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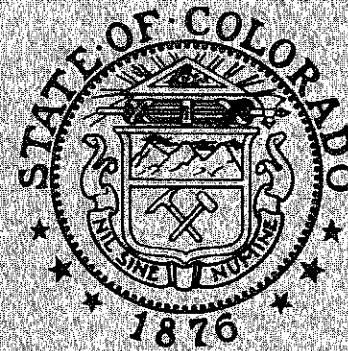
Follow-up

ADP Report

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Performance Evaluation On The Department Of Highways Data Processing Activities

DEPARTMENT OF ADMINISTRATION

Prepared by :

State ADP Plans & Coordination Section

January 1975

STATE OF COLORADO
DEPARTMENT OF ADMINISTRATION
DIVISION OF AUTOMATED DATA PROCESSING
ADP FOLLOW-UP REPORT
OF
THE DEPARTMENT OF HIGHWAYS
January, 1975

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DEPARTMENT OF HIGHWAYS

Follow-up to ADP Performance Evaluation Report - Nov. 1974

BACKGROUND

An ADP Performance Evaluation of the Department of Highways was conducted by the Division of ADP during September and October 1973 and a report issued in November 1973. On July 24, 1974 the Department of Highways was requested to review the report and provide written comments regarding the Division of ADP findings, conclusions and recommendations. Their response is attached to this document. Follow-up visits to the Department of Highways were made during the period of December 13 to 20, 1974.

OBJECTIVES

The objectives of this follow-up review are:

- Review and evaluate the actions taken by the Department of Highways to meet deficiencies identified by the performance evaluation study.
- Verify that the recommendations which were reported as having been implemented were in fact implemented and the results achieved.
- Determine the status of the recommendations which were reported as being in process of implementation.
- Verify reasons that recommendations were rejected.
- Provide the Division of ADP and the evaluation team with information regarding the feasibility of specific recommendations in order to aid in improving future evaluations.
- Make additional recommendations as appropriate based on the latest conditions.

- Prepare a written follow-up report in order to provide the evaluated agency and the Division of ADP management with a status report.

PROCEDURE

The Department of Highways written comments were reviewed with appropriate ADP systems users and with the ADP management and staff of the Department of Highways.

FINDINGS

The Department of Highways indicated that eight recommendations had been implemented, two recommendations were in process of implementation, one was being delayed because of budget restrictions and one rejected as not feasible. (See Attachment 'A')

In reviewing the eight recommendations which were shown as implemented it was found that four (numbers 5, 6, 7, and 9) had been fully and successfully implemented. The remaining four (numbers 1, 2, 3, and 10) were only partially implemented. The current status of the recommendations is as follows:

Recommendation #1

"ESTABLISH A DEPARTMENTAL ADP PLANNING COMMITTEE TO INCLUDE THE EXECUTIVE DIRECTOR, DIVISION DIRECTORS AND THE MANAGER OF ADP"

An ADP Policy committee consisting of the Executive Director and Division directors was established. Also, an ADP Steering Committee was established which includes two of the division directors, the Manager of Management systems and other key users. The Steering committee

received a general description of its duties and purpose when it was formed. No formal specific charter has been adopted as yet. The committee has met twice since its inception in July 1974. The initial assignment has dealt with reviewing current systems.

The committee received a report in June 1974 regarding a proposed Colorado Highway Records Inventory System (CHRIS). Funding decisions for this system yet to be made by DOH will lead to implementation.

Recommendation #2

"DEVELOP COOPERATIVE, COMPREHENSIVE AND CONTINUOUS ADP PLANS WITH THE DADP AS PER ARTICLE 26, CRS 1963 AND IMPLEMENT THE APPROVED ADP PLAN"

An overall ADP plan has been developed by the Department of Highways and provided to the Division of ADP.

There was a lack of specific detailed plans (Project-Life Cycle functions e.g., Initiation, check points, milestones, completion dates, specific outputs, projected costs, etc.) for projects currently underway or proposed. For instance the Department is currently converting accounting programs from the IBM 407 tab machine to the IBM 370-145 computer without detailed plans to accomplish the conversion. Also there is no formal plan to phase the converted systems into an overall administrative data base as proposed in the Highways plan included in the State ADP Master Plan. No firm schedule for the conversion had been established, however, was tentatively to be completed by June 1975.

The Department plans to equip their District Offices with IBM 3741 Programmable Work Station terminals. The first one is to be installed

on July 1, 1975 on a pilot basis. There are considerable general ideas for the use of these terminals. Specific coordinated planning to assure maximum economical use is now in progress.

Recommendation #3

"CHANNEL AND MONITOR ALL ADP ACTIVITIES THROUGH THE MANAGER OF ADP"

The Manager of ADP operations, the Supervisor of the Administrative Systems and the Supervisor of the Engineering Systems report to the Manager of Management Systems. As previously stated the Manager of Management systems is a member of the ADP Steering committee. This provides the mechanisms to channel and monitor all ADP activities. However, during the course of the review it was determined that further improvement is necessary. As the committee gets further into its activities this should help bring about the necessary control and coordination. It appears that greater coordination between the administrative and engineering systems areas is needed. Systems that have administrative elements are being developed with some of the engineering applications.

Recommendation #4

"ESTABLISH A MANAGER OF ADP SERVICE CENTER I, AND AS SOON AS THE APPROVED ADP PLAN IS AUTHORIZED, FILL THIS POSITION"

Currently the Manager of Management Systems has the responsibility for the Departments ADP activities. Due to other responsibilities he is able to devote only approximately one third of his time to ADP. In view of the need for more detailed planning and coordination, this appears to be inadequate.

Recommendation #5

"CONSIDER THE VALUE OF TRANSFERRING AND/OR CREATING ADP POSITIONS IN THE DOH SECTION"

Has been implemented. However, it is the opinion of the Evaluation Team, that the resystematization of DOH administrative applications on the DADP computer for establishing DOH administrative data base files has not as yet been initiated. Moreover, with the exception of very little conversion of IBM 407 applications, the 5 ADP FTE's which were transferred to the DOH ADP section from the Division of ADP, are for the most part maintenance oriented, and thus, not in our opinion being utilized by DOH as planned.

Recommendation #6

"RECLASSIFY AND JUSTLY COMPENSATE THE DOH INDIVIDUALS PERFORMING ADP DUTIES AND FUNCTIONS UNDER OTHER THAN ADP CLASSIFICATIONS"

This recommendation was implemented by reclassifying five engineering positions to ADP positions.

Recommendation #7

"ALLOW THE IBM 2780 HRJE TERMINAL AND ANY OTHER ADP PRODUCTS, SERVICES AND EQUIPMENT TO BE UTILIZED TO THE MAXIMUM POTENTIAL"

This recommendation was implemented by the Division of ADP allowing full use of the terminal for program compiles etc.

Recommendation #8

"UPGRADE AND KEEP CURRENT ALL ADP DOCUMENTATION"

This recommendation is in process of implementation.

Recommendation #9

"REDUCE 100% KEY VERIFICATION IN NON-CRITICAL AREAS"

By implementing this recommendation the DOH has been able to reduce their keypunch section by one position and improve turnaround time.

Recommendation #10

"ESTABLISH PROCEDURES WHICH WILL BACKUP THE DOH ENGINEERING SYSTEM, PROGRAMS AND DATA FILES ON A REGULAR BASIS OFF-SITE"

It was determined that there is no complete off-site backup for the Department of Highways files at the University of Colorado Computer Center.

Recommendation #11

"DEVELOP ADP STANDARDS DOCUMENTATION FOR THE SYSTEMS, PROGRAMMING AND OPERATORS ACTIVITIES"

This recommendation is in process of implementation. The Systems Assurance Standards included as guidelines in the Colorado ADP Management Manual were suggested for DOH consideration.

Recommendation #12

"UTILIZE THE MANAGEMENT ANALYST SERVICES PROVIDED BY FEDERAL HIGHWAY ADMINISTRATION (FHWA) TO THE DOH, TO HELP DETERMINE ADDITIONAL MANAGEMENT INFORMATION NEEDS"

This is the one recommendation which was rejected. It was pointed out by the DOH that although these services were theoretically available they are in fact practically impossible to obtain.

CONCLUSIONS

Although the DOH has taken a number of steps to improve their management and effective use of ADP resources there is still a need for considerable improvement. A stronger commitment by top management to good planning and coordination in the ADP area is desirable.

The greatest need at this time appears to be to appoint a full time ADP manager in order to provide the necessary push to effectively make ADP serve the total Departments needs in the most economical manner.

RECOMMENDATIONS

1. Assign a full time ADP manager for the department, preferably in a Manager of ADP Service Center Position.
2. Develop a written charter for the Steering committee and meet more often (at least once a month) during the early phases of getting control and coordination.
3. Document a detailed plan and schedule for the conversion of the systems from the IBM 407 to the IBM 370/145 computer.
4. Coordinate immediately the administrative systems development which is now occurring by both the Administrative Systems and the Engineering Systems sections.
5. Make decisions regarding the proposed CHRIS system and plan implementation if the decision is to go with the proposal.
6. Develop detailed plans regarding the proposed use of the IBM 3741 terminals at the District Offices.

7. The Highway Department should determine what, if any, files located at the University of Colorado computer center should be stored off-site in order to provide for recovery in case of disaster. A written request should be made by the Highway Department to the University of Colorado to provide any needed off-site storage.

STATE DEPARTMENT OF HIGHWAYS

CHAS. E. SHUMATE

EXECUTIVE DIRECTOR

DIVISION OF HIGHWAYS
E N HAASE
CHIEF ENGINEER

STATE OF COLORADO



COLORADO STATE PATROL
COL C WAYNE KEITH
CHIEF

4201 EAST ARKANSAS AVENUE • DENVER, COLORADO 80222 • (303) 757-9011

August 8, 1974

Mr. Wilbur M. Richardson
Director of Data Processing
Department of Administration
1000 Social Services Building
Denver, Colorado 80203

Dear Mr. Richardson:

We have reviewed the ADP Performance Evaluation of the Department of Highways and have implemented, or are in the process of implementing, all recommendations.

These recommendations have been of benefit to the Department and we welcome your re-evaluation when appropriate.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'Chas. E. Shumate', written over a horizontal line.

CHAS. E. SHUMATE
Executive Director

CES/as

Comment #1

An ADP Planning Committee has been established consisting of Executive Director, Chief Engineer, Chief of Patrol, and Highway Safety Coordinator.

An ADP Steering Committee has been organized consisting of Assistant Chief Engineer Operations as head, Manager of Management Systems as secretary, and key division heads as members. The objectives and composition of the committee have been developed and sent to the Planning Committee for approval.

Comment #2

Manager of Management Systems still functioning in this position. Budget restrictions and reorganization have delayed implementation of this recommendation.

Comment #3

It will take us about a year to get all documentation up-graded. The University of Colorado is helping us in this area with 3 1/2 FTE.

Comment #4

This is a long term process and is under a planned work program. Expect completion in fiscal year 75-76.

Comment #5

These people are in constant demand and hard to reach for help. Assistance has been requested, but deferred indefinitely. We do work with the Federal Highway Administration, American Association of State Highway and Transportation Officials, Highway Engineer Exchange Program, Highway Research Board, and the Department of Transportation on the national level for the advancement of the state of the art.

DEPARTMENT OF HIGHWAYS

Recommendation	See Comments	Imple- mented	In Process	In Fiscal Year	Deferred	Rejected
1. Establish a departmental ADP planning committee, to include the executive director, division director and the manager of ADP.	X 1	X				
2. Develop cooperative, comprehensive and continuous ADP plans with the DADP as per CRS Article 26, 1963, and implement the <u>approved ADP plan</u> .		X				
3. Channel and monitor all ADP activities through the Manager of ADP.		X				
4. Establish a Manager of ADP Service Center I, and as soon as the <u>approved ADP plan</u> is authorized, fill this position.	X 2			75-76		
5. Consider the value of transferring and/or creating ADP positions in the DOH ADP Section.		X				
6. Re-classify and justly compensate the DOH individuals performing ADP duties and functions under other than ADP classifications.		X				
7. Allow the IBM-2780 HRJE terminal and any other ADP products, services and equipment to be utilized to the maximum potential.		X				
8. Upgrade and keep current all ADP documentation.	X 3		X			
9. Reduce 100% key verification in non-critical areas.		X				
...Continued						

Recommendation	See Comments	Imple- mented	In Process	In Fiscal Year	Deferred	Rejected
10. Establish procedures which will backup the DOH engineering systems programs and data files on a regular basis off-site.		X				
11. Develop ADP standards documentation for the systems, programming and operations activities.	X 4		X			
12. Utilize the Management Analyst services provided by Federal Highway Administration (FHWA) to the DOH, to help determine additional management information needs.	5					X