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R SHEET ON WATER INFRASTRUCTURE PROCUREMENT

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BACKGROUND

The story of American infrastructure has been characterized by cycles of building, maintenance and rebuilding that span generations of lawmakers. When assets will be used for decades, it is especially important for governments to make good decisions about how to invest scarce infrastructure dollars.

Regretfully, the United States has been slow to adopt and follow **best practices** that would make American infrastructure cheaper and improve the lifespans of building projects to lower future maintenance costs. Taking steps to implement these practices would bring American infrastructure costs down and quality up, to match those of other developed countries.

CURRENT DEBATE

For water infrastructure, the quantity, quality and geographical distribution that pipes, conduits, reservoirs and aqueducts take is decided by state and local lawmakers that regulate and manage private infrastructure contractors in local monopoly markets. Procurement rules—the laws and regulations that govern how contractors are selected and what contracts entail—differ from place to place and are one reason the cost of building water infrastructure can vary widely.

Many of the problems associated with infrastructure—high costs, lacking maintenance, low worker-productivity growth and failure to use up-to-date technology—can be partially alleviated by making government procurement a more open process. Open procurement means that the contracts for services do not prescribe any technology or material, instead measuring the contract on objective outputs, like amount of water carried for pipes or how long pavement lasts for roads. Closed-procurement rules are those where the law mandates the technology used for any given type of infrastructure project.

Rules on what materials must or may be used in infrastructure construction are one of the major hurdles to lowering the cost of building new assets and maintaining and updating what is already in the ground. Materials mandates were often codified to address real problems

SUMMARY

- Outdated rules that mandate particular materials for water infrastructure increase costs and water rates.
- Implementing open-procurement practices that lack these mandates could yield cost savings from 26 to 39 percent.
- State public-private partnership (P3) offices are well positioned to coordinate and advise municipal-procurement reform.
- Legislative staff are positioned to compile procurement reform options as part of capital-budgeting processes.

of the time that generated public nuisances when pipes leaked or only one material was used.

But times have changed and in the past few decades, materials science has come a long way. Better concrete, improved plastics and advanced coatings have made possible cheaper, more reliable infrastructure. And accordingly, failing to capitalize on these developments will result in long-run water rates that are higher than they need to be. Today, there are six commonly used materials in irrigation but whether any particular type of pipe is allowed **differs widely** by place. While municipalities have made strides in allowing different materials to be used, if state procurement processes are ever going to implement the latest and best technology, more work needs to be done.

Open-procurement practices have been proven to lower infrastructure costs. For example, **a recent study for the U.S. Conference of Mayors** found that under open competition, costs to replace water pipes were 26 percent lower than in regions that had closed practices. For storm-water infrastructure, open procurement yielded savings of 39 percent per mile. Meanwhile, 76 percent of surveyed cities had closed practices for at least one type of water pipe. This is low hanging fruit for policymakers concerned with America's high infrastructure costs. After all, problem

rules are currently ubiquitous. And further, few municipalities are free of materials mandates for infrastructure projects. To change this would yield savings large enough to have a noticeable impact on water budgets. One of the main reasons water infrastructure costs have traditionally been so high is that when pipes are replaced, the replacement uses the same materials as the original. Simply allowing utilities to consider other materials when they update their pipes would be a valuable step. These are all reasons **scholars across the ideological spectrum** see value in opening infrastructure-procurement practices.

ACTION ITEMS

In recent years, states and municipalities have increasingly realized that there are clear and proven benefits to using open-procurement processes when the time comes to update water and other infrastructure assets. To fully achieve these benefits, states and municipalities will need to remove materials mandates and other features that dictate particular technologies from their codes. This task is ripe for study by legislative staff as part of any proposal for new capital spending on water infrastructure.

One path forward would be to extend state public-private partnership offices' authority to advise municipalities and water districts on how to open their procurement processes in ways that could yield cost savings. As more states set up dedicated P3 coordinating offices in their push to increase private involvement in infrastructure, these offices may be best positioned to advise other state bodies on how to save money through procurement reform. States that have not set up P3 offices could turn to utilities regulators to provide instruction.

Broader reform would involve states mandating that all municipalities and utility districts replace technology mandates with objective output measures in their governing statutes, and remove them from all contracts moving forward. High water-infrastructure costs can have regional and statewide effects on where development is possible, which gives state officials a powerful incentive to ensure municipalities follow the best procurement practices available. Whatever path to reform legislators take, in the long run, failure to update water-procurement rules will leave ratepayers high and dry.

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