

## DC Streets: Innovation Yields Results

In July 2000, the District of Columbia embarked on the first urban, performance-based asset management project in the United States, known as "DC Streets." Under the \$70 million, 5-year initiative, the District of Columbia Department of Transportation (DDOT) and the Federal Highway Administration (FHWA) contracted with VMS, Inc., to preserve and maintain approximately 121 km (75 mi) of roadway that make up the District's portion of the National Highway System (NHS). Also included in the contract is the maintenance of such assets as tunnels, bridges, curbs, gutters, sidewalks, and retaining walls. As the initiative wraps up its fifth and final year, stakeholders are reviewing both the successes and the lessons learned.

According to Edward Sheldahl, project delivery team leader for FHWA's DC division office, the contract's big advantage is that it covers all of the assets of the District's portion of the NHS, which carries the bulk of DC traffic. "Before this contract, maintenance of these roadways was the responsibility of the city, and suffered because the resources weren't there. Because this contract qualifies for Federal aid, it is 80 percent funded by the Federal Government, with a 20 percent local match," says Sheldahl. A major highlight of the program, adds Sheldahl, was the rehabilitation of two very heavily used tunnels in downtown DC that was undertaken as one of the initiative's first priorities. He also notes that the contract ensured the timely repair and replacement of peripheral assets such as lighting and guardrails.

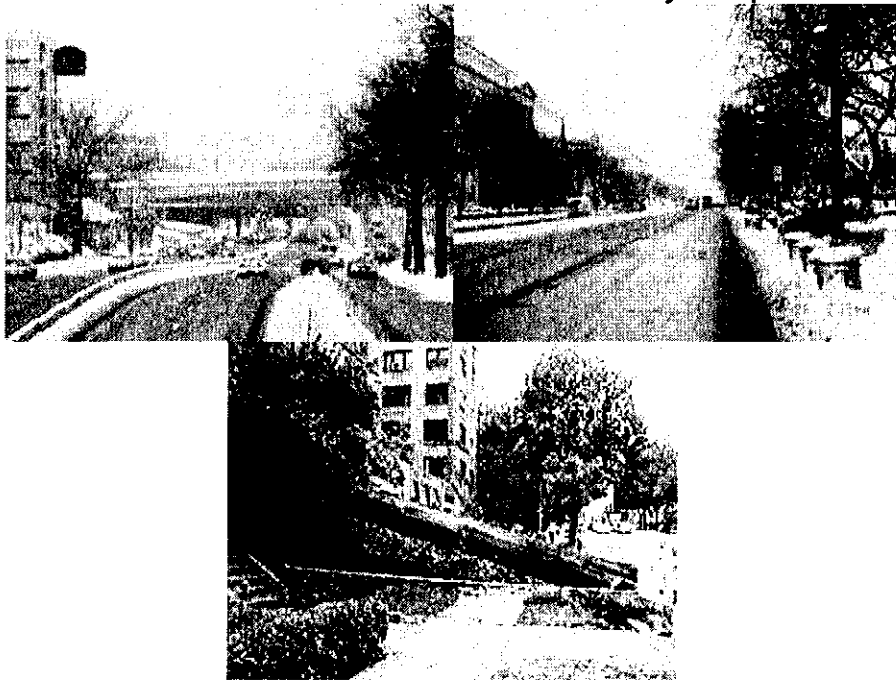
For Rich Herlich, president of VMS, Inc., the nature of the initiative itself was the biggest success of the project. "This kind of outcome-based contract relies on close cooperation between public and private partners," he says. "We as the contractor were given great freedom to choose how to conduct routine and preventive maintenance. Overall, the process went well." One example of innovation in action was the widespread use of spray-injection mobile pothole patcher technology for the first time in the District. The mobile pothole patcher machines can be used to quickly and efficiently fill potholes, minimizing the inconvenience to drivers and the exposure of work crews to traffic. VMS believed in the technology and used it on the NHS roads. After seeing the positive results in terms of fewer driver complaints, DDOT has now accepted the technology. "It was controversial at first, but that's the great thing about this type of contract," Herlich explains. "The contractor is free to do innovative things, and if it doesn't work, we fix it."

Simon Rennie, DDOT project manager for DC Streets, notes that change can be difficult in public agencies, and welcomes the injection of innovation that this type of contract allows. According to Rennie, the greatest advantage to such a contract is the ability to address unforeseen maintenance without the need for an additional appropriation process and the corresponding delay. For example, when Hurricane Isabel struck the District in September 2003, resulting in downed trees and submerged highways, Rennie had already consulted with VMS to arrange standby crews to address the damage. As a result, the roadways were restored within 72 hours, a feat that Rennie does not believe would have been possible before the DC Streets initiative was in place.

Rennie places a high value on this responsiveness to emergencies and citizen complaints. "Now, when someone calls our office with a report of an asset needing repair, I can call VMS, report the problem, get the schedule for when it will be fixed, and call the citizen back and tell them when the problem will be addressed, all in a short time," he says.

Despite its successes, the DC Streets program has not been without a few lessons learned on how to do a better job in future initiatives. According to Mark Robinson, program manager for Science Applications International Corp. (SAIC), which provided management consulting services for the DC Streets initiative, the contract has been a success, but some of the actual contract language should be adjusted in future contracts of this nature.

**Work performed under the DC Streets contract has included snow removal and clearing trees and other debris after Hurricane Isabel hit the city in September 2003.**



"Because this was the first time that such a contract was drafted for an urban area, some of the demands it stipulates were not achievable with reasonable effort," says Robinson. "For example, a few of the maintenance categories are still not up to par because there is not a well defined line between what is rehabilitation, which is covered in the contract, and what is reconstruction, which is not. So some actions required to satisfy the performance standards fall outside the scope of the contract. We've resolved these issues through a combination of general partnering agreements and item-by-item negotiations. Because this is a hybrid of a construction and a services contract, we need to better define the rehabilitation/reconstruction criteria in the future."

Herlich agrees that criteria and definitions need to be clarified in future agreements. "Some of the standards were contradictory," he notes. "For example, there is a standard for curb conditions. In some cases, tree roots have displaced the curb slabs, and the only way to fix this is to remove the trees. But another standard says that these trees should be preserved. We resolved the conflict through mediation and consultation, and kept the trees."

Rennie would like to see language in future contracts tying the meeting of performance standards to the incremental payment of the contract. Currently, VMS receives a monthly payment regardless of asset conditions. He would also like to see a greater sampling of assets to determine if performance standards have been met. The current sampling percentage is 10 percent.

Looking beyond the contract's completion in July 2005, Sheldahl expects the District to opt for smaller, follow-on asset management contracts focusing on specific types of assets, such as tunnels or bridges. He expects to see four to five such contracts, addressing the most vital components of the NHS, and possibly expanding to other District arteries that are not a part of the NHS. However, funding may not be available to issue contracts for all of the components of the DC Streets program. VMS would pursue a contract similar to DC Streets in the future without question, says Herlich, and might pursue smaller contracts if they make sense for the company.

"Performance-based contracts, when closely monitored, are definitely a good way to go," adds Rennie.

For more information about the DC Streets initiative, contact Edward Sheldahl at FHWA, 202-219-3514 (email: [edward.sheldahl@fhwa.dot.gov](mailto:edward.sheldahl@fhwa.dot.gov)), Simon Rennie at DDOT, 202-671-4666 (cell: 202-438-8607; email: [Simon.Rennie@dc.gov](mailto:Simon.Rennie@dc.gov)), or Mark Robinson at SAIC, 703-676-2384 (email: [Mark.D.Robinson@saic.com](mailto:Mark.D.Robinson@saic.com)).

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