Centralized Data Processing; The View from 1957

By 1957 there were fears that government had grown too unwieldy and inefficient. There was no way to project revenue, track expenses, or even understand the basis of department appropriations. There were over a hundred independent departments, boards, and commissions whose missions and productivity were unknown. While the governor had to sign all personnel changes for each employee, no one knew precisely how many employees there were or how many positions were vacant.

Act 283 of 1957 appropriated $35,000 to fund a commission to study state government. The act was modeled after similar efforts in other states, collectively known as "Little Hoover Commissions" after a study of the federal government headed by former President Herbert Hoover. The Vermont commission was headed by Deane C. Davis of National Life.

While not specifically enumerated among the commission’s statutory charges, support for a central processing unit to address common fiscal, personnel, inventory control, and statistical analysis activities across state government quickly emerged. In its final report the commission noted, "Data processing is partly here. Central data processing is on its way in Vermont. A central service is more economical than that conducted by many separate installations. Several states are now engaged in a painful process whereby each is converting separate services into a consolidated, centralized service." 1

Several commissioners had experience with "mechanical" processing, including Deane Davis whose National Life Company used punch card data machines. It was also in 1957 that Tom Watson, Jr., brought IBM to Essex. IBM served as a consultant to the commission.

Eight state departments already used various data processing (punch card) machines. Agriculture used IBM equipment for accounting and statistical analysis. Motor Vehicles used IBM punch cards to track car accidents. The Unemployment Compensation Commission (the most mechanized program in the state government) used IBM’s system for benefit determinations, statistical studies, employer history and rating, wage earning records and other controls. The Department of Health used punch cards to track vital statistics and to monitor public nursing programs. Vermont Life was using punch cards to track subscribers. Forests and Parks, Tax, and Fish and Game utilized Agriculture’s equipment to track costs and for statistical analysis. In addition, the Highway Department was starting to use data processing to prepare payrolls and track labor costs. 2

The commission looked across the Connecticut River to view the problems of letting each department generate its own processing system. Rolf Haugen of the University of Vermont political science department and a consultant to the commission was dispatched to Concord to investigate the governor of New Hampshire’s warning that his state had gone too far in using IBM machines. Haugen reported that "what he meant by going too far was that too many departments had individual installations, and they were not using them economically." Consequently New Hampshire’s "Department of Administration and Control doesn’t have the information it needs" and was looking to consolidate data processing. 3

The uses of mechanical data processing met the commission’s mission of enhancing government efficiency. The commission and the IBM consultants thought government should be viewed at a functional, rather than structural, level. Once core functions were identified government could be restructured so that agencies and departments were organized along functional lines. Thus all revenue functions would be centralized under an agency of revenue, including tax and

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3 Commission to Study State Government, Minutes, August 8, 1957, page 16, State Archives Record Series A-088, Box 1, Folder 14.
other departments. An agency of finance would oversee the fiscal affairs of the state through centralized accounting. An agency of personnel would provide a centralized program governing state employees. Beneath these agencies would be departments, also grouped by function, such as departments of regulation; labor; conservation and agriculture; and public safety.

Centralized mechanical data processing would draw information from the departments to the agencies in order to give the governor and legislature a global view of key functions and facilitate budgeting and administration.

The commission was clear, however, that the efficiencies of mechanical processing could not be achieved simply by buying the technology. Deane Davis, again drawing from his experience in the insurance industry, noted that, "The bigger the operation, the more economy there is involved in using electronic machinery. The larger insurance companies have already gotten machines. We [National Life] have been planning on ours for five years. We have three men spending full time planning for what will be three years hence. In the state…is the long range planning function adequately provided for?"

Later Davis returned to his concern for the need to plan. "I feel that this development of electronics, if we could expedite a practical system for planning for it [sic]. You can’t just decide you want one. You have got to start way back, getting punch cards lined up so they are useful. We [National Life] had lots of things that had to be done over. It is a long term proposition. The quicker we get started on centralization, the better. It is a field where you are lost without proper advice and preparation." 

Against this caution he also painted the promise of centralized processing. "Suppose ten years hence we had centralized accounting, and had electronic computation and recordation equipment, the amount of information that would be available would be a great help toward business management of the administrative branch of state government…If you are going to have real management, the electronic thing would be undoubtedly in the cards for the state." 

In 1959, by Act 328, the legislature adopted many of the recommendations of the Little Hoover Commission through the creation of a department of administration, which included the authority to establish and maintain central data processing facilities. The ideals of centralized computing, and Deane Davis’ caution that its success depended on effective long range planning, however, have not been consistently addressed. Consequently those issues often re-emerged in subsequent studies. The vision of information technologies creating government efficiency is not new; nor is the need to plan in order to truly achieve those efficiencies.

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4 Ibid.
5 Ibid, page 35.
6 Ibid.

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In response to November’s column on Wells Goodwin and the Memory of War, a reader wrote in to say that the last Mexican War veteran living in Vermont was John Goodwin, Wells Goodwin’s son. John Merrill Goodwin was born in Ryegate on 17 July 1820 and died in Newbury on 8 September 1910. The information was drawn from Goodwin Genealogy, History Of Ryegate, Vermont, Miller & Wells.