

CASE STUDY

# Electrical Panel Repair/Replacement for Risk-Based Policy Segmentation



The analysis process began by leveraging Home Factors, which provides insights into 90% of households, and combining it with claims data through a collaborative effort with the data science and actuarial teams.

Using univariate analysis to evaluate individual factors, strong correlation between electrical panel repairs and increased fire risk was identified. Homes with electrical panels requiring repairs could experience a **~41% higher claims frequency** compared to those without.



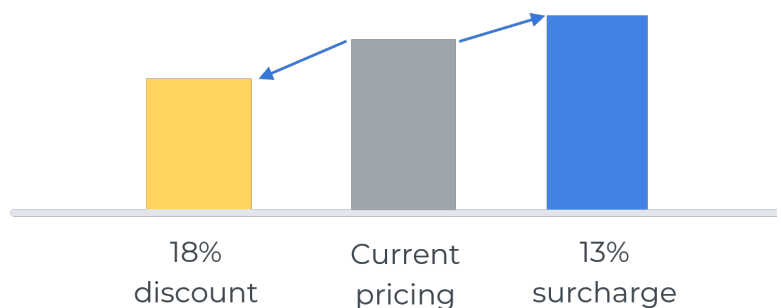
## ACTIONABLE OUTCOMES

This critical insight enabled HOA to refine their policy segmentation, helping them achieve more accurate alignment with premiums, benefiting both policyholders and overall portfolio performance:

- **39% of policyholders** likely do not need electrical panel repair, potentially qualifying for an **18% premium discount**, reflecting lower associated risks.
- **33% of policyholders** likely need electrical panel repair, potentially incurring a **13% surcharge**, accounting for their elevated claims frequency.

### Electrical Panel Needing Repair/Replacement

Could indicate a **~41%** higher claims frequency



**39% of Policyholders** likely **WITHOUT** electrical panel repair needs

**33% of Policyholders** likely **WITH** electrical panel repair needs