Faced with widening one of the oldest sections of Interstate 40 through downtown Knoxville, yet determined to fulfill a promise to motorists to minimize the inconvenience of road work, the Tennessee Department of Transportation has embarked on the largest project in the state’s history. Transportation Commissioner Gerald Nicely initiated the project with confidence that it could be completed successfully as an accelerated highway project.

Many motorists traveling through downtown Knoxville on their way to visit the Great Smoky Mountains have experienced traffic tie-ups and delays on I-40. This section has never been widened since it was built in the early 1960s. It is also one of the highest accident locations in the state.

After months of precise planning for the contract, TDOT let a contract for the first phase of the project called SmartFIX40 at a cost of over $80 million dollars. This complex urban interchange project, which includes a second phase and contract, will cost almost $190 million dollars. It includes widening I-40 to three lanes in each direction, reconfiguring several interchanges, and constructing a new city boulevard leading to downtown Knoxville. The second contract was recently awarded at $104.6 million. Both contracts include multimillion dollar bonuses for early completion and liquidated damages of $25,000 per day for late completion.

The overall accelerated construction process TDOT is using to speed up construction is called SmartFIX. It involved short-term total closures of roads or bridges with ample work areas for crews and freedom to go around the clock.

One of the most important tasks throughout the life of the project is a major public information effort. Disruptions to the involved communities and major traffic closures including the 14-month closure of I-40 in 2008 involving a major reroute of traffic means communication through a variety of methods is critical. The construction of the SmartFIX40 on-site office serving as an information center for residents, project staff offices, as well as a location for public meetings has already proved invaluable. Since opening in August of 2005, over 350 visitors have stopped by the center to review plans or request information about the project.

Planning for this project took years of cooperation and patience between many different parties including impacted neighborhoods, historic districts, commercial properties and city and state officials. That partnership resulted in a highly functional design that addresses I-40’s serious safety concerns and preserves the integrity of the adjoining historical areas. Community input regarding noise walls, landscaping, lighting, and other functional and aesthetic aspects of the project has been incorporated into the final design through an extensive public involvement process.

For the first time in TDOT highway contracting history, the contract includes a ‘no excuse’ deadline for on time completion. Bonuses are awarded for early completion, liquidated damages are assessed for late completion.

A key feature is a CEI contract (Construction Engineering Inspection) with an engineering consultant to help keep the project on schedule. This contract provides for 24/7 inspection services which, under current staffing levels, cannot be provided by TDOT.

The payoff for motorists is two-fold. First, more than two years of traffic delays, lane closures and motorists’ frustrations will be shaved off the project by allowing construction crews to work without traffic restrictions while I-40 is closed. Second, this is the first widening of this section of I-40 since it was built over 40 years ago and congestion will be relieved significantly through this area.

Urban areas present the most complicated challenges for highway construction because of heavy traffic which ironically is the very reason this project took decades to get underway. While minimizing the enormous traffic impacts, SmartFIX40 will result in the reconstruction of a four-lane bottleneck through downtown Knoxville improving both the safety and efficiency on the interstate system.

For more information on the SmartFix project, go to the project website at www.tdot.state.tn.us/smartfix.