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Cornell Program *in* Infrastructure Policy
EDUCATING THE NEXT GENERATION OF INFRASTRUCTURE LEADERS

Cornell Program in Infrastructure Policy



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Overview of U.S. Infrastructure Policy Issues Impacting the New York Metro Area

R. Richard Geddes

Professor and Founding Director

Cornell Program in Infrastructure Policy (CPIP)

March 24, 2021

Defining Infrastructure: Two Parts (1)

▶ Part 1: Civil (or network) infrastructure

- Drinking water treatment systems (pumps, plants, and pipes)
 - Wastewater treat systems (pumps, plants, and pipes)
 - Roads and highways
 - Bridges and tunnels
 - Communications systems (land line systems, cell towers, etc.)
 - Electric systems (generation, transmission, and distribution)
 - Railroads as network infrastructure (passenger and freight)
 - Solid waste removal/garbage collection
 - Street lights
 - Parking garages
 - Sidewalks, etc.
- ▶ Hard infrastructure is usually part of a network (sometimes also called network infrastructure)

Defining Infrastructure (2)

- **Social infrastructure:**
 - Prisons
 - Courthouses
 - Schools
 - Hospitals
 - Stadiums
 - Senior centers
- Soft infrastructure is usually stand-alone; not part of a network; sometimes referred to as facilities



Two distinct types of infrastructure gaps:

A funding gap versus a financing gap



The funding gap: Infrastructure funding refers to the *underlying resources* (dollars) necessary to pay for infrastructure

This gap is the difference between what engineers say is needed for a “state of good repair” and dollars currently available for funding

The two broad categories are some type of user fee and some type of broader tax revenue



Major Infrastructure Policy Misconception:

The private sector does not provide more funding *per se*, but can help to finance a facility once funding is secured



Once infrastructure funding is in place, then financing can come from many sources



Infrastructure Financing Sources in the United States

Tax-exempt municipal bonds

Privately issued corporate bonds

TIFIA (Transportation Infrastructure Funding and Financing Act) loans

Direct equity investment by a private investor (often considered the key aspect of a PPP)

State revolving funds (SRFs) , etc.



Main Infrastructure Problems in the United States:

- A. Inadequate funding from current sources (note endemic problems with fuel taxes)
 - B. Deferred maintenance of key infrastructure
 - C. Slow and costly infrastructure delivery
- * Intensity of problems vary greatly across sector
- * Infrastructure generally better where there is a *direct user fee*



Key U.S. infra policy improvements:

- * A robust **asset recycling program** that encourages state and local “self help” in generating new funding
- * Encourage bundling of design/construction with operation/maintenance via DBOM contracts
- * Incentivizing the **adoption of new technologies** that will save money and improve delivery
- * Facilitate **value-added tolling** of interstates



Key U.S. infra policy improvements (con't):

- * Lift the cap on Private Activity Bonds (PABs) and allow for use on other infrastructure types
- * Reform National Environmental Policy Act (NEPA)
- * Repeal of Section 111 of Title 23 on the development of Interstate rest stops by states!



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Thank you!