

SmartMove...

SUCCESS STORIES FROM THE TOLLING INDUSTRY



Agency

E-470 Public Highway Authority

Project

Local Governments Take Charge of Toll Road Development

Purpose

Congestion relief in a growing metropolitan area.

Vital Stats

- 47-mile controlled-access toll road traversing the eastern portion of the Denver Metropolitan Area.
- First phase opened in June 1991; road complete in January 2003.

History

Based on a 1982 transportation study, three suburban counties surrounding the city and county of Denver agreed to build a semi-circular eastern beltway to accommodate projected population growth and serve as a focal point for urban planning. But with declining state and federal resources, elected officials in Adams, Arapahoe, and Douglas counties realized the road would only be built if they financed it themselves. In February 1985, they formed the E-470 Authority, the predecessor of today's E-470 Public Highway Authority.

In 1986, the Authority unveiled a \$722 million bond issue, the largest in Colorado's history at that time. The funds were placed in escrow for two years while the agency finalized its design and cost estimates and came up with a repayment plan that relied on tolls as the primary source of revenue. The E-470 Public Highway Authority was formed in 1988, and, in addition to the three counties, its membership soon grew to include five municipalities located in those three counties. In 1988, voters approved a \$10 vehicle registration fee that enabled E-470 to

break escrow.

Construction began in early 1989, and the first

five-mile segment of the new road opened in June 1991, linking I-25 and C-470 south of Denver to the growing suburb of Parker, in northern Douglas County.

Results

With the construction of E-470, communities in Adams, Arapahoe, and Douglas County showed that local governments can raise financing to meet their own surface transportation needs, without state or federal tax support. The project successfully redistributed traffic from roadways that were already congested and provided a crucial link to the new Denver International Airport, an important gateway in and out of the region. Thanks in part to E-470, traffic is moving much more freely in the area than it otherwise would have.

By introducing in 2009 one of North America's first all-electronic tolling systems, E-470 made it that much easier for drivers to use the road, with or without an ExpressToll account. Traffic volume has grown steadily, reaching a peak of 54 million transactions in 2012.

And by commissioning 42 miles of the 47-mile facility as a design-build project, the E-470 Public Highway Authority sped up project delivery, saved money and gained the



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flexibility to deliver the best possible road. Public-private partnerships were considered an unconventional way to finance and construct a highway when E-470 was built, but the strategy meant no tax dollars were used to complete the project. The vast majority of funding came from long-term revenue bonds, and the small amounts that E-470 borrowed from its member jurisdictions were paid off by 2004.

In 2013, E-470 received IBTTA's Toll Excellence Award for social responsibility, after installing a network of solar-electric panels to power its signage and headquarters building.

Key Success Factors

"Several factors made this road possible, but tolling was the most important," said E-470 Executive Director John McCuskey. "User-based funding today accounts for more than 85 percent of our revenues."

The shift to all-electronic, completely non-stop tolling in 2009 "was a radical change," he added, "but we have always taken the approach that if a process needs to be improved, we won't hesitate to make that change." E-470 has served as a model for the rest of the state, and paved the way to the creation of two other tolling agencies in metro Denver, one of them a division of the Colorado Department of Transportation.

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