

Benefit Cost (Benefit Cost Overview)

Springfield Highway Expansion - 2 regions

Benefit-Cost Overview (2020 \$M)

Category	7% discount rate	3% discount rate
Present Value of Benefit Stream	367.388	657.442
Travel Benefits	317.118	552.281
Value of Consumer Surplus From Induced New Activity	0.000	0.000
Value of Improved Travel Time Reliability	28.355	57.150
Value of In-Vehicle Travel Time (IVTT)	271.467	446.915
Value of Out-of-Vehicle Travel Time (OVTT)	0.000	0.000
Value of Safety Improvement	-2.040	-0.175
Value of Vehicle Operating Cost (VOC)	19.337	48.391
Environmental and Social Benefits	7.207	16.502
Value of Emission Reduction For Carbon Dioxide	3.262	7.515
Value of Emission Reduction For Mobile Source Pollutants	3.945	8.987
Value of Other Social Benefits	0.000	0.000
Wider Economic (Productivity) Benefits	43.062	88.659
Value of Business Productivity	0.000	0.000
Value of Enhanced Labor Market Participation Rate	0.000	0.000
Value of Logistics & Supply Chain Cost Savings	43.062	88.659
Transfer Benefit Effects (net benefit adjustment)	0.000	0.000
Added Fees: Collected By Operators	0.000	0.000
Added Fees: Loss to Users	0.000	0.000
Present Value of Cost Stream	194.083	209.035
Project Costs	203.262	230.259
Capital Investment Costs	201.237	227.265
Operation and Maintenance Costs	2.025	2.993
Cost Adjustments	-9.179	-21.224
Residual Value of Capital Spending	-9.179	-21.224
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Net Benefit (Benefits - Costs)		
Transportation System Efficiency - Traveler Benefits Only	123.035	343.246
Traditional BCA - Traveler Benefits + Environmental Benefits	130.242	359.748
Full Societal BCA - All Benefit Categories	173.305	448.407
Benefit Cost Ratio (Benefits / Costs)		
Transportation System Efficiency - Traveler Benefits Only	1.634	2.642
Traditional BCA - Traveler Benefits + Environmental Benefits	1.671	2.721
Full Societal BCA - All Benefit Categories	1.893	3.145