Module 19: Financing the Digital City

Dr. Ashby Monk, Stanford University
Digital cities will be a lot of things; cheap to build isn’t one of ‘em!
The good news: Theoretically, Plenty of Long-Term Capital

$70,000,000,000,000$
The bad news: Short termism is endemic…
… And finance is too big a tax.
Result: Lack of Investment Dollars for Critical ‘Projects’

FIGURE 1 - Investment Gap by Infrastructure Category as a Percentage of Total Needs in the Years 2020 and 2040

- Surface Transportation: 51% Funded, 49% Funding Gap in 2020; 46% Funded, 54% Funding Gap in 2040
- Water/Wastewater: 33% Funded, 67% Funding Gap in 2020; 27% Funded, 73% Funding Gap in 2040
- Electricity: 85% Funded, 15% Funding Gap in 2020; 72% Funded, 28% Funding Gap in 2040
- Airports: 71% Funded, 29% Funding Gap in 2020; 76% Funded, 24% Funding Gap in 2040
- Inland Waterways & Marine Ports: 47% Funded, 53% Funding Gap in 2020; 50% Funded, 50% Funding Gap in 2040

SOURCE: Data taken from previous Failure to Act studies.
OUR RESEARCH AT STANFORD IS FOCUSED ON IMPROVING THE PRODUCTION FUNCTION OF INVESTMENT FOR LONG-TERM INVESTORS, WHICH, WE HOPE, WILL BETTER ALIGN LONG-TERM CAPITAL WITH CRITICAL LONG-TERM PROJECTS.

OUR FOCUS IS ON INSTITUTIONAL-INVESTMENT INNOVATION THAT CAN RE-ROOT LONG-TERM INSTITUTIONAL INVESTORS IN THE REAL ECONOMY:

SPECIFICALLY, THIS LEADS US TO FOUR CATEGORIES OF RESEARCH, WHICH WE BELIEVE WILL HELP IMPROVE THE RETURN PRODUCTION:

- **Professionalization of AOs**
- **Re-Intermediation of AMs**
- **Conceptual Innovations**
- **Technological Adoption**
Let’s do a case study: Clean energy investments.

Seems obvious investment opportunity for long-term investors, but it’s just not happening. Why?
Back to basics: The production function of returns...
Looking outside-in a pension fund....
Living inside a pension fund....
We need multiple bridges, a patron, and a true partner inside what is, truly, a tough and sometimes nasty world...