

10-6

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A new 2-lane road is needed in a part of town that is growing. At some point the road will need 4 lanes to handle the anticipated traffic. If the city's optimistic estimate of growth is used, the expansion will be needed in 4 years. For the most likely and pessimistic estimates, the expansion will be needed in 8 and 15 years, respectively. The expansion will cost \$5.4 million. Use an interest rate of 6%.

- (a) What is the PW for each scenario, and what is the range of values?
- (b) Use Equation 10-1 to find the mean value of the expansion's PW.