

I HISTORICAL PERSPECTIVE

Prior to 1982 the City of Cambridge made extensive use of outside service bureaus to satisfy their data processing needs.

These organizations were responsible for the servicing of all of the major financial applications such as General Ledger, Accounts Payable, Budgeting, Payroll, Water & Sewer and Tax Receivables.

In addition, a number of City departments acquired computer systems on their own to satisfy needs that were particular to their operations. The City Hospital, Public Library, School and Police Departments, as well as Rent Control and Traffic & Parking all had systems in place by 1982.

A majority of the City's departments maintained their records on manual systems.

II PRESENT (1982-1985)

During the fall of 1981 and the winter of 1982 the City issued an RFP for computer hardware, reviewed the responses and selected a computer system and software to handle many of the functions which were in the hands of outside service bureaus.

In July 1982, with its new computer hardware and software systems installed, the City began a new era of data processing self sufficiency. Budgets and purchase orders were now under the control of a system which reported information almost immediately, while the control of expenditures was regulated by the appropriate departments.

By the middle of 1983 the following departments were able to access on a restricted basis, certain accounting information deemed necessary for their purposes:

- City Hospital
- Police Department
- School Department
- Public Works Department
- Community Development
- Human Services
- Auditing
- Traffic & Parking
- Budgeting
- Revenue and Treasurer/Collector
- Purchasing

Other software applications followed the successful implementation of the accounting system. A receivable system for delinquent personal property and real estate taxes was developed and installed in the late fall of 1983 and winter of 1984.

A motor vehicle excise tax system was introduced in the fall of 1984 which included a successful conversion from the service bureau of prior year records.

In the winter of 1985 a personnel data analysis was completed which will be used by the Budget Department in preparing the standard personnel analysis forms beginning with the next budget year.

The introduction of word processing was deemed necessary if many of the City departments were to keep pace with the information explosion that was taking place. A system was introduced in the winter of 1985 which provided the resource sharing by a large number of users.

The following users are making use of this system and are able to share files when needed:

- Executive and Budget Departments
- Mayor and City Council Offices
- Personnel Department
- Office of the City Solicitor
- Composing
- Office of the Finance Director

The following departments have also been identified as users. Staff members have recently completed their training and their equipment will be installed in their departments this month.

- Cambridge City Hall
- Human Services
- Purchasing
- Public Works

In the spring of 1985 personal computers were introduced at City Hall. A number of departments will soon be addressing ways in which this tool will make them more productive.

The fall of 1985 is the time identified for the introduction of a comprehensive monitoring and record keeping system for the Inspectional Services Department.

A system which will satisfy the informational and reporting needs of the Assessing Department is expected to be in place during the winter of 1985.

III FUTURE APPLICATION

There are a number of applications which are still to be addressed, many of which are currently being handled by outside vendors.

Some of these applications include:

- Water & Sewer
- Payroll & Personnel
- Real Estate & Personal Property billing and receivables
- Cashier's
- Fire Department incident reporting
- Police Detail billing & receivable
- Personal Property revaluation
- Retirement
- Health Department hazardous waste monitoring

In order to manage and respond to the City's rapidly growing data processing needs, the City of Cambridge has hired its first Director of Data Processing. An inventory and assessment of the City's needs are being performed in order to ensure careful planning for the future. Priorities for systems development in the City are being reviewed and will be assigned in the near future.

IV SYSTEMS INTEGRATION & COMMUNICATIONS

One of the most important aspects in the progress made to date is in the area of systems integration. The ability to maintain compatibility between applications as new needs are addressed and new computer hardware is made available requires careful planning.

Thus far we have been successful in identifying our priorities and as a result many of our new users will be able to move between applications without great difficulty.

The ability to share and transfer data is a necessity. We have taken the necessary steps to ensure that this will be possible whenever a new user or application has been added.

The use of telephone and dedicated communications lines, as well as magnetic media (ie. computer tapes and disketts) ensure the continual flow of necessary information between the various City departments.

As the need to use the computer system in the City grows, so does the importance of careful planning to ensure compatibility between applications. Therefore, the issue of system integration will continue to be the focal point in the City's plans to expand its use of computer technology.

The decentralized control of recent years is in the process of centralization under the new Data Processing Director. As such, I have issued a directive that no additional hardware be purchased by any City department unless first approved by the Data Processing Director. This centralized coordination of data processing will lead to the continued development of automated systems that not only interact with each other, but are cost effective.

VALERIE A. ROMAN

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Education

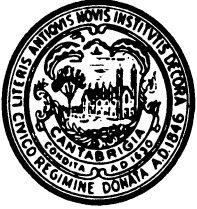
- 1974-1978 Wellesley College Wellesley, Ma.
1978 B.A. in Math and Economics, summa cum laude
Phi Beta Kappa, Durant Scholar, Wellesley Scholar
- Summer 1977 University of New Hampshire Durham, NH
Extensive work with PASCAL and FORTRAN on DEC mainframe
computer
- 1976-1977 Bowdoin College Brunswick, Me.
Twelve College Exchange - Junior Year
Dean's List both semesters, delivered mathematical
lectures biweekly
- 1970-1974 Somersworth High School Somersworth, NH
Valedictorian
Proficiency keys in Math and English
Debate team president, DAR award

Work Experience

- 1978-Present U.S. Dept. of Commerce Washington, D.C.
Chief of Systems Conversion Department, Bureau of the
Census. Three U.S. Department of Commerce Superior
Performance Awards. Major responsibilities include
provision of consultation services regarding structured
systems analysis and design, technical ADP issues and
the need for and development of software systems; project
management, hiring and personnel management and budget
analysis/fiscal planning, in addition to serving as the
liaison between ADP personnel and the user community.
Extensive experience in top management of statistical
applications and systems programming using ANSI FORTRAN,
COBOL, Assembler, MAPPER, and DBMS on Sperry 1100 series
mainframes and minicomputers, IBM 4331, IBM PC's, Sperry
9300, IBM 3800, and Nixdorf 480. Other areas of expertise
include the use of Sperry OS1100, IBM DOS, development of
new software, modification of previously written software
and production management and maintenance. Additional
knowledge and experience in UNIX, Data Structures,
Microcomputers and various related software packages,
LAN's and ALGOL. Projects have included complete staffing
and management of a computer system consulting department,
college recruiting, top management and major programming
role in the development of software to process respondent
data for use in the next revision of the Consumer Price
Index, statistical and programming research for the Dept.
of Labor concerning complex weighting procedures,
development and enforcement of documentation, programming
and quality assurance standards, and coordination and
automation of accurate and timely transmission and
processing of data from 13 U.S. Census Bureau Processing
Centers.

References

Available upon request



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EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

December 30, 1985

To the Honorable, the City Council:

With respect to Awaiting Report Item No. 14, I submit the attached report from James Maloney, Assistant City Manager for Fiscal Affairs. This report outlines the departments that are currently benefitting from the implementation of data and word processing and explains the integration of these systems.

I have also attached the resume of the City's new Director of Data Processing, Valerie Roman, who brings an extensive background in the implementation of data processing systems to this new position. Currently, Ms. Roman is conducting an inventory and assessment of the City's data processing needs to ensure cost-effective planning for the future.

Very truly yours,

Robert W. Healy
City Manager

Agenda Item No. 3-909

Re: response to Awaiting Report Item No.
14 on departments utilizing data & word
processing & the interaction of these sys-
tems.

In City Council,

December 30, 1985

12/30/85

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