ABSTRACT

Pavements have been overlaid with thin bonded portland cement concrete (PCC) for several years. These projects have had traffic detoured for a period of 5-10 days. These detours are unacceptable to the traveling public and result in severe criticism. The use of thin bonded fast track overlay was promoted to allow a thin bonded PCC overlay with minimal disruption of local traffic.

This project demonstrated the concept of using one lane of the roadway to maintain traffic while the overlay was placed on the other and then with the rapid strength gain of the fast track concrete, the construction and local traffic is maintained on the newly placed, thin bonded overlay.

The goals of this project were:

1. Traffic usage immediately after placement and finishing.
2. Reduce traffic disruption on a single lane to less than 5 hours.
3. Reduce traffic disruption on a given section of two-lane roadway to less than 2 days.
4. The procedure must be economically viable and competitive with existing alternatives.
5. Design life for new construction equivalent to or in excess of conventional pavements.
6. A 20 year minimum design life for rehabilitated pavements.