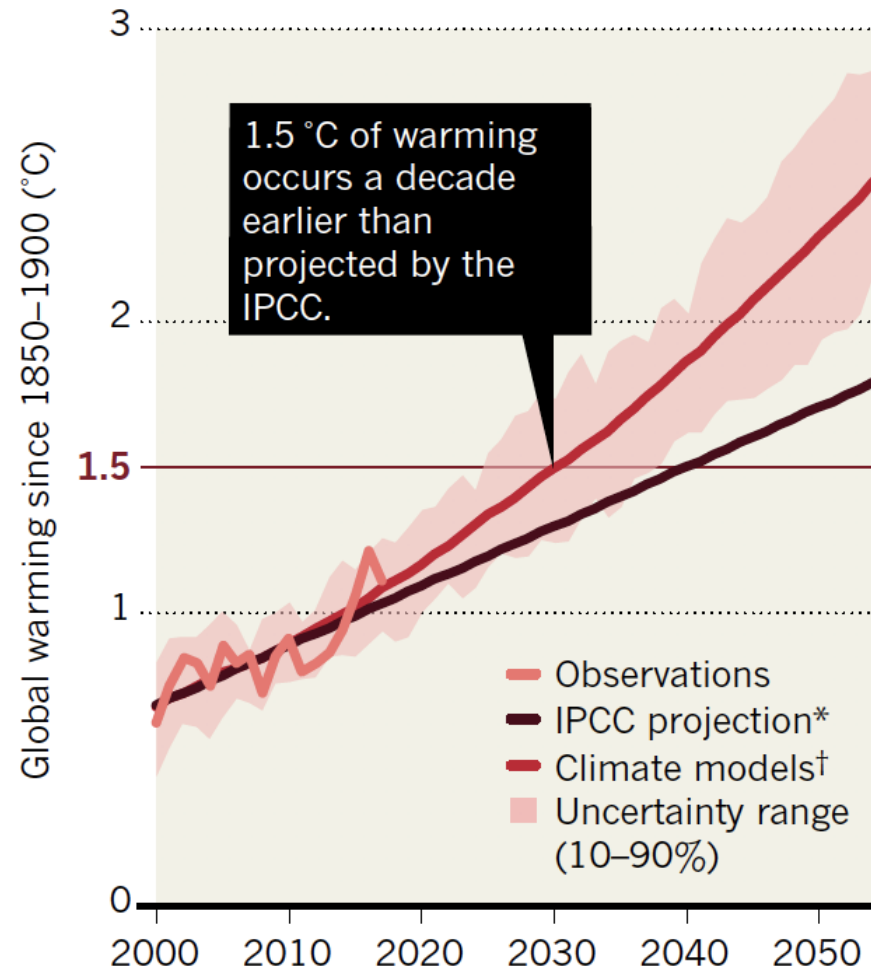


Municipal Bonds and the Risks of Climate Change

David Victor (Tuesday, July 14th, 2020)

ACCELERATED WARMING

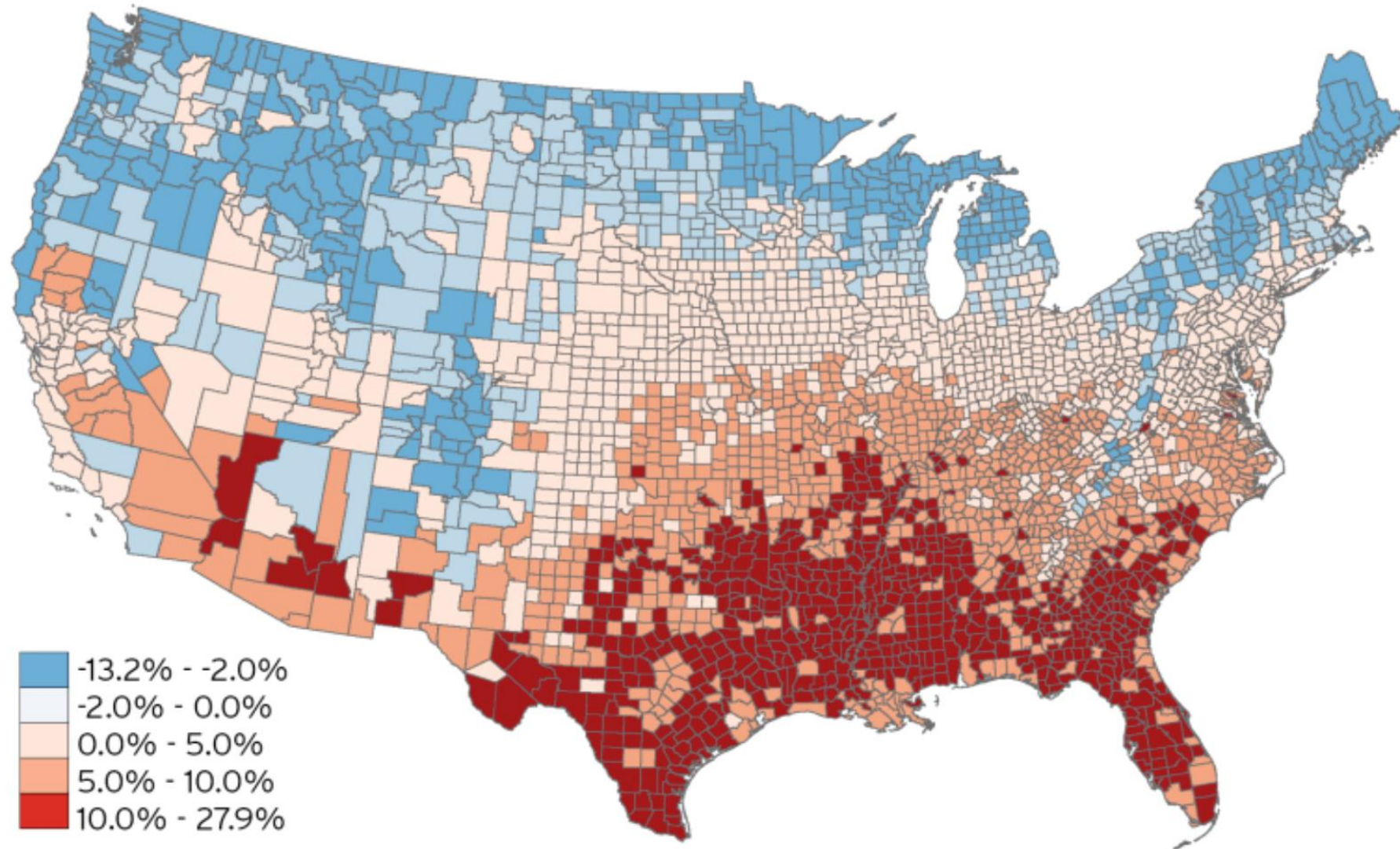
Climate simulations predict that global warming will rise exponentially if emissions go unchecked.



*Trend for 2001–15 extended with a constant rate of 0.2 °C per decade, as per IPCC special report. †Ten-year average, 37 climate models for the RCP8.5 scenario (IPCC Fifth Assessment, 2014).

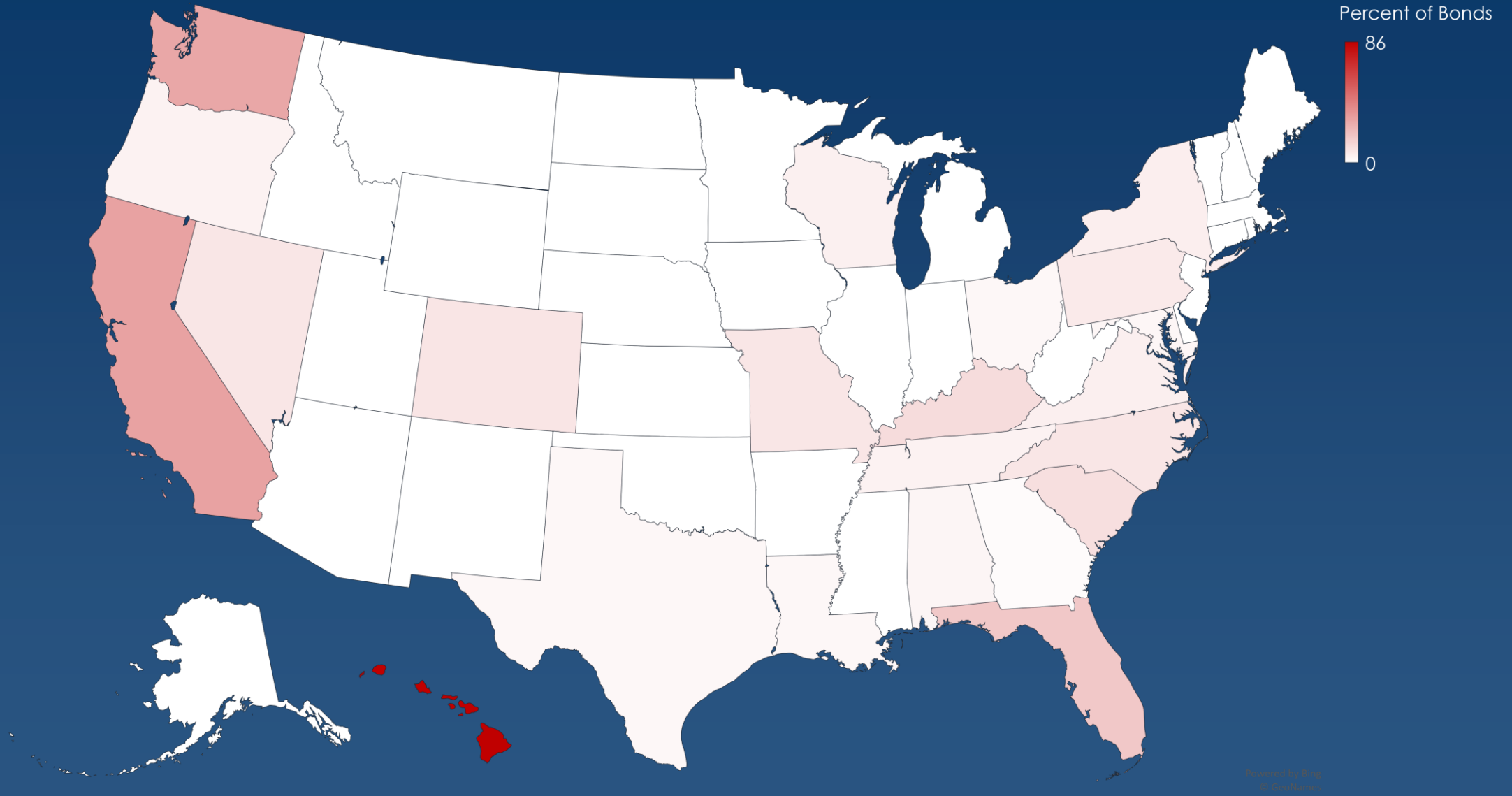
Climate-related costs by 2080-2099

Share of 2012 county income

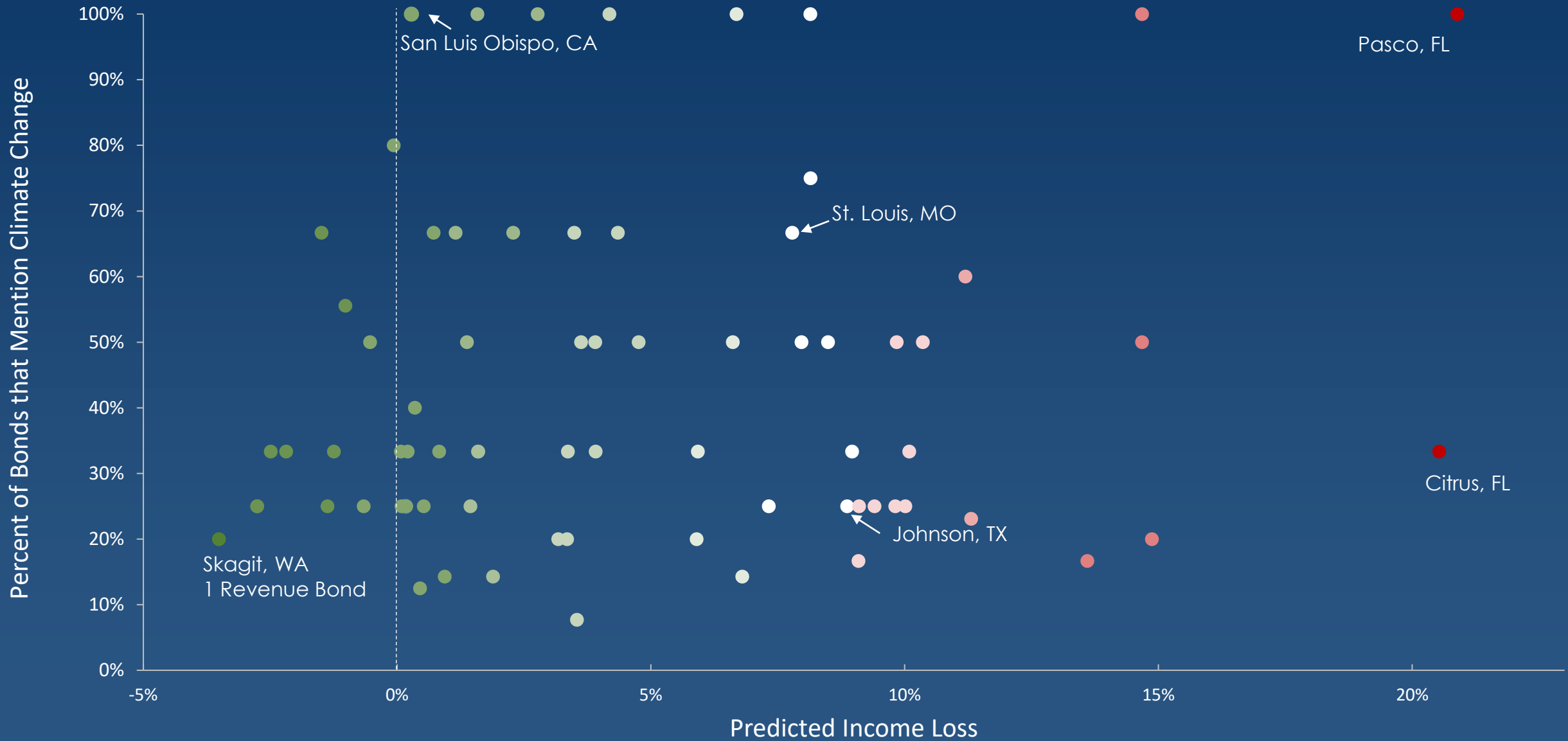


Source: Muro, Victor et al 2019, Brookings

Percent of Bond Statements that Mention Climate Change



Mentions of Climate Change vs. Climate Risk Scores: Sample of 590 counties over 2010-2020: ranked by climate exposure



JOHNSON, TX 2019 GO BOND (EXPECTED INCOME LOSS: 9.1%)

*“Fund performance may also be affected by factors other than asset allocation, including, without limitation, the general performance of the securities markets in the United States and abroad; political and investment considerations including those relating to socially responsible investing; **economic impacts relating to domestic and international climate change**; development of hostilities in and among nations; cybersecurity issues that affect the securities markets, changes in international trade policies, economic activity and investments ...”*