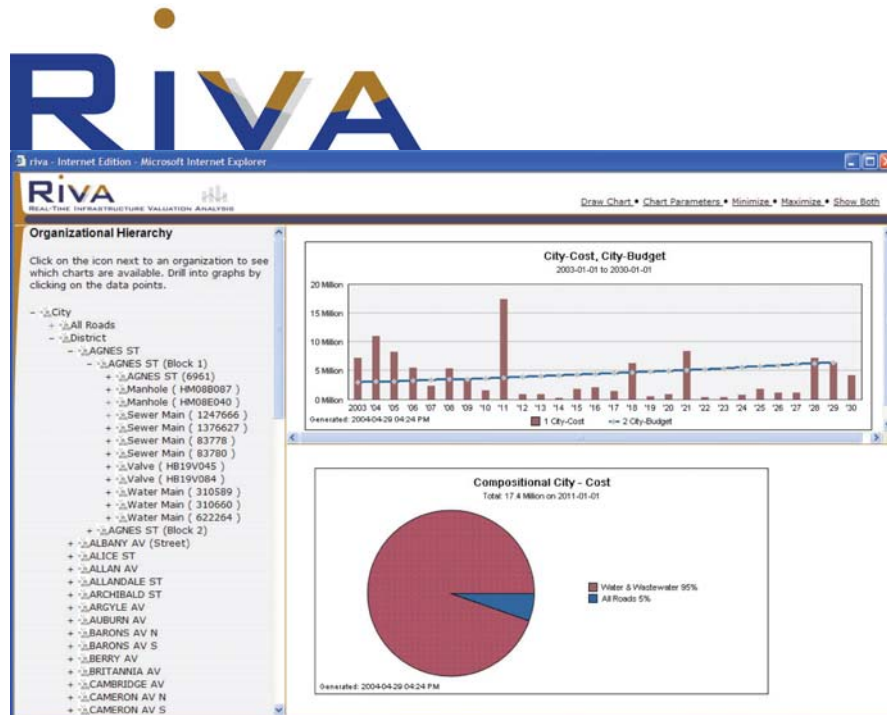


Implementation of a Water Distribution Asset Management Program using RIVA Software



The City of North Vancouver is implementing a comprehensive asset management program for its water distribution system. The key aims of this program are to assess the current condition of the City's distribution system and to predict future conditions to enable replacement before pipe failure. The City is implementing "RIVA" asset management software to develop a long-range asset management plan and manage this large volume of asset related information.

Earth Tech was retained to facilitate the implementation of RIVA, including the following activities:

- Identified a range of condition assessment rating systems from best practices such as InfraGuide and AwwaRF and recommended a system for incorporation into Riva;
- Developed a condition assessment program for utilization in Riva, including identification of data requirements for each asset such as soil type, structural condition and hydraulic capacity. Developed proxies and deterioration curves to be used in Riva to develop reports for the City's asset management program and synchronize with actual condition data as it becomes available; and
- Undertook a preliminary assessment of the City's water distribution system replacement requirements based on existing condition data and an assessment of risk.

PROJECT DETAILS

CLIENT: City of North Vancouver
 LOCATION: British Columbia, Canada

REFERENCE INFORMATION

NAME: TONY BARBER
 TEL: 604-983-7338

PROBLEM

Infrastructure information is currently recorded in the City's GIS but analytical capabilities for sustained asset management such as water main renewal planning are limited.

CHALLENGES

The City of North Vancouver has limited information on the condition of its water mains and GIS data does not include location attributes for each water main.

SOLUTIONS

A water main condition assessment rating system for utilization in Riva.

A preliminary assessment of the City's water distribution system replacement requirements based on existing condition data and an assessment of risk.

BENEFITS

Able to manage the large amount of asset related information.

Develop a well rationalized program for the life cycle management of all the City's capital assets.

Identify problems before failure and thereby reduce the volume of relatively expensive non-programmed work.