

Asset Management

City of Saco, Maine

GIS-based asset management system manages roadway, sewer, and stormwater infrastructure

PROJECT AWARDS



2003 SPECIAL ACHIEVEMENT IN GIS
ESRI Award Winner

The City received the **2002 COMPREHENSIVE ANNUAL FINANCIAL REPORT AWARD (CAFRA)** from the Government Finance Officers Association for meeting GASB 34 and Generally Accepted Accounting Practices (GAAP).



Woodard & Curran worked with the City of Saco, Maine to develop and implement a Geographic Information Systems (GIS)-based asset management system—a solution that meets Governmental Accounting Standards Board (GASB) Statement 34 requirements and provides the City with a comprehensive asset inventory, inspection, and management system for all its roadway, sewer, and stormwater infrastructure assets.

GASB 34 accounting standards

GASB 34 requires that State and local governments report on the value of infrastructure assets including roads, bridges, water and sewer facilities, and dams. Governments are required to report on the value of assets both prospectively and retroactively.



Gathering infrastructure data using a Global Positioning System is part of an effective infrastructure management system.

Our team worked with Saco to acquire and organize infrastructure related asset information and procure a GIS-centric asset management software program, Azteca Systems' Cityworks, to meet GASB 34 requirements under the Board's Modified Approach.



The use of handheld devices optimizes data entry.

Asset management system manages sewer and stormwater data

The asset management system serves many roles, including maintaining and organizing sewer and stormwater asset information including the characteristics of the asset (e.g., pavement type, pipe size) and condition information; automated work order generation and scheduling; and reporting maintenance and repair costs.



Automated field inventories and inspections fill data gaps

Though our team took advantage of existing inventory and inspection data, it was necessary to conduct field investigations to fill in the gaps. Using hand held computers (e.g., Compaq iPAQ hand-held devices) information was gathered recording the characteristics and conditions of all sewer and drainage features in the City. By using these hand-held devices, field data collection costs were reduced by 20 percent.

City of Saco, Maine

PROJECT GOALS ACCOMPLISHED

GIS-based Asset Management system **PROACTIVELY MET GASB 34** reporting requirements.

Database **MANAGES ASSET CHARACTERISTICS** and conditions, and automates maintenance and reporting activities.

Data gathering and asset inventories and inspections **ENSURE COMPREHENSIVE INFORMATION** is compiled.

GIS database is **LINKED TO ASSET MANAGEMENT SYSTEM** to provide a mapping dimension.

OFFICE LOCATIONS

Maine ■ 1-800-426-4262

Massachusetts ■ 1-800-446-5518

New Hampshire ■ 1-888-611-7272

Connecticut ■ 1-888-265-8969

Florida ■ 1-800-426-4262

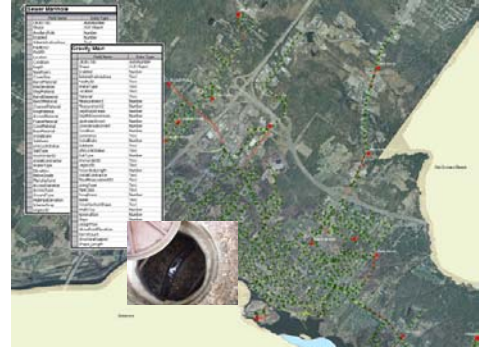
Operational offices across the U.S.

GIS database manages maps

An ArcGIS geodatabase was developed of all roads, sewers, and drainage networks using a combination of existing Computer Aided Design (CAD) files and Global Positioning Systems (GPS), which is directly linked to the asset management system. This enables the City to visualize the patterns of roadway, sewer, and drainage features that meet certain criteria. When planning for roadway improvements, City personnel can use the linkage to map roadways that need immediate improvement.

Proactive approach assures compliance

By implementing its system months ahead of the June 1, 2002 deadline, Saco instituted a proactive approach that assured compliance by the required date. The City received a bond rating upgrade resulting in a \$2 million savings to City residents over 20 years. The City was one of the first four communities in New England and 70 communities in the U.S. to achieve GASB 34 compliance.



A GIS database linked to the asset management system manages mapping.