1.

Ryan Patton HW2

$B = 175,000,000\,(P/A, 8\%, 5)$

$= 175,000,000\,(3.9927)$

$= \$\,698,722,500$

$D = 30,000,000$

$C = 110,000,000 + 50,000,000\,(P/A, 8\%, 2)$

$= 110,000,000 + 50,000,000\,(1.7833)$

$= \$\,199,165,000$

$B/C = \dfrac{(B-D)}{C}$

$= \dfrac{698,722,500 - 30,000,000}{199,165,000}$

Benefit-to-Cost Ratio $= 3.36$

Since the plan has a BCR greater than 1.0, it's expected to yield positive net present value and they should accept the plan.