



*Paying for Sustainable Water Infrastructure:
Innovations for the 21st Century*

State and Local Innovations

***Alternative Revenue Sources:
Economic Issues***

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What Does Infrastructure Do?

- ▶ It provides **market goods**
 - Examples: water supply to household; wastewater removal
 - Market goods benefit only those who receive them
 - Non-payers can be excluded
- ▶ Infrastructure provides **public goods**
 - Examples: public health improvement, environmental protection
 - Public goods benefit many people simultaneously
 - Non-payers cannot be excluded

How Do We Pay for Infrastructure?

- ▶ **User Charge** (a price paid voluntarily to receive a service)
 - e.g., water rates, highway tolls, admission fees
 - If the service is not delivered, the price is not paid, and vice versa
 - NOTE: User charges only possible for market goods
- ▶ **Tax** (an amount paid involuntarily, whether or not a service is received)
 - Benefit tax – levied on those who receive a benefit, preferably in rough proportion to the benefit received; e.g., benefit assessments
 - Other taxes – e.g., head taxes, ad valorem taxes, sales taxes, income taxes, etc.



Financing Sources v. Instruments

- ▶ Financing source – the person or persons who ultimately pay for the infrastructure
 - Note that the government is never a financing source
- ▶ Financing instrument – a financial device which:
 - Provides the funds for infrastructure when needed
 - Determines who will ultimately pay
 - Determines when payment will occur
- ▶ Financing instruments include, among other things, the decision to use debt or current revenues, the terms of debt, the decision to apply user charges or to rely on taxes, etc.



Why Do We Care?

► Financing plans should:

- Provide sufficient revenue to carry out the project
- Be fiscally sustainable
- Promote economic efficiency
- Treat affected persons equitably and fairly (e.g., avoid disproportionate impact on low-income households)
- Treat future generations fairly
- Be politically acceptable
- Avoid perverse incentives (free riding, counterproductive responses, etc.)