

Computers in Public Works

Computers are a valuable tool. In many instances public works departments could benefit from using computers to save time and keep accurate records. This article gives the reader suggestions for how managers can expand their computer usage.

The UNH T² Center recently used the electronic mailing list T2.NHROADS to ask public works departments how they use computers. An electronic mailing list is a computer program that automatically sends a computer message to all members of the list.

Public works officials use computers for a variety of tasks. They are using specialized programs, such as Road Surface Management System (RSMS), Municipal Equipment Management System (MEMS), and, Sign Inventory Management System (SIMS). They are creating spreadsheets to fit their needs. There is a growing use of email, Geographic Information System (GIS), and word processing.

John Severance, Whitefield Public Works Coordinator, uses computers for a variety of operations. He uses spreadsheets to track work efforts, such as time spent on various tasks and sand, salt, and gravel usage. With the water department, he knows, by using spreadsheets, the monthly and annual water usage for each of the town's four wells. Spreadsheets also provide hydrant, culvert, and sewer manhole flushing routes and maintenance records.

John uses Internet and email services as reference tools and for correspondence. This doesn't tie him down to normal work hours; he can conduct research and answer his correspondence any time.

John uses AutoCAD for sewer, road, and water projects. If the town warrant article is passed, he intends to implement GIS this spring.

Word-processing enables John to create attractive grant proposals and letters. He also writes a public works newsletter using a word-processing program, and uses the same word-processing program to do his billing.

Lee Murray, the Road Agent in New Boston and President of the New Hampshire Road Agent's Association finds many uses for spread-

sheets. Lee uses spreadsheets to keep track of his personnel records. According to Lee, the people in the "town office love it, and wish all the other departments would use spreadsheets too." Lee sends a weekly package to the town office that contains of a payroll sheet, a budget form, equipment, and accounts payable.

Lee uses the spreadsheet to determine the weekly payroll. He has a variety of formulas programmed into the spreadsheet, which compute hours, wages, and overtime pay. He has a form he calls the Budget Form that tells the people in the town office which budget to apply expenses to. His equipment worksheet is for hired-out equipment; it tracks the equipment, the rates of hire, and the hours work. Lastly, Lee has created an accounts payable sheet, which indicates what suppliers to pay and reiterates the information from the equipment worksheet. The bundle of worksheets creates a system of checks and balances which enable Lee to know where he is in his budget year at all times. Lee also uses spreadsheets to keep track of employees sick and vacation time.

Lee has an old laptop computer for "on the road" RSMS surveys. He uses the laptop with a distance-measuring instrument, which works off the odometer, to get accurate road lengths.

Ed Mattson, the Fitzwilliam Road Agent, also uses spreadsheets to document time and overtime. He says that he can adapt almost any need to a spreadsheet. He uses spreadsheets in conjunction with his RSMS data, which he exports into a spreadsheet. He does this to incorporate his culverts and drainage and brush cutting into his 10-year plan.

Ed uses word processing programs to create letters, memos and reports. He says, "a nice computer and printer will make you look more professional in your job."

For more information on computers in public works, contact the UNH T² Center. To join the mailing list, see page 11 of this newsletter.