Thoughts on Climate Adaptation

Henry Lee Harvard Kennedy School July 14, 2016

Introduction

- Climate adaptation policy is basically a form of risk management, but only harder
- Risks are hard to define and occur over a wide temporal and spatial range
- Risks are dependent on assumptions about the rate of climate change and global temperature rise.

Broad Range

- Vulnerabilities and exposures will differ across geographic and socio-economic strata
- Risks will change over time as global temperatures increase and socio-economic factors evolve
- Certain risks amplify other risks—feedback loop

Temporal Uncertainty

- The consensus is that the probabilities of damaging impacts will increase over time—but no agreement on magnitudes, scope and timing of these risk increases
- These uncertainties affect the financial and economic viability of future investments

Investments in Adaptation

- Planning, but no investment
- Private investments in enhanced resilience
- Investments in insurance
- Public investments—local governments
- Public investments—international, federal, or state governments

Theory

- The jurisdiction or entity that will reap the benefits should bear the costs
- Risks should be borne by the entity best positioned to manage that risk
- Both rules suggest that local governments should bear the primary responsibility for investments in adaptation

Questions

- If the impacts of climate change are geographically and socio-economically uneven—is there an equity argument for a greater international, federal, or state role?
- If yes, how would you define that role?
- If the federal or central government pays the costs of damage from natural disasters ex-post, should they pay a portion of the adaptation costs to prevent or reduce those costs by investing in adaptation?