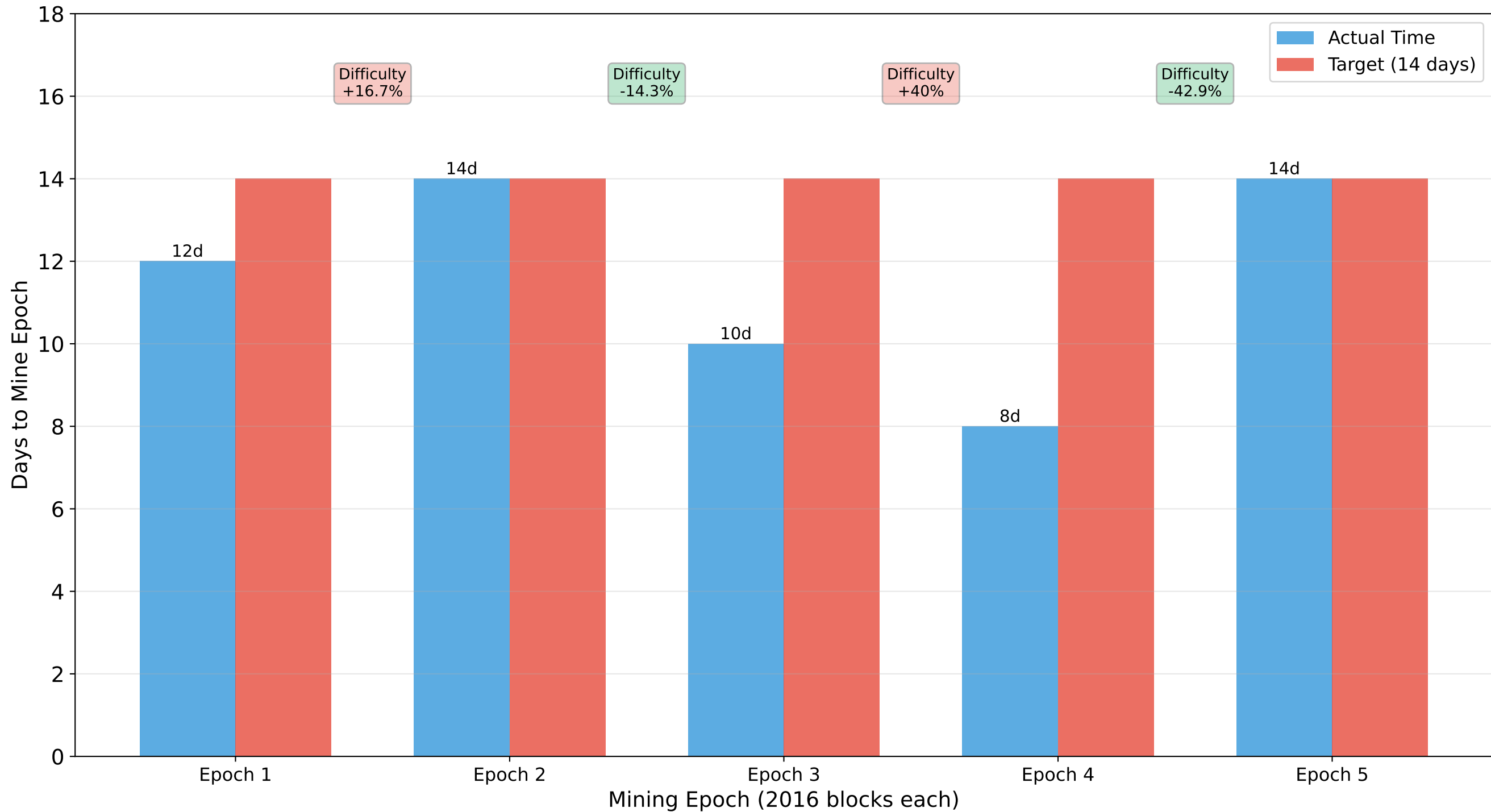


# Bitcoin Difficulty Adjustment Mechanism



$$\text{New Difficulty} = \text{Old Difficulty} \times \left( \frac{\text{Target Time}}{\text{Actual Time}} \right)$$
  
Adjusts every 2016 blocks (~2 weeks) to maintain 10-minute block target  
*Source: Bitcoin Core Implementation, BIP-42 (2024)*