

- appropriate, and indicate which project is preferable under each circumstance.
7. The narrow gravel road to Jehnzen Lake is open only for the summer months. At present, the county spends \$750 per mile each year to prepare the road for summer traffic and another \$150 per mile for maintenance during the period in which it is open. A "permanent" road could be constructed at a cost of \$10,000 per mile; the county would have to spend \$800 per mile for maintenance (patching, etc.) only every five years through the thirty-year life of the road. Prospects for the area suggest that the road would have to be relocated at the end of that period. If 8 percent is a reasonable discount rate, which option is less costly? What discount rate would cause the two alternatives to have the same cost in present value terms?

