

TDOT Example 1 (Non-Annual Series)



TDOT needs to build a bypass route around Clarksville, TN and they have decided to use an asphalt pavement.

The asphalt pavement will cost \$3,000,000 per mile to construct and \$75,000 per mile for annual maintenance. Every 12 years, the top two inches of the asphalt will have to be milled off and replaced at a cost of \$1,000,000 per mile.

What is the present value of the pavement's costs over a study period of 36 years? Assume that TDOT's cost of capital is 3% per year.