it with a programmatic or project-based decision-making process that considers non-economic factors, such as local expertise, political climate, and available materials. However, in many parts of the U.S., non-economic factors dominate, resulting in a significant bias toward one pavement type and creating an effective monopoly.

Under increasing fiscal pressure, coupled with the growing need for infrastructure investment, DOTs are beginning to recognize the problem. Some DOTs are developing new ADAB processes that provide for the selection of pavement type through the bidding process. This process allows the bidding contractors to select the pavement type to be constructed, rather than a DOT. This not only eliminates any bias in the selection process, but also increases competition between paving industries. The end result is greater choice, lower costs, and enhanced innovation. In short, the competition that ADAB fosters provides much better value for the taxpayer.



States around the country are embracing alternate bidding to increase competition and reduce costs. For example, Missouri has utilized alternate bids and realized substantial savings:

- From 2003 to 2008, MoDOT has saved \$46M or 7.3% on paving projects using alternate bidding.
- Since 2003, the number of bids received per project is 25% higher for alternate bid projects.

## ALTERNATE DESIGN/ALTERNATE BIDDING

**Economists and business professionals agree – competition is good for the consumer. When consumers are presented with choices, they can select the product or service of preference, evaluating their decision based on a number of factors, chiefly quality and value.**

### Benefits of Alternate Bidding:

- Allows both concrete and asphalt industries to participate.
- Increasing the bid pool and competition has proven to result in lower bid prices.
- Considers future expenditures.
- Can lead to innovative solutions and lower costs.

### Concrete Solutions

Concrete pavement solutions are a wise choice for government agencies employing alternate bidding. The reasons are simple.

### Comparable first costs:

- As recently as 2003, asphalt pavements enjoyed a \$120,000 cost advantage over concrete for a one mile “standard” two lane roadway.
- By 2009, concrete roads enjoyed a \$82,000 cost advantage due to rapidly escalating asphalt costs.
- By 2015, PCA estimates concrete roads will enjoy a \$500,000 initial bid cost advantage.
- According to the Bureau of Labor Statistics, the price of liquid asphalt has doubled in the past five years. Meanwhile, the price of concrete has largely kept pace with a 4% inflation curve.

### Lower Life-Cycle Cost:

- Due to concrete’s durability, maintenance isn’t required as often. Less frequent maintenance translates into lower ownership costs.
  - 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 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.

### Improve Remaining Service Life

- Concrete pavements help extend the life of transportation systems by strengthening their individual components.
- Concrete pavements can dramatically increase network service life, cutting the amount of yearly repairs and spreading them out over longer time periods.



Portland Cement Association  
5420 Old Orchard Road  
Skokie, Illinois 60077-1083  
847.966.6200 Fax 847.966.9781

500 New Jersey Avenue NW, 7th Floor  
Washington, DC 20001-2066  
202.408.9494 Fax 202.408.0877  
[www.cement.org](http://www.cement.org)