# MANAGEMENT INFORMATION SYSTEMS

## MUNICIPALITY OF ANCHORAGE MANAGEMENT INFORMATION SYSTEMS

#### **Department Goal:**

The goal of the 1994-1999 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: (1) consolidation of application systems onto the IBM or DEC platforms where appropriate, (2) integration of existing and new application systems to reduce redundant data entry, storage and management and (3) automation of after-hours computer operations where possible.

#### **Program Statement:**

This goal can be accomplished through the continued application systems development and enhancement on the IBM and DEC platforms and implementation of various new software packages. All project costs will be funded via a commercial loan to Management Information Systems which will be repaid through realized savings and allocations to other departments.

Given ATU's plans to transfer processing to their own equipment, the Administration will be thoroughly reviewing the role of MIS during the transition period with respect to its future support role in serving General Government and Utilities.

Approved 12/7/93

1994 CIB/1994-1999 CIP

#### MUNICIPALITY OF ANCHORAGE CAPITAL IMPROVEMENT PROGRAM PRIORITY LIST FOR Management Information Systems

DOLLARS IN (000S)

YEAR	PROJECT TITLE	DEPT PRIORITY	GO BONOS	STATE GRANTS		TOTAL REQUEST
CATEGO	DRY: Management Information Systems					
1994	TERMINAL/PC REPLACEMENTS	1			100	100
1994	PROGRAMMER WORK STATIONS	2			80	80
1994	PRINTER REPLACEMENTS	3			75	<i>7</i> 5
1994	INFORMATION CENTER UPGRADES	4			65	65
1994	NETWORK UPGRADE	5			100	100
1994	REPLACE MAINFRAME DISC SUBSYSTEM	6			1,368	1,368
177 <del>4</del> 1994	IOMS PERFORMANCE PRODUCTIVITY PRODUCTS	7			100	100
1994	DEC/VAX NETWORK ENHANCEMENTS	8			140	140
1994	IMPROVED DATA RECORDING CAPABILITY (IDRC)	9			50	50
1994	INSTALL VSAN RECOVERY SOFTWARE	10			32	32
1994	HUNICIPAL GIS SYSTEM	11			200	200
1994	TRANSPARENT LOCAL - AREA NETWORK (TLS)	12			250	250
1994	PUBLIC SAFETY SYSTEM	13			1,800	1,800
1994	MUNICIPAL WIDE-AREA NETWORK	14			500	500
1774	UNATELLE ATDELLER MELACU	• •				
	CATEGORY TOTAL				4,860	4,860
	DEPARTMENT TOTAL FOR 1994				4,860	4,860
TOTAL	FOR 1994				4,860	4,860
					100	100
1995	TERNINAL/PC REPLACEMENTS	1				70
1995	PROGRAMMER WORK STATIONS	2			70 75	70 75
1995	PRINTER REPLACEMENTS	3			75	
1995	INFORMATION CENTER UPGRADES	4			45	45
1995	NEW DATA BASE SYSTEM	5			360	360
	CATEGORY TOTAL				650	650
	DEPARTMENT TOTAL FOR 1995				650	650
TOTA	L FOR 1995				650	650
1996	TERMINAL/PC REPLACEMENTS	1			100	100
1996	PROGRAMMER WORK STATIONS	2			70	70
1996	PRINTER REPLACEMENTS	3			75	75
1996	INFORMATION CENTER UPGRADES	4			10	10
	CATEGORY TOTAL				255	255
	DEPARTMENT TOTAL FOR 1996				255	255
TOTA	L FOR 1996				255	255
4000	TERMINAL (DO DEBLACEMENTO	1			100	100
1997	TERMINAL/PC REPLACEMENTS	2			45	45
1997	PROGRAMMER WORK STATIONS	3			75 75	75
1997	PRINTER REPLACEMENTS	ა			7.0	/3

#### ACBC016R

REPORT TOTAL FOR ALL YEARS

#### CAPITAL IMPROVEMENT PROGRAM PRIORITY LIST FOR Management Information Systems DOLLARS IN (000S)

YEAR	PROJECT TITLE	DEPT PRIORITY	GO Bonds	STATE GRANTS	OTHER Sources	TOTAL REQUEST
1997	INFORMATION CENTER UPGRADES	4	.min mijt 160: 150: 150:		10	10
	CATEGORY TOTAL				230	230
	DEPARTMENT TOTAL FOR 1997				230	230
TOTAL	. FOR 1997				230	230
1998	TERMINAL/PC REPLACEMENTS	1			100	100
1998	PROGRAMMER WORK STATIONS	2			45	45
1998	PRINTER REPLACEMENTS	3			<i>7</i> 5	<i>7</i> 5
1998	INFORMATION CENTER UPGRADES	4			10	10
	CATEGORY TOTAL				230	230
	DEPARTMENT TOTAL FOR 1998				230	230
TOTA	L FOR 1998				230	230
1999	TERMINAL/PC REPLACEMENTS	1			100	100
1999	PROGRAMMER WORK STATIONS	2			45	45
1999	PRINTER REPLACEMENTS	3			75	75
1999	INFORMATION CENTER UPGRADES	4			10	10
	CATEGORY TOTAL	**************************************	AF STREET, LABOURD AND THE STREET, CONTRACT OF THE		230	230
	DEPARTMENT TOTAL FOR 1999				230	230
TOTA	L FOR 1999				230	230
EPROT 1	TOTAL FOR ALL YEARS				6,455	6,455

Management Information Systems		ROJECT COST	Category Management	Information Systems
PROJECT TITLE AND DESCRIPTION	A-Ass F-Fed	te B-Bond nt D-D.O.T. eral O-Other tage Land Bank	D&H COST	COMMUNITY COUNCIL - PRIORITY
PROJECT TITLE AND DESCRIPTION			DEBT SERVICE	l-Essential 2-Necessary 3-Desireable
TERMINAL/PC REPLACEMENTS Provide for the replacement of outdated and obsolete terminals and personal computers.	0=	100		Areawide
PROGRAMMER WORK STATIONS Improve Application Services development staff productivity through the acquisition of personal computers, printers and software facilities; to include, application prototype and data base design capability at the technicians work station.	0=	80	4.0 0.0	Areawide
PRINTER REPLACEMENTS Replace outdated printers on network with graphics-capable printers. This will reduce maintenance costs, simplify network control, and expand functions available to users.	0=	75		Areawide
INFORMATION CENTER UPGRADES Acquire local area network, personal computer and software facilities for the MISD Information Center. These products will facilitate installation, testing, trouble (Continued on Next Page)	0=	65	4.0 0.0	Areawide
				1994

management Information Systems	1994 PF	ROJECT COST	Category Management	Information Systems
DROJECT TITLE AND DESCRIPTION	S-Stat A-Assm F-Fede		O&M COST	COMMUNITY COUNCIL - PRIORITY
PROJECT TITLE AND DESCRIPTION			DEBT SERVICE	2-Necessary 3-Desireable
INFORMATION CENTER UPGRADES (Continued) shooting and configuration evaluation/ verification for the client community.				
NETWORK UPGRADE To provide improved data and voice communications facilities. Concurrent with the move to a new facility; provide for consolidation of multiple networks.	0=	100		Areawide
REPLACE MAINFRAME DISC SUBSYSTEM Replace current IBM 3880/3380 mainframe disc subsystem with IBM 9343/9345 discs; resulting in dramatically lower operating costs, reduced maintenance, power, cooling and floorspace. System will have increased availability, reliability and performance. Current discs were pruchased in early 1980's.	0=	1,368		Areawide
IDMS PERFORMANCE PRODUCTIVITY PRODUCTS Purchase and install technical products to reduce data base management operating and manpower costs and increase managerial (Continued on Next Page)	0=	100		
		The state of the s		1994

partment Management Information Systems	1994 PROJECT COST	Category Management	Information Systems
DECLEOT TYTE AND DECCRIPTION	S-State B-Bond A-Assmt D-D.O.T. F-Federal O-Other H-Heritage Land Bank	08M COST	COMMUNITY COUNCIL - PRIORITY
PROJECT TITLE AND DESCRIPTION		DEBT SERVICE	l-Essantial 2-Necessary 3-Desireable
IDMS PERFORMANCE PRODUCTIVITY PRODUCTS (Continued) control.			
DEC/VAX NETWORK ENHANCEMENTS T1 Bridges, hardware/software and work station for DEC/VAX network management.	0= 140		Areawide
IMPROVED DATA RECORDING CAPABILITY (IDRC) IDRC will allow increased performance and capacity of cartridge tape drives. Benefits include reduced run-time for tape intensive jobs, and reduced tape costs, because each tape can hold up to 5 times the data. Also reduces processor utilization because data compression can be done by the tape subsystem rather than the host.	0= 50		Areawide
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 System (A/S) files in case of system failure.	0= 32	3.0 0.0	Areawide
			1994

Management Information Systems		DJECT COST	Management	Information Systems
DRO LECT TITLE AND DESCRIPTION	A-Assmt F-Feder	B-Bond D-D.O.T. al O-Other ge Land Bank	0&H COST	COMMUNITY COUNCIL - PRIORITY
PROJECT TITLE AND DESCRIPTION			DEBT SERVICE	l-Essential 2-Necessary 3-Desireable
MUNICIPAL GIS SYSTEM The Hill Building Geographic Information (GIS) Hardware upgrade will replace and outdated proprietary operating platform with a modern UNIX based open system platform for GIS processing. This upgrade will provide a significant improvement in our ability to manage and share GIS data and resources among the many Municipal agencies on the network. Additionally, it will significantly reduce operating costs and greatly simplify network management.	0=	200		Areawide
TRANSPARENT LOCAL - AREA NETWORK (TLS) A fiber optic distribution system which would support high speed LAN connectivity (both 10MB and 16MB). It is a multiple LAN connection system utilized for LAN/WAN integration; intergrated data transport/ distribution on site and to remote locations.	0=	250		Areawide
PUBLIC SAFETY SYSTEM The architecture for Anchorage Fire and Law Enforcement (Public Safety and Emergency (Continued on Next Page)	<b>0</b> = 1	,800		Areawide
				1994

Management Information Systems	1994 PROJECT COST	Category Management	Information Systems
PROJECT TITLE AND DESCRIPTION	S-State B-Bond A-Assmt D-D.O.T. F-Feders1 O-Other H-Heritage Land Bank	08M COST (000's)	COMMUNITY COUNCIL - PRIORITY  1-Essential 2-Necessary
		DEBT SERVICE	3-Desireable
PUBLIC SAFETY SYSTEM (Continued)  Management Office) information infrastructure heterogeneous network structures will require not only data base access and service requests, but additionally, message transfers and transaction posting. The distribution of processing is based on many different kinds of communication, ranging from closely coupled messaging to messaging thru e-mail to Electronic Data Interchange (EDI) between completely disparate systems over the municipal networks.			
MUNICIPAL WIDE-AREA NETWORK Plans call for the future implementation of a high speed Municipal wide area network, utilizing fiber optic facilities provided by ATU or another common carrier. Purchase of the appropriate interconnecting hardware and software will be required to allow the high-speed connection of major Municipal facilities. Benefits include an enhanced capability to share Municipal hardware and (Continued on Next Page)	0= 500		Areawide
	<u> </u>		1994

11

Management Information Systems		OJECT COST	Category Management	: Information Systems
PROJECT TITLE AND DESCRIPTION	A-Assm F-Fede	e B-Bond t D-D.O.T. dal O-Other age Land Bank	0&H COST	COMMUNITY COUNCIL - PRIORITY
PROJECT TITLE AND DESCRIPTION			DEBT SERVICE	1-Essential 2-Necessary 3-Desireable
MUNICIPAL WIDE-AREA NETWORK  (Continued)  software resources (ex: Geographic Information System). The fiber optic facility will also provide for video conferencing.				
		The second secon		
Sub-Total(s)	0=	4,860		
Category Total		4,860	11.0 0.0	
************************************	***	****	******	***************
Department Total(s)	0=	4,860		
Grand Total of Management Information Systems		4,860	11.0 0.0	
		According to the Control of the Cont		1994

ŧı

Department Management Information Systems	Category Man		nt In	format:	ion S	ystems						
PROJECT TITLE AND DESCRIPTION		(00	)'\$) S~	State B-Bor	d A-Ass	mt D-D.O.T.	F-Fede	ral 0-0ther	H-Heri	age Land I	3ank	
PROJECT TITLE AND DESCRIPTION	19	94	1'	995	1	996	1	997	19	98	1	999
TERMINAL/PC REPLACEMENTS Provide for the replacement of outdated and obsolete terminals and personal computers.	0=	100	0=	100	0=	100	0=	100	0=	100	0=	100
PROGRAMMER WORK STATIONS Improve Application Services development staff productivity through the acquisition of personal computers, printers and software facilities; to include, application prototype and data base design capability at the technicians work station.	0=	80	0=	70	0=	70	0=	45	0=	45	0=	45
PRINTER REPLACEMENTS Replace outdated printers on network with graphics-capable printers. This will reduce maintenance costs, simplify network control, and expand functions available to users.	0=	75	0=	75	0=	75	0=	75	0=	75	0=	75
INFORMATION CENTER UPGRADES Acquire local area network, personal computer and software facilities for the MISD Information Center. These products will facilitate installation, testing, trouble (Continued on Next Page)	0=	65	0=	<b>45</b>	0=	10	0=	10	0=	10	0=	10
								1	994	- 199	9	

epartment Management Information Systems	Category Manag	emen	t Informat	ion Systems	5		
PROJECT TITLE AND DESCRIPTION		(000,	s) S-State B-Bo	nd A-Assmt D-D.O.	r. F-Federal O-Othe	r H-Heritage Land	Bank
PROJECT TITLE AND DESCRIPTION	1994		1995	1996	1997	1998	1999
INFORMATION CENTER UPGRADES  (Continued) shooting and configuration evaluation/ verification for the client community.							
NETWORK UPGRADE To provide improved data and voice communications facilities. Concurrent with the move to a new facility; provide for consolidation of multiple networks.	0=	100					
REPLACE MAINFRAME DISC SUBSYSTEM Replace current IBM 3880/3380 mainframe disc subsystem with IBM 9343/9345 discs; resulting in dramatically lower operating costs, reduced maintenance, power, cooling and floorspace. System will have increased availability, reliability and performance. Current discs were pruchased in early 1980's.	0= 1,	368					
IDMS PERFORMANCE PRODUCTIVITY PRODUCTS Purchase and install technical products to reduce data base management operating and manpower costs and increase managerial (Continued on Next Page)	0=	100					
		tude of Assessment Section Section 1				1994 - 19!	99

Department Management Information Systems	Category Mana	gemen	t Informat	ion Systems	5		
PROJECT TITLE AND DESCRIPTION		(000	's) S-State B-Bo	nd A-Assmt D-D.O.1	. F-Federal O-Other	H-Heritage Land E	ank
PROJECT TITE AND DESCRIPTION	199	4	1995	1996	1997	1998	1999
IDMS PERFORMANCE PRODUCTIVITY PRODUCTS (Continued) control.							
DEC/VAX NETWORK ENHANCEMENTS Tl Bridges, hardware/software and work station for DEC/VAX network management.	0=	140					
IMPROVED DATA RECORDING CAPABILITY (IDRC) IDRC will allow increased performance and capacity of cartridge tape drives. Benefits include reduced run-time for tape intensive jobs, and reduced tape costs, because each tape can hold up to 5 times the data. Also reduces processor utilization because data compression can be done by the tape subsystem rather than the host.	0=	50					
INSTALL VSAM RECOVERY SOFTWARE Provide ability to recover data from VSAM files and system catalogs. In particular, provide abliity to recover OFFICE SUPPORT and Application System (A/S) files in case of system failure.	0=	32					
						.994 - 199	9

Management Information Systems		nt Informati				
PROJECT TITLE AND DESCRIPTION	1994	's) S-State B-Bon 1995	d A-Assmt D-D.O. 1996	T. F-Federal 0-0the	1998	1999
MUNICIPAL GIS SYSTEM The Hill Building Geographic Information (GIS) Hardware upgrade will replace and outdated proprietary operating platform with a modern UNIX based open system platform for GIS processing. This upgrade will provide a significant improvement in our ability to manage and share GIS data and resources among the many Municipal agencies on the network. Additionally, it will significantly reduce operating costs and greatly simplify network management.  TRANSPARENT LOCAL - AREA NETWORK (TLS) A fiber optic distribution system which	0= 200 0= 250					
would support high speed LAN connectivity (both 10MB and 16MB). It is a multiple LAN connection system utilized for LAN/WAN integration; intergrated data transport/ distribution on site and to remote locations.  PUBLIC SAFETY SYSTEM The architecture for Anchorage Fire and Law Enforcement (Public Safety and Emergency (Continued on Next Page)	0= 1,800	¥ъ			1994 - 199	9

Department  Management Information Systems	Category Managemen	nt Informat	ion Systems	:						
PROJECT TITLE AND DESCRIPTION	(000's) S-State B-Bond A-Assmt D-D.O.T. F-Federal O-Other H-Heritage Land Bank									
	1994	1995	1996	1997	1998	1999				
PUBLIC SAFETY SYSTEM	O= 500									
			1	1	994 - 199 <u>9</u>					

Management Information Systems	Category Man	j	nt Ini	formati	ion Sy	/stems						
DROJECT TITLE AND DESCRIPTION	(000's) S-State B-Bond A-Assmt D-D.O.T. F-Federal O-Other H-Heritage Land Bank											
PROJECT TITLE AND DESCRIPTION  MUNICIPAL WIDE-AREA NETWORK   (Continued) software resources (ex: Geographic Information System). The fiber optic facility will also provide for video conferencing.  NEW DATA BASE SYSTEM Purchase and install or upgrade to new technology.	19	94	1995		1996		1997		1998		1999	
			0=	360								
								m				
Sub-Total(s)	0=	4,860	0=	650	0=	255	0=	230	0=	230	0=	23
Category Total		4,860		650		255		230		230		23
********************************	***	****	***	( <b>*</b> ***	***	****	***	*****	***	****	***	***
Department Total(s)	0=	4,860	0=	650	0=	255	0=	230	0=	230	0=	23
Grand Total of Management Information Systems		4,860		650		255		230		230		23
		And the state of t		<u></u>				1	994 994	- 199	9	