

## Runway 12-30 Reconstruction

### Customer Benefits:

The reconstruction of Runway 12-30 (east-west) to replace the original 1962 pavement portions.

### Project Description:

Runway 12-30 was originally constructed in 1960 of Portland Cement Concrete (PCC) at a length of 10,000 feet and a width of 150 feet. A 500-foot concrete extension was added in 1992, and the asphalt shoulders were reconstructed and widened to 35 feet in 1998. The original runway pavement was in poor condition due to increased aircraft traffic, use of heavier aircraft, and the age of the pavement. Pavement conditions had become so bad that an extensive repair project was required only two years prior to this project in order to keep the runway in usable condition until complete reconstruction could be undertaken.



As the only crosswind runway at IAD, there are critical times during the year when the availability of an east/west, crosswind runway are essential. Demand for the runway exacerbated, during the design and construction phases, as IAD experienced a significant increase in aircraft operations of 33% over the previous year. The increase in aircraft operations made returning the runway back to service a critical concern to the Airports Authority, the airlines, and the Federal Aviation Administration (FAA). To determine the best time to schedule the reconstruction, prevailing wind conditions were carefully analyzed during the design phase of the project.

To expedite the runway's return to service, several construction phasing options were considered during design. Ultimately, through major coordination between the Airports Authority, FAA, airlines, construction manager, and contractor, it was determined the most economical and expedient approach was to perform demolition and reconstruction of the entire runway in one phase. Negotiations with the Contractor for combining phases advanced contract completion two weeks from the original phasing schedule (from 148 days to 134 calendar days).

During construction, several obstacles had to be overcome but, in the end, the project was completed 13 days ahead of the revised construction schedule and almost one month ahead of the original contract schedule. The completion of the Reconstruction of Runway 12-30, within budget and ahead of schedule, made it one of the Metropolitan Washington Airports Authority's most successful projects to date.

Contractors:	Design:	Michael Baker, Jr. Inc.
	Construction:	Lane Construction Corporation
Estimated Completion:	Runway returned to daytime operations:	August 2004
	Runway returned to full service:	October 2004
Program Cost:		\$49.7 million