



## STATE POLICY PACKAGE

### Fix-it-First Policy for Water and Sewer Infrastructure

*Restoring Prosperity is a new approach to helping older industrial cities transition to the 21st century: by investing and encouraging development in already-existing towns and cities, planning for communities where people want to live and work, and creating better transportation, housing, and job choices for the new economy.*

Infrastructure investment in the U.S. is at a critical juncture. In many older cities and towns, water and wastewater systems have passed the 100-year mark. Pipes, sewers and drains fail with dismaying regularity and even newer improvements such as pumps and treatment plants have reached the end of their useful lives. Hundreds of billions of dollars will be needed to fix and update the water and sewage systems of these cities and towns.

Some states continue to make costly investments in new infrastructure to serve previously undeveloped areas. In contrast, a few states have begun to experiment with “fix-it-first” approaches that prioritize spending on repairing existing facilities. In the area of water and sewer infrastructure, the focus of fix-it-first policies is rightly on the states’ Clean Water and Drinking Water State Revolving Funds (CW/DWSRFs). These are the main vehicles through which states have a say in the planning and implementation of water and sewer projects.

### What is “Fix-it-First?”

The location of investments in infrastructure helps determine where growth will occur. Fix-it-first policies aim to steer public spending toward projects that maintain and improve existing infrastructure in established areas. Public funds are used for extending new infrastructure into developing areas only after existing infrastructure has been updated.

Fix-it-first is a fundamentally different approach to growth than conventional practices. It has the potential to strengthen older cities and towns by supporting the significant public investments made earlier in those areas and by recognizing the efficiencies inherent in more compact development patterns.

### Case Study: State of Maryland

In 1997, Maryland became one of the first states to enact a statewide smart growth policy. The policy requires local governments to identify growth areas for future development—known as “Priority Funding Areas” (PFAs)—and incorporate them into 20-year county land use plans. The act requires the state to direct its funds for growth-related infrastructure to projects located within the PFAs. Growth-related projects covered by the legislation include most state programs that encourage or support growth and development, such as sewer and water infrastructure, economic development assistance and state leases or construction of new facilities. For more information, see the state’s smart growth web page, at [www.mdp.state.md.us/smartintro.htm](http://www.mdp.state.md.us/smartintro.htm).

Regarding water and sewer infrastructure, Maryland’s Clean Water and Drinking Water State Revolving Funds (SRFs)—which provide low-interest loans to municipalities for infrastructure—are intended to provide funds only for projects located within the PFAs. Projects not consistent with the local growth plans and other PFA requirements are not eligible for funds unless they are necessary to protect public health or safety (for more information, see [www.mde.state.md.us/Programs/WaterPrograms/Water\\_Quality\\_Finance/index.asp](http://www.mde.state.md.us/Programs/WaterPrograms/Water_Quality_Finance/index.asp)). Maryland’s SRF policies, like fix-it-first policies elsewhere, are a work in progress and, with grandfathering and the public health/safety exceptions, have faced implementation challenges; however, they mark an important shift in the state’s orientation.



## Policy Ideas

The fix-it-first approach can apply to all types of infrastructure in which states play a planning and funding role. Concerning water and sewer infrastructure, states are involved primarily through their Drinking Water and Clean Water State Revolving Funds (SRFs); as such, the SRFs should be the focus of a fix-it-first policy for water and sewer infrastructure. Through the SRFs, states receive block grants from the U.S. Environmental Protection Agency (EPA) and make low-interest loans to local communities to build and improve their wastewater treatment plants, sanitary sewers, drinking-water systems and other water and sewer projects. The SRF programs give states the flexibility to set their own priorities, within limits, and require public involvement in decision-making. Those program aspects present valuable opportunities for fix-it-first advocates. Below are some ideas for requirements to include in your state SRF in support of a statewide fix-it-first policy for water and sewer infrastructure:



Courtesy of Roland Tanglao

- Prioritize funding for projects that maintain, repair, update or upgrade existing infrastructure or expand capacity strategically to enable infill growth, rather than for projects that extend infrastructure into newly developing areas.
- Prioritize funding for projects in cities and towns first, then for immediately adjacent areas set aside for new growth as part of a long-term comprehensive growth plan, rather than for projects in the urban fringe.
- Provide especially attractive loan terms—in the form of lower interest rates, principal forgiveness or extended repayment terms—to priority projects and projects serving disadvantaged urban communities.
- Require municipalities receiving SRF funds to institute “full-cost” pricing for their water and sewer services. Full-cost pricing reflects and seeks to recover the full costs of building, operating and maintaining a water or sewer system. This would prevent services for new sprawl development—which are typically costlier to serve due to the greater distances involved—from being subsidized by existing customers.
- Dedicate any annual non-allocated, returned or otherwise left-over funds in the SRF programs exclusively to fix-it-first projects.

### Case Study: Commonwealth of Massachusetts

In 2006, Massachusetts won a “National Award for Smart Growth Achievement” from the EPA, in part for its fix-it-first policy, which “ensures that state spending focuses investments on existing water, sewer, road, transit, and park infrastructure.” Specific to water and sewer infrastructure, the *Massachusetts Water Policy* (2004) seeks to “promote...timely maintenance of old infrastructure” through what it calls a “fix-it-early” approach. The commonwealth’s SRFs have established project prioritization criteria that tend to favor maintenance projects and existing infrastructure. The Drinking Water SRF generally does not fund “projects primarily intended solely to serve future growth,” for example, while the Clean Water SRF considers “the extent to which the project is consistent with local and regional...plans, and promotes the rehabilitation and revitalization of infrastructure, structures, sites, and areas previously developed and still suitable for economic (re)use.” For more information on the Massachusetts SRFs, see [www.mass.gov/dep/water/wastewater/wastewat.htm](http://www.mass.gov/dep/water/wastewater/wastewat.htm).

Some advocates have argued that Massachusetts’ fix-it-first policies look good on paper but not on the ground; in particular, SRF criteria contain many loophole-enabling exceptions so that sprawl-inducing projects continue to be funded. Their experience shows that a fix-it-first policy is not by itself sufficient to change growth patterns; rather it is a first step toward sustainable infrastructure planning. Interested advocates will need to devote attention to the policy details and, more importantly, work with state agencies to improve and implement adopted policies.



## The Economic Case

The U.S. Environmental Protection Agency projects that, unless neglect is addressed, close to half of the water-system pipes in America will be in poor, very poor or ‘life-elapased’ status by 2020. It also estimates that the nation’s water agencies will need to invest \$276.8 billion through 2023 to provide safe drinking water and \$202.5 billion through 2028 to control wastewater pollution. Directing scarce state resources toward upgrading existing water and sewer infrastructure makes sense fiscally and financially. A fix-it-first approach invests states’ limited resources where they will have the biggest impact. By bringing infrastructure up to date, it lets states take advantage of what is already in place, rather than needing to provide funds for entirely new systems. Additionally, infrastructure in older cities and towns tends to be more compact which means that it can accommodate growth more cost-effectively and reduces the need for new and costlier water and sewer infrastructure far from city centers.

Investing in existing infrastructure is an economic development strategy for older cities and towns: it can enable new development, spurs reinvestment, creates jobs, attracts new employers and residents, and increases the local tax base. Maintenance projects restore critical urban infrastructure, protecting the public’s previous investments. Also, addressing deficiencies now prevents the need for bigger and more expensive fixes later on.

## The Environmental and Social Equity Case

The environmental case for a fix-it-first approach rests on several arguments. It helps preserve open space by directing growth to already developed areas. Also, the more-compact development patterns in older cities and towns are associated with lower rates of driving, energy consumption and emissions of greenhouse gases. Lastly, repairing water and sewer infrastructure ensures clean drinking water, reduces water loss from leaky pipes and prevents public-health problems and water pollution resulting from sewer overflows.

From a social equity perspective, a fix-it-first approach creates a more balanced playing field between older and newly developing areas. In recent decades, states shifted their attention and resources toward the urban fringe while neglecting older cities and towns. The result was a cycle of disinvestment in older areas that aggravated unemployment, poverty, population decline and other social ills. A fix-it-first policy would give older cities and towns an opportunity to restore their lost prosperity.

## More Facts

- Researchers at the Brookings Institution estimate that more compact growth would generate between \$22 billion and \$24 billion in annual costs savings over sprawl development for state and local governments through 2025; and that compact development patterns promise savings of 6 percent, or \$12.6 billion, from costs for water and sewer infrastructure alone.
- According to the U.S. Environmental Protection Agency, the amount of water lost to leaks each year nationally is 9.2 trillion gallons, worth approximately \$13 billion.
- A study by the Cadmus Group, an environmental consultancy, calculates that each job created in the construction of water and sewer infrastructure generates an additional 3.68 jobs in the broader economy.
- According to an Urban Land Institute report, almost 30 states have enacted legislation allowing impact fees to be charged to developers to pay for the water, sewer and other infrastructure associated with their projects.



## Political Strategy

Enacting a statewide fix-it-first policy for water and sewer infrastructure by influencing the design of the SRFs in your state will require a well-developed and coordinated political strategy. Below are some elements of an effective strategy:

- Consult experienced advocates to determine the best policy instrument for influencing the design of the SRF programs in your state; this may be done through administrative action by a state agency, legislation or an executive order from the governor.
- Begin by assembling a coalition of like-minded groups (see sidebar at right). Make sure that at least one key group has experience in state-level political strategy and lobbying.
- Conduct additional research on the need and rationale for a fix-it-first approach, its potential benefits and policy details from other states.



- Recruit spokespeople who can make the economic, environmental and social equity cases for a fix-it-first policy convincingly and arm them with supporting facts and messages.
- Cultivate media support, particularly from the editorial boards of newspapers in urban areas.
- For administrative action, look to the state agency that administers the SRFs; this is typically the department of environmental protection or its equivalent. Specifically, lobby the agency to revise its water resources plan (or similar document) to establish SRF guidelines and priorities consistent with a fix-it-first policy.
- For an executive order, build support among the governor's staff and agency directors; stress themes—urban revitalization or fiscal discipline, for instance—that echo the governor's positions and interests.
- For legislation, target members of the legislature who represent urban districts and members of the committee(s) with primary jurisdiction over infrastructure spending. Find a "champion" to write and shepherd a bill through the legislative process and other legislators to co-sponsor it.
- Remind politicians and the media that polling shows strong sentiment among Americans for reinvestment and fix-it-first policies (see "Messages that Work," on the next page).

## Coalition Building

Passing a statewide fix-it-first policy may attract substantial opposition. Fix-it-first is threatening to interests that depend on business-as-usual development.

Overcoming such opposition is possible but will require determined grassroots advocacy, "champions" in state-level politics and a broad coalition of interests. Fortunately, constituencies from many parts of the policy-making spectrum now understand their interest in revitalizing older cities and containing sprawl. Many of them can be enlisted as allies in pushing for a statewide fix-it-first policy. Potential allies include:

- City councils and elected officials representing older municipalities
- Environmental groups working on open-space preservation and water protection
- Developers specializing in infill, mixed-use and transit-oriented development
- Chambers of commerce in older cities and towns
- Overstretched water and sanitation districts, transit agencies and other utility and public-service providers
- Transit and other smart growth advocates, "good government" groups and government-spending watchdogs

Some of these groups will jump on board immediately while others will need reassurance that their interests will be taken into account. Most, if not all, will take an interest in the policy details. Open communication, transparent stakeholder involvement, frequent outreach and compromise will all be essential in assembling such a broad coalition.



## Communications

Communicating the need for and potential benefits of a fix-it-first policy is crucial in gaining the support of potential allies, the media and elected officials. This is especially true because fix-it-first is a relatively new concept and one that can be expected to generate opposition from interests that depend on business-as-usual development.

To overcome opposition, advocates will need to make a strong case for the economic, environmental and social equity benefits of a fix-it-first policy.



## Messages that Work

- Existing infrastructure in older cities and towns suffers badly from deferred maintenance; fix-it-first is a fiscally responsible approach that maintains and protects billions of dollars' worth of the public's investments.
- Investments in existing infrastructure help revitalize older cities and towns by enabling new development, creating jobs, attracting new employers and residents and increasing the local tax base.
- The repair of existing water and sewer infrastructure is a quality-of-life measure that promotes public health and protects the environment.
- A 2004 nationwide survey sponsored by Smart Growth America and the National Association of Realtors found that 86% of Americans want their states to fund improvements in existing communities over incentives for new development.
- Every dollar spent on infrastructure for new development takes a dollar away from sorely needed repairs to existing infrastructure. This unfairly shifts the costs of deferred maintenance to the next generation and creates new infrastructure that will need to be maintained in its turn.

## Addressing Concerns

Potential coalition allies and elected state officials considering proposed legislation to enact a fix-it-first policy will no doubt raise a number of concerns about the issue. This should be seen as an opportunity to educate people, clarify misunderstanding, dispel myths and assuage fears. Below are some expected concerns regarding fix-it-first, as well as effective ways to address them.

- **A fix-it-first policy will allow no new growth or development**

Fix-it-first does not restrict development. It redirects state resources for water and sewer systems and other infrastructure to existing areas and, by doing so, actually encourages growth there. Development elsewhere can still take place, as long as developers or local governments pay for the infrastructure needed to service it.

- **The state has no money to implement a fix-it-first policy**

Fix-it-first does not call for new spending; it simply prioritizes state spending on infrastructure in already developed areas. Fix-it-first might actually reduce spending in the long run by directing growth to more-compact areas, where it can be serviced more efficiently.

- **A statewide fix-it-first policy will take land use authority away from local government**

Fix-it-first is concerned with where state spending takes place, not with local land use decisions. Local governments can choose to develop outside the urban core as long as they or developers pay for the water pipes, stormwater drains, sewers, treatment capacity and other infrastructure needed to service it.



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## Related Policies

While fix-it-first is a central concept in sustainable water and sewer infrastructure, it is not the only one. Below are several related concepts that are also worth considering as statewide policies, as they have the potential to benefit older cities and towns. As with fix-it-first, they apply to all types of infrastructure in which states play a planning and funding role, from transportation to schools, among others.

- **Make infrastructure for newly developing areas pay for itself:** State assistance for development outside population centers works against urban revitalization. Instead, states should make local governments pay for infrastructure outside cities and towns or allow them to pass the costs along to developers in the form of impact fees.
- **Dedicate new funding to infrastructure repairs:** Decades of deferred maintenance mean that even a fix-it-first policy would not be sufficient to repair, let alone upgrade, our existing infrastructure; instead, new funds are needed. If they are allocated public works funds from a federal economic recovery package, states should make fix-it-first projects their first spending priority for funds received under the program.



## Resources for Additional Information

- For reports, fact sheets and other publications on the national Clean Water SRF program, visit [www.epa.gov/owm/cwfinance/cwsrf](http://www.epa.gov/owm/cwfinance/cwsrf); see especially *Potential Roles for Clean Water State Revolving Fund Programs in Smart Growth Initiatives* (October 2000), at [www.epa.gov/owm/cwfinance/cwsrf/smartgro.pdf](http://www.epa.gov/owm/cwfinance/cwsrf/smartgro.pdf). For similar information on the Drinking Water SRF program, see [www.epa.gov/safewater/dwsrf](http://www.epa.gov/safewater/dwsrf).
- A nationwide needs survey and assessment report on drinking water infrastructure can be found at [www.epa.gov/safewater/needssurvey/index.html](http://www.epa.gov/safewater/needssurvey/index.html). Additional information on state-specific needs for water and sewer infrastructure can be obtained through the agencies that administer the SRFs at the state level. The list of state-level Clean Water SRF contacts is at [www.epa.gov/owm/cwfinance/cwsrf/cwnims/pdf/agency.pdf](http://www.epa.gov/owm/cwfinance/cwsrf/cwnims/pdf/agency.pdf); the list of contacts for the Drinking Water SRF programs is at [www.epa.gov/safewater/dwsrf/nims/dwagency2.pdf](http://www.epa.gov/safewater/dwsrf/nims/dwagency2.pdf).
- For information on the benefits of a fix-it-first approach, see *Fixing It First: Targeting Infrastructure Investments to Improve State Economies and Invigorate Existing Communities* (National Governors Association Center for Best Practices, August 2004); [www.nga.org/Files/pdf/0408fixingfirst.pdf](http://www.nga.org/Files/pdf/0408fixingfirst.pdf).
- For information on the economic impacts of water and sewer investments, see *Local Government Investment in Municipal Water and Sewer Infrastructure: Adding Value to the National Economy* (The Cadmus Group; August 14, 2008); [www.awwa.org/files/Publications/WaterWeek/LocalGovt%20InvInMunicipalWaterandSewerInfrastructure.pdf](http://www.awwa.org/files/Publications/WaterWeek/LocalGovt%20InvInMunicipalWaterandSewerInfrastructure.pdf).
- For information about the 2004 Smart Growth America/NAR survey, which reveals public support and preference for reinvestment and fix-it-first approaches to infrastructure, see <http://www.smartgrowthamerica.org/resources.html> (Smart Growth America; October 2004).
- For information on the benefits of compact development and infrastructure, see *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns* (The Brookings Institution Center on Urban and Metropolitan Policy; March 2004); [http://smartgrowthamerica.org/RP\\_docs/brookings\\_sg\\_savings.pdf](http://smartgrowthamerica.org/RP_docs/brookings_sg_savings.pdf).

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**EISEN | LETUNIC**  
TRANSPORTATION, ENVIRONMENTAL  
AND URBAN PLANNING



**SAMPLE FACT SHEET**  
**Fix-it-First Policy**  
**for Water and Sewer**  
**Infrastructure**

“Fix-it-first” policies focus spending on repairing existing infrastructure in established areas. In the area of water and sewer infrastructure, the focus of statewide fix-it-first policies should be on the Clean Water and Drinking

Water State Revolving Funds (CW/DWSRFs), the main vehicles through which states have a say in the planning and implementation of water and sewer projects.

There are many good reasons to enact fix-it-first policies for water and sewer:

- Directing funds to building new infrastructure while neglecting existing facilities doesn’t make sense, especially in times of constrained public budgets.
- Ensuring that water/sewer infrastructure is maintained in established areas protects residents’ health and safety.
- Fix-it-first helps revitalize older cities and towns by enabling new development, creating jobs, attracting new residents, and increasing the local tax base. It also helps ensure that towns don’t lose investment and business opportunities because of failing public infrastructure.
- Polls show that the public strongly supports repairing existing infrastructure before building new facilities.
- Fix-it-first is budget neutral; it simply prioritizes funding for existing infrastructure.

Many states are already pursuing fix-it-first. Maryland and Massachusetts, for example, have established policies in their SRF programs that give higher priority to projects that are located in cities and towns, and that maintain, repair, and upgrade existing infrastructure or expand it strategically. Almost 30 states have enacted legislation allowing impact fees to be charged to developers to pay for water and sewer infrastructure related to their projects.

**Creates jobs**

Research shows that each job created in the construction of water and sewer infrastructure generates 3.68 more in the broader economy.

**Is fiscally responsible**

Repairing existing infrastructure maintains and protects expensive investments made by the public in earlier years. And infrastructure can be serviced more efficiently, and affordably, in existing compact areas.

**Protects public health**

Repairing existing water and sewer infrastructure is a quality-of-life measure, helping to ensure that the public and the environment are protected from pollution caused by sewer overflows and leaks.

**The Need in**  
**[insert state]**

INSERT HERE details specific to your state, including:

- Number of aging treatment plants, water/sewer systems or miles of water/sewer pipe.
- Estimated costs to repair this aging infrastructure.
- Local examples, preferably high-profile ones, of infrastructure breakdowns, highlighting resulting problems such as sewer overflows, closed beaches and sinkholes.
- Example of a successful repair project in an older city that yielded visible benefits.



**Supporters**

INSERT HERE the names of groups and organizations in your state that support a fix-it-first policy. Refer to the “Building Coalitions” sidebar in the policy paper for potential allies.