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## In a case study of Florida, wind loads were underestimated in >80% of homes

- In 86% of Florida census tracks, current models
  - Underestimate wind loads
  - Undervalue stronger construction
- Model results suggest that stronger construction could reduce Florida expected annual losses by \$4 billion per year (double the estimate of current models)



## Analysis of the US East Coast suggests that ignoring texture underestimates value of stronger construction by > \$12B/year

 While Florida's is EAB Expected Annualized Benefit largest, all coastal of mitigating homes states are exposed to AEAB wind hazard risk Additional EAB when we consider texture >\$10 B in expected value from mitigation 122 188 In several cases, 152 28 35 texture reveals risks 1,435 749 2X of conventional models

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## Analysis of the US East Coast suggests that due to texture effects, building codes should be updated pervasively

- Texture leads to additional wind loads than current codes assume
- One way to fix this would be to use a textureinformed drag coefficient (C<sub>d</sub>) in codes
- 25,000 communities should set a higher drag coefficient to reduce their risk of loss















