

Fiscal Highlights

Looking at the Present Value of Bonding for Certain Projects - Thomas E. Young

During the 2016 General Session, the Legislature gave the following direction to the Utah Department of Transportation (UDOT) regarding accelerating certain projects through bonding:

"The Legislature intends that the Utah Department of Transportation prepare an analysis and financial report on the possibility of advancing construction of road projects currently programmed in the Transportation Investment Fund. The analysis should include consideration of the savings or additional costs associated with advancing the projects through the use of either short term debt or long term financing. The report should be reported to the Executive Appropriations Committee on or before the July 2016 legislative interim committee meetings."

UDOT presented its findings at the July meetings of the Executive Appropriations Committee (EAC) and the Infrastructure and General Government Appropriations Subcommittee. Their report includes four possible scenarios of accelerating road construction in Salt Lake, Utah, Davis, and other counties through the use of 10-year and 15-year bonds.

In conjunction with the UDOT report, LFA was tasked with evaluating the potential gains from accelerating projects against the costs of additional bonding.

Below are the results. On the cost side, when bonding, the State incurs bond issuance and interest costs (column "Nominal Interest and Cost of Issuance"). On the benefits side, the State gets increased construction employment, less congestion, and potential economic development by saving commuters' time on the road ("PV Benefits").

Overall, the results indicate that at the current time and presuming the detailed assumptions given in the report, that the benefits from reduced congestion may not be enough to cover the costs of bonding. This is represented by the "Net" column in the table below.

A copy of the complete report is available on the July 12th EAC meeting material page.

Results Matrix, 10-Year Bonding Scenarios					Results Matrix, 15-Year Bonding Scenarios				
Current Conditions					Current Conditions				
	Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net		Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net
Scenario 1	(\$115,510,500)	(\$97,996,636)	\$30,522,324	(\$67,474,312)	Scenario 1	(\$140,695,600)	(\$120,908,372)	\$30,638,703	(\$90,269,669)
Scenario 2	(\$124,719,250)	(\$106,064,915)	\$51,580,344	(\$54,484,572)	Scenario 2	(\$151,807,700)	(\$130,635,767)	\$51,390,613	(\$79,245,154)
Scenario 3	(\$164,414,000)	(\$139,304,112)	\$65,680,867	(\$73,623,245)	Scenario 3	(\$200,361,250)	(\$172,070,349)	\$65,452,816	(\$106,617,533)
Scenario 4	(\$263,652,250)	(\$215,243,625)	\$102,822,063	(\$112,421,563)	Scenario 4	(\$315,818,250)	(\$266,637,241)	\$102,420,878	(\$164,216,363)
Accelerated Growth					Accelerated Growth				
	Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net		Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net
Scenario 1	(\$132,837,075)	(\$112,696,131)	\$29,259,836	(\$83,436,296)	Scenario 1	(\$161,799,940)	(\$139,044,628)	\$29,365,922	(\$109,678,706)
Scenario 2	(\$143,427,138)	(\$121,974,653)	\$50,217,456	(\$71,757,197)	Scenario 2	(\$174,578,855)	(\$150,231,132)	\$50,016,573	(\$100,214,559)
Scenario 3	(\$189,076,100)	(\$160,199,728)	\$63,886,365	(\$96,313,364)	Scenario 3	(\$230,415,438)	(\$197,880,901)	\$63,644,437	(\$134,236,464)
Scenario 4	(\$303,200,088)	(\$247,530,169)	\$99,962,099	(\$147,568,071)	Scenario 4	(\$363,190,988)	(\$306,632,827)	\$99,542,259	(\$207,090,568)
Recessionary Decline					Recessionary Decline				
	Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net		Nominal Interest and Cost of Issuance	PV Cost	PV Benefits	Net
Scenario 1	(\$109,734,975)	(\$93,096,804)	\$31,784,813	(\$61,311,991)	Scenario 1	(\$133,660,820)	(\$114,862,954)	\$31,911,485	(\$82,951,469)
Scenario 2	(\$118,483,288)	(\$100,761,670)	\$52,943,231	(\$47,818,438)	Scenario 2	(\$144,217,315)	(\$124,103,979)	\$52,764,654	(\$71,339,325)
Scenario 3	(\$156,193,300)	(\$132,338,906)	\$67,475,369	(\$64,863,537)	Scenario 3	(\$190,343,188)	(\$163,466,831)	\$67,261,195	(\$96,205,637)
Scenario 4	(\$250,469,638)	(\$204,481,444)	\$105,682,027	(\$98,799,417)	Scenario 4	(\$300,027,338)	(\$253,305,379)	\$105,299,496	(\$148,005,883)