

MANAGEMENT INFORMATION SYSTEMS

MUNICIPALITY OF ANCHORAGE
MANAGEMENT INFORMATION SYSTEMS CAPITAL PROGRAM
Department: Management Information Systems

Department Goal:

The goal of the 1990-1995 CIP for the Management Information Systems Department is to continue to provide cost effective quality computer processing and telecommunications services to the Municipality while at the same time reducing costs by the consolidation of application systems onto a single mainframe computer.

Program Statement:

This goal can be accomplished through the upgrade of the IBM mainframe, migration from the Data General systems and the procurement and implementation of various new software packages. The backup computer facility will be included in the Municipality of Anchorage's legislative request package. All other projects costs (totaling \$1,806,000 for 1990) will be funded via a commercial loan to Management Information Systems, which will be repaid through realized savings and allocations to other departments.

MUNICIPALITY OF ANCHORAGE
 AUTOMATED CAPITAL IMPROVEMENT SYSTEM
 DEPARTMENTAL PRIORITY

9/12/89
 Page 1

Pri #	Proj ID	TITLE	MIS Category	Proj Cost	G O	F G	S G	H L	F B	S A	I N	O T	Cum
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Budget Year: 90

1	1043	MAINFRAME UPGRADES	Computer Upgrades/Purchases	787	:	:	:	:	:	:	:	:X	787
2	1020	ENTERPRISE: PC DEVELOPMENT PRODUCT	Computer Upgrades/Purchases	75	:	:	:	:	:	:	:	:X	862
3	1021	CULLINET ENTERPRISE MAINFRAME PRODUCTS	Computer Upgrades/Purchases	236	:	:	:	:	:	:	:	:X	1098
4	1026	DOCUMENTATION SOFTWARE	Computer Upgrades/Purchases	15	:	:	:	:	:	:	:	:X	1113
5	1004	PLOTTER SUPPORT	Computer Upgrades/Purchases	13	:	:	:	:	:	:	:	:X	1126
6	1006	INFORMATION CRT UPGRADES	Computer Upgrades/Purchases	47	:	:	:	:	:	:	:	:X	1173
7	1007	PROGRAMMER WORK STATIONS	Computer Upgrades/Purchases	152	:	:	:	:	:	:	:	:X	1325
8	1033	ADVANCED FUNCTION PRINTING ENHANCEMENT	Computer Upgrades/Purchases	18	:	:	:	:	:	:	:	:X	1343
9	1038	INSTALL RACF SECURITY PRODUCT	Computer Upgrades/Purchases	66	:	:	:	:	:	:	:	:X	1409
10	1029	INSTALL ISPF/PDF V3	Computer Upgrades/Purchases	76	:	:	:	:	:	:	:	:X	1485
11	1028	INFO/MANAGEMENT VERSION 4	Computer Upgrades/Purchases	61	:	:	:	:	:	:	:	:X	1546
12	1008	BACKUP COMPUTER FACILITY	Computer Upgrades/Purchases	3000	:	:X	:	:	:	:	:	:	4546

Budget Year: 91

1	1027	PL/I COMPILER AND LIBRARY	Computer Upgrades/Purchases	40	:	:	:	:	:	:	:	:X	40
2	1031	VS COBOL II COMPILER AND LIBRARY	Computer Upgrades/Purchases	63	:	:	:	:	:	:	:	:X	103
3	1032	INSTALL VSAM RECOVERY SOFTWARE	Computer Upgrades/Purchases	30	:	:	:	:	:	:	:	:X	133
4	1034	INSTALL OFFICE/VISIONS	Computer Upgrades/Purchases	102	:	:	:	:	:	:	:	:X	235
5	1035	INSTALL "C" COMPILER	Computer Upgrades/Purchases	42	:	:	:	:	:	:	:	:X	277
6	1036	PURCHASE IBM SOFTWARE	Computer Upgrades/Purchases	975	:	:	:	:	:	:	:	:X	1252
7	1037	SCHEDULING SOFTWARE	Computer Upgrades/Purchases	87	:	:	:	:	:	:	:	:X	1339
8	1002	TERMINAL UPGRADES	Computer Upgrades/Purchases	480	:	:	:	:	:	:	:	:X	1819
9	1003	NETWORK UPGRADES	Computer Upgrades/Purchases	380	:	:	:	:	:	:	:	:X	2199
10	1005	PRINTER UPGRADES	Computer Upgrades/Purchases	201	:	:	:	:	:	:	:	:X	2400
11	1045	OPERATIONAL INTERFACES	Computer Upgrades/Purchases	50	:	:	:	:	:	:	:	:X	2450
12	1030	CICS/ESA SOFTWARE	Computer Upgrades/Purchases	199	:	:	:	:	:	:	:	:X	2649

Budget Year: 92

1	1023	CULLINET ENTERPRISE DEC-VAX PRODUCTS	Computer Upgrades/Purchases	180	:	:	:	:	:	:	:	:X	180
2	1048	DCRIS PHASE I REPLACEMENT	Computer Upgrades/Purchases	400	:	:	:	:	:	:	:	:X	580

MUNICIPALITY OF ANCHORAGE
1990 CAPITAL IMPROVEMENT BUDGET

Department	Project Category				Fund Code	
MANAGEMENT INFORMATION SYSTEMS	COMPUTER UPGRADES/PURCHASES				0608	
PROJECT TITLE AND DESCRIPTION	1990 PROJECT COST		COSTS IN THOUSANDS OF DOLLARS			
	S-State F-Federal	O-Other B-Bonds	ESTIMATED START DATE	ESTIMATED COMPLETION DATE	O&M COST DEBT SERVICE	
COMMUNITY COUNCIL						
MAINFRAME UPGRADES Upgrade mainframe computer from 3090/170S to model 180S to accommodate increased application workload due to migration from other processors. It is forecasted that this project could potentially reduce as many as 40 ATU positions. (Note: if ATU is sold, this project will be deleted from the general government CIB.)	0-787		1/90	12/90	15.0 0.0	Areawide (A11)
ENTERPRISE: PC DEVELOPMENT PRODUCT To provide integrated environment for creating production applications on the personal computer.	0-75		1/90	6/90	1.2 0.0	Areawide (A11)
CULLINET ENTERPRISE MAINFRAME PRODUCTS Application design and development tools to build strategic business systems for mainframe environment.	0-236		1/90	3/90	40.0 0.0	Areawide (A11)
DOCUMENTATION SOFTWARE Acquire/install documentation software to provide automated checking and documentation of application systems, and cross referencing for improved quality control reliability, and repairability for production systems.	0-15		1/90	12/90	3.0 0.0	Areawide (A11)
PLOTTER SUPPORT Provide plotter support for A/S and other mainframe system to meet user service demands	0-13		1/90	12/90	0.0 0.0	Areawide (A11)
TOTAL PROJECT COSTS						1990

MUNICIPALITY OF ANCHORAGE
1990 CAPITAL IMPROVEMENT BUDGET

Department	Project Category	Fund Code			
MANAGEMENT INFORMATION SYSTEMS	COMPUTER UPGRADES/PURCHASES	0608			
PROJECT TITLE AND DESCRIPTION	1990 PROJECT COST <small>S-State F-Federal O-Other B-Bonds</small>	COSTS IN THOUSANDS OF DOLLARS			
		ESTIMATED START DATE	ESTIMATED COMPLETION DATE	O&M COST DEBT SERVICE	COMMUNITY COUNCIL
INFORMATION CENTER UPGRADES Improve the quality and scope of services available from our Information Center by acquisition of microcomputer equipment and processing capability so as to maintain compatibility with systems already installed in the client community for which we have training, troubleshooting and maintenance responsibility.	0-47	1/90	12/90	0.0 0.0	Areawide (All)
PROGRAMMER WORK STATIONS Provide personal computers, printers and related software for Application Services Staff.	0-152	1/90	12/90	0.0 0.0	Areawide (All)
ADVANCED FUNCTION PRINTING ENHANCEMENT Provide a controlled environment for creating AFP forms and overlays. Current method requires private libraries and cannot be integrated into the LMF system leading to production control problems. Provide ability to drive customer-acquired remote printers with custom fonts, paper selection, etc. Provide interface to AFP from POSTSCRIPT desktop publishing files.	0-18	1/90	12/90	0.0 0.0	Areawide (All)
INSTALL RACF SECURITY PRODUCT Install IBM RACF security product replacing two products: TOP SECRET and TLMS. This will allow us to take full advantage of new ESA software. Greatly simplify installation and	0-66	1/90	12/90	0.0 0.0	Areawide (All)
TOTAL PROJECT COSTS					1990

MUNICIPALITY OF ANCHORAGE
1990 CAPITAL IMPROVEMENT BUDGET

Department	Project Category				Fund Code	
MIS	COMPUTER UPGRADES/PURCHASES				0608	
PROJECT TITLE AND DESCRIPTION	1990 PROJECT COST		COSTS IN THOUSANDS OF DOLLARS			
	S-State F-Federal	D-Other B-Bonds	ESTIMATED START DATE	ESTIMATED COMPLETION DATE	O&M COST DEBT SERVICE	COMMUNITY COUNCIL
maintenance of operating system releases. Reduce the security administration overhead by eliminating requirement to define users to TSO.						
INSTALL ISPF/PDF V3 Install ISPF/PDF V3 to provide improved (SAA) dialog management such as drop-down menus. Improve library management facility (LMF) to provide complete source/jcl/parameter control and audit facility. Improve programmer facility.	0-76		1/90	12/90	0.0 0.0	Areawide (All)
INFO/MANAGEMENT VERSION 4 Install Info/Management Version 4 to replace version 3 which is withdrawn. This will provide improved user interface and our ability to customize the user interfaces. Will provide improved ability to interface the network monitor and the job scheduling/tracking software into the problem reporting/tracking function of Info/Management.	0-61		1/90	12/90	0.0 0.0	Areawide (All)
BACKUP COMPUTER FACILITY Grant will be utilized to incorporate a computer "hot-site" into the new municipal data center if it is deemed necessary to vacate the Hill Building.	S-3,000		1/90	12/90	0.0 0.0	Areawide (All)
TOTAL PROJECT COSTS	S-3,000 F-0	0-1,546 B-0			59.2 0.0	1990

MUNICIPALITY OF ANCHORAGE

1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department	Project Category				Fund Code	
MANAGEMENT INFORMATION SYSTEMS	COMPUTER UPGRADES/PURCHASES				0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS				S-State O-Other F-Federal B-Bonds	
	1990	1991	1992	1993	1994	1995
<p>MAINFRAME UPGRADES Upgrade mainframe computer from 3090/170S to model 180S to accommodate increased application workload due to migration from other processors. It is forecasted that this project could potentially reduce as many as 40 ATU positions. (Note: if ATU is sold, this project will be deleted from the general government CIP.)</p>	0-787					
<p>ENTERPRISE: PC DEVELOPMENT PRODUCT To provide an integrated environment for creating production applications on the personal computer.</p>	0-75					
<p>CULLINET ENTERPRISE MAINFRAME PRODUCTS Application design and development tools to build strategic business systems for mainframe environment.</p>	0-236					
<p>DOCUMENTATION SOFTWARE Acquire/install documentation software to provide automated checking and documentation of application systems, and cross referencing for improved quality control reliability, and repairability for production systems.</p>	0-15					
<p>PLOTTER SUPPORT Provide plotter support for A/S and other mainframe system to meet user service demands.</p>	0-13					
TOTALS				1990 - 1995		

MUNICIPALITY OF ANCHORAGE

1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department MANAGEMENT INFORMATION SYSTEMS	Project Category COMPUTER UPGRADES/PURCHASES				Fund Code 0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS					S-State O-Other F-Federal B-Bonds
	1990	1991	1992	1993	1994	1995
<p>INFORMATION CENTER UPGRADES Improve the quality and scope of services available from our Information Center by acquisition of microcomputer equipment and processing capability so as to maintain compatibility with systems already installed in the client community for which we have training, troubleshooting and maintenance responsibility.</p>	0-47					
<p>PROGRAMMER WORK STATIONS Provide personal computers, printers and related software for Application Services Staff.</p>	0-152					
<p>ADVANCED FUNCTION PRINTING ENHANCEMENT Provide a controlled environment for creating AFP forms and overlays. Current method requires private libraries and cannot be integrated into the LMF system leading to production control problems. Provide ability to drive customer-acquired remote printers with custom fonts, paper selection, etc. Provide interface to AFP from POSTSCRIPT desktop publishing files.</p>	0-18					
<p>INSTALL RACF SECURITY PRODUCT Install IBM RACF security product replacing two products: TOP SECRET and TLMS. This will allow us to take full advantage of new ESA software. Greatly simplify installation and maintenance of operating system releases.</p>	0-66					
TOTALS				1990 - 1995		

MUNICIPALITY OF ANCHORAGE

1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department MANAGEMENT INFORMATION SYSTEMS	Project Category COMPUTER UPGRADES/PURCHASES				Fund Code 0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS					S-State O-Other F-Federal B-Bonds
	1990	1991	1992	1993	1994	1995
<p>crease programmers productivity with new Lan- guage features and on-line debug.</p> <p>VS COBOL II COMPILER AND LIBRARY Install new version of COBOL. This will im- prove programmer productivity by simplifying CCS and IDMS coding, providing on-line debug- ging and many programming enhancements. Take advantage of new software and hardware, in- terface with new OFFICE/VISIONS software. This will also bring compiler up to current IBM SAA and AMSI COBOL standards.</p> <p>INSTALL VSAM RECOVERY SOFTWARE Provide ability to recover data from VSAM files and system catalogs. In particular, provide ability to recover OFFICE SUPPORT and Application Systems (A/S) files in case of system failure.</p> <p>INSTALL OFFICE/VISIONS New integrated SAA version of the OFFICE SUPPORT software. The user interface is greatly improved over current software and is consistent across all IBM platforms. Will eliminate requirements for multiple user id's for PC users. Allows windowing into other mainframe applications while working in OFFICE VISIONS.</p>		<p>0-63</p> <p>0-30</p> <p>0-102</p>				
TOTALS				1990 - 1995		

MUNICIPALITY OF ANCHORAGE

1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department MANAGEMENT INFORMATION SYSTEMS	Project Category COMPUTER UPGRADES/PURCHASES				Fund Code 0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS				S-State O-Other F-Federal B-Bonds	
	1990	1991	1992	1993	1994	1995
<p>INSTALL "C" COMPILER Install "C" compiler for systems software programming. Improve productivity of systems programming staff and reduce learning curve time for newer staff by eliminating need to learn the esoteric assembler language. "C" provides a highlevel language for systems work similar to COBOL or PLI, but usable for all systems code including internal systems exits, etc.</p>		0-42				
<p>PURCHASE IBM SOFTWARE Purchase IBM software that is currently being leased on a month-to-month basis. This would result in a substantial reduction in the annual operating budget.</p>		0-975				
<p>SCHEDULING SOFTWARE Acquire/install automated computer operations scheduling software to increase level of automation in datacenter operations, decrease manual intervention required, improve reliability of batch processing, and provide workload forecasts and current schedule reports.</p>		0-87				
<p>TERMINAL UPGRADES Replace antiquated/obsolete terminals with full-function terminals. Enable MIS to meet user demands for color/graphics terminals. Enable effective use of new MIS tools such as A/S project management.</p>		0-480				
TOTALS				1990 - 1995		

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1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department MANAGEMENT INFORMATION SYSTEMS	Project Category COMPUTER UPGRADES/PURCHASES				Fund Code 0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS					S-State O-Other F-Federal B-Bonds
	1990	1991	1992	1993	1994	1995
<p>NETWORK UPGRADES Replace network terminal control units with new technology units. Enable integration of multiple networks into unified network with central control and monitoring. Enable attachment of ASCII terminals to IBM network. Enable attachment of advanced function terminals into network. Provide diagnostic and microcode loading from central location.</p>		0-380				
<p>PRINTER UPGRADES Replace antiquated printers on network with graphics-capable printers. Reduce maintenance, simplify network control, expand functionality available to users.</p>		0-201				
<p>OPERATIONAL INTERFACES Interactive interfaces between central office switches, 611 (LRS 10), four wire test (RATS) and the DCRIS software systems (hardware only). It is forecasted that this project could potentially reduce several ATU positions. (Note: if ATU is sold, this project will be deleted from the general government CIP.)</p>		0-50				
<p>CSS/ESA SOFTWARE Install CICS/ESA Version 3. Enhances CICS capabilities by removing limits on growth of users, terminals, and applications. Provides improved response time by utilizing features of new system software and upgraded processor</p>		0-199				
TOTALS				1990 - 1995		

MUNICIPALITY OF ANCHORAGE

1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department MANAGEMENT INFORMATION SYSTEMS	Project Category COMPUTER UPGRADES/PURCHASES				Fund Code 0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS				S-State O-Other F-Federal B-Bonds	
	1990	1991	1992	1993	1994	1995
<p>storage. Increased application, security and systems capabilities.</p> <p>CULLINET ENTERPRISE DEC-VAX PRODUCTS Software engineering tool for implementing production applications for the DEC-VAX environment.</p> <p>DCRIS PHASE I REPLACEMENT Acquisition of new system to replace DCRIS Phase I (hardware only). (Note: if ATU is sold, this project will be deleted from the general government CIP.)</p> <p>DATA BASE ENVIRONMENT STUDY Study, evaluate and recommend future DBMS environment.</p> <p>ATU BILLING SYSTEM Replacement of ATU customer billing system (hardware only). (Note: if ATU is sold, this project will be deleted from the general government CIP.)</p> <p>NEW DATA BASE SYSTEM Purchase and install or upgrade to new technology.</p>			<p>0-180</p> <p>0-400</p>	<p>0-75</p>	<p>0-360</p>	
TOTALS				1990 - 1995		

MUNICIPALITY OF ANCHORAGE
1990 - 1995 CAPITAL IMPROVEMENT PROGRAM

Department	Project Category				Fund Code	
MANAGEMENT INFORMATION SYSTEMS	COMPUTER UPGRADES/PURCHASES				0608	
PROJECT TITLE AND DESCRIPTION	COSTS IN THOUSANDS OF DOLLARS				S-State F-Federal	O-Other B-Bonds
	1990	1991	1992	1993	1994	1995
<p>OPERATIONAL INTERFACES Enhance interfaces between administrative systems (billing and DCRIS Phase I) with operational systems (CRS10, DMS100, GIS) (hardware only). (Note: if ATU is sold, this project will be deleted from the general government CIP.)</p>					0-50	
TOTALS	S-3,000 F-0	O-5,660 B-0			1990 - 1995	