Innovative Financing and Delivery in Colorado

Colorado legislation dictates much of how the state's transportation system is funded and programmed. Under law since 1992, motor fuel taxes – 22 cents per gallon on gasoline and 20.5 cents per gallon on diesel – have comprised the primary state funding source for Colorado's system of more than 23,000 lane miles and 3,000 state-owned bridges. Legislation signed into law in 2009 eliminated general fund transfers to Colorado's Highway User Tax Fund and replaced it with motor vehicle registration surcharges directed to safety, bridge, and transit programs. This paper and its accompanying presentation detail aspects of Colorado transportation law and its impact on the Colorado Department of Transportation's (CDOT's) financing and delivery of highway and bridge projects.

1992 Taxpayer Bill of Rights (TABOR)

More than two decades ago Colorado voters approved a measure amending Article X of the state constitution and restricting revenue growth for nearly all levels of government. TABOR allows government spending to grow at no more than the combined rate of inflation plus population growth and requires any tax rate increases, spending increases, or bonding to be approved by a vote of that jurisdiction's constituency. On November 3, 2015, for example, state voters approved by a 2:1 margin the state's retention of $66 million in surplus sales tax revenues.

2009 Funding Advancements for Surface Transportation & Economic Recovery (FASTER)

FASTER was passed in 2009 and enables the state to improve roadway safety, repair deteriorating bridges, and support and expand transit.[1] The bill generates about $200 million annually in registration fees for projects across Colorado. The bill also created two enterprises under CDOT, the High Performance Transportation Enterprise (HPTE) and the Colorado Bridge Enterprise (CBE). By law, enterprises in Colorado – government-owned entities that generate no more than 10% of their revenues from state general fund – are permitted to bond without a vote of the people.

Adding Capacity – US 36 Managed Lanes

The FASTER legislation authorized CDOT to find innovative ways to finance and construct major highway projects. A $500 million project[2] to rebuild and add capacity to US 36 between Denver and Boulder with light rail expansion is the first venture in Colorado involving a private consortium in the finance, building, operation and maintenance of a state highway. The "concessionaire" and HPTE reached a 50-year concession agreement with maintenance performance standards and minimum facility conditions at the end of the term.

US 36 Phase 1 and 2 Funding Sources

	Phase 1	Phase 2	Total
RTD	$124,000,000	$18,500,000	$142,500,000
DRCOG	46,600,000	15,000,000	61,600,000
CDOT (including Bridge Enterprise)	77,700,000	15,000,000	92,700,000
HPTE (including TIGER Grant)	10,000,000	–	10,000,000
Plenary Debt & Equity (including TIFIA 1 & 2)	54,000,000	120,000,000	174,000,000
Local Government	5,600,000	11,000,000	16,600,000
TOTAL	**$317,900,000**	**$179,500,000**	**$497,400,000**

Key: RTD = Regional Transportation District (Denver transit); DRCOG = Denver Regional Council of Governments; CDOT = Colorado Department of Transportation; HPTE = CDOT's High Performance Transportation Enterprise

Under Colorado law, existing capacity cannot be tolled but added capacity can generate incremental revenues provided those revenues are reinvested within the tolled corridor. US 36 retained two general purpose lanes and added a third managed lane in both directions. In exchange for revenues from the managed lane, the concessionaire accepted certain design and construction risks as well as all risks associated with operations and maintenance.

[1] https://www.codot.gov/projects/faster

[2] Project Report: Achieving Value for Money, March 14, 2014.

Supporting Coast to Coast Commerce – Interstate 70

The FASTER legislation that enabled HPTE to finance US 36 also identified 128 poor bridges – bridges with sufficiency ratings less than 50 – and made all CDOT-owned poor bridges eligible for FASTER funding. 127 of those 128 initially poor bridges have been or are programmed to be replaced. One bridge has not.

Amount of Risk Retained by the Public

	DB	DBOM	DBFOM
NEPA Approvals	High	High	High
Permitting	Medium	Low	Low
Right of Way	High	Medium	Medium
Utilities	Medium	Low	Low
Project Financing Schedule	Low	Medium-High	Medium
Interest Rate Changes	Medium	Medium	Medium
Design	Medium	Low	Low
Ground Conditions	High	Low	Low
Unknown Hazmat	High	High	High
Construction Costs	Medium	Low	Low
Quality Assurance/Quality Control	Medium	Low	Low
Operating Performance	High	Low	Low
Lifecycle Maintenance Cost	High	Medium	Low
Long-term Security Cost	High	Medium	Low

Key: DB = Design-Build; DBOM = DB-Operate-Maintain; DBFOM = DB-Finance-Operate-Maintain

Constructed in the early 1960s, the I70 viaduct runs along the north end of Denver for just more than a mile and will be replaced by a partially covered, below-grade lowered highway at a cost of approximately $850 million. Other improvements along that corridor have brought the total project cost estimate to $1.2 billion, nearly the equivalent of CDOT's entire annual budget.

Last February, Colorado's Transportation Commission approved a Design-Build-Finance-Operate-Maintain (DBFOM) project financing and delivery method that, like the US 36 project, will shift a significant amount of risk to the private sector.[3] A subsequent Request for Qualifications generated five proposals from consortiums of large firms – local, national, and international – equipped to undertake such a project. The top four were selected to advance to the next phase as the project moves toward a 2016 Record of Decision, with construction slated for the fall of 2016.

Keeping Good Bridges from Becoming Poor Bridges – Regional Bundled Bridge Projects

Under federal legislation, every state will be required to produce a risk-based asset management plan. CDOT adopted its first such plan early in 2014. A tenet of sound transportation asset management is optimizing life cycle costs for highways and bridges. Much like a car that receives oil changes and preventative maintenance, a highway or bridge can benefit from prolonged life when strategically preserved.

While the FASTER legislation targeted CDOT-owned poor bridges, few funds were available to keep the state's other 3,000 bridges from becoming poor and requiring replacement. In late 2012, Governor John Hickenlooper and Executive Director Don Hunt announced the Responsible Acceleration of Maintenance and Partnerships (RAMP), leveraging CDOT cash balances to increase preservation programs by $150 million per year for five years. Under the department's Asset Management programming, $30 million of this was allocated for bridge preservation work.

With these additional resources, CDOT's bridge engineers designed a deck sealing and joint replacement program. To prioritize candidate bridges, they developed risk-based criteria such as sufficiency rating, detour lengths, functional obsolescence, and safety considerations. They initially worked with three bridge consultants under existing CDOT design contracts to divide the state geographically and maximize the work performed for a fixed amount on each contract. That program was later rolled into a competitively advertised statewide program, with one prime consultant and multiple sub-consultants under contract for four to five years. Consultants design the preservation work and CDOT's engineering regions deliver the work as part of their ongoing asset management programs.

[3] Colorado Transportation Commission workshop presented February 5, 2015.