

SECTION IV

Implementation Plan

IMPLEMENTATION PLAN

There were many factors to consider in determining the Implementation Plan for the City of Irving. The major projects to be included for the next few years were already established even before Information Services was asked to prepare the automation plan. Those major projects included completing connectivity between the City network and its facilities, replacement of old legacy systems running on the mainframe, and replacement, upgrades or additions to the Police and Fire Computer Aided Dispatch and Records Management Systems. The order of the major projects, in addition to many of the other projects determined by the needs assessment, has been scheduled over the next five years. Each verified need had to be analyzed to establish its importance to the City. To be included in the plan, the need had to improve public safety, reduce the City's liability, increase productivity, or decrease costs. Then the determination had to be made whether the need was affordable and whether there was available IS staff to devote the necessary time to the projects.

Some of the listed needs were scheduled for the fourth and fifth years. The reason for the delay of these needs was, in some cases, due to the fact that technology is still developing to meet the needs. In other cases, anticipated funding and required time would not exist within the first three years. The completion dates planned for some of the needs will still be contingent on the availability of data sets and connectivity from the State of Texas, Dallas County, or the City of Dallas. IS felt that those needs still should be scheduled in the plan to make Council aware of the projected costs and time required for implementation. Some of those projects include the Live Scan Fingerprint System, the Automated Fingerprint Identification System (AFIS), the juvenile database system, and the pawnshop system.

The plan includes a generalized addition each year for needed minor hardware and software. This is an addition established primarily by cost, previous history, and required time to implement. The departments could specify what they needed for major systems, but in many cases, they were unaware of what specific software was needed, what the cost would be for such software, or what the implementation and support time would be to take the system "live". Therefore, time had to be allowed for specific needs assessments, research, demonstrations, site visits, and Request for Proposals for most of the major systems. In other cases, it was determined that existing systems could be improved by IS or that small application needs could be met by IS designing and programming the application in-house. Whether the system is built by IS or purchased from an outside vendor, allocation of time will be required by both IS and the requesting departments.

Funds have already been established for much of the first year of the plan through previous planning and allocation, and IS has already done much preparation. We, the IS staff, are excited over the plan and hope that each of you will share our excitement.

PLAN FOR 1ST YEAR FISCAL YEAR 2000-2001

The City of Irving automation plan for the Fiscal Year 2000-2001 is a very optimistic, concentrated schedule. However, with successful completion, the City will have made great progress in their quest for needed automation. The acquisition and implementation of all the major systems are the first priority of the affected department. Therefore, IS will strive to assign personnel in a way that will allow these projects to be obtained and implemented simultaneously. In addition to the items listed below, there will be ongoing support and upgrades of all active systems as well as the normal repair and replacement of personal computers, printers, and other peripherals. Some additional needed minor software packages will be obtained or built by IS throughout the plan.

The following listing of major acquisitions is in chronological order of the anticipated installation, and this order indicates the priority of the projects. To accomplish the replacement of some of the mainframe systems and to continue to upgrade and increase the availability of the network to our users are the highest priority this first year of the plan. Some of the other items on the plan are being done this year because of bond plan commitments to the citizens. Because of the lack of available funds, some of the projects originally shown in the first year of the plan have had to be moved to the second year.

1. INVESTMENT SOFTWARE FOR FINANCE DEPARTMENT \$30,000

This software was recommended by the Management Audit, and the need for the software has existed since October 1997 when the Banner system was activated. Presently, we have only a very limiting, simple system on the mainframe.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None should be required	To be selected	Existing Staff	Yes
Departments Affected: Finance			

2. CITRIX SERVERS AND LICENSES FOR CITYWIDE NETWORK \$300,000

This is a critical need for the City for multiple reasons. It allows the remote locations to quickly access Banner for their Financial and HR entries and information. Some of the remote locations presently have to go to the Civic Center to have timely, if any, access.

This system will also allow the City to buy fewer software licenses by being able to quickly access software on the servers rather than having to have individual licenses. On the upgrade to Office 2000 alone, this will save the City almost \$200,000. This method will monitor software licenses and assure that the City is using only legal copies.

Funding can be saved by slowing down the replacement of computers or by purchasing "thin client" systems rather than a heavy-duty personal computer for

each user. The reason this change is possible is because the end-user will actually be doing all processing on the server rather than on the machine on their desk. In time, this will also reduce the yearly amount of funds having to be budgeted for Computer Replacement Funds.

The use of this technology moves the City into the position of being able to have eligible staff telecommute when and if regulations require it.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
Servers and Modems	Citrix & Office 2000	Existing Staff	No
Departments Affected: All City Departments			

3. LIBRARY CLIENT/SERVER SYSTEM \$800,000

The need to replace this decade old system has risen in priority because of the desire to integrate with the North Lake Library operation. The new system will need to be interfaced with the Finance system and with Dallas County Community College resources. The funds for the system were approved in the Bond Election. With the addition of this new application, another remote library site, and a sizable increase in personal computers through a grant, it will be necessary to increase the IS staff assigned to the Library by one Micro Computer Specialist. Since the Library computer inventory is close to 200 and spread throughout the City, even two IS staff would not be able to give adequate support if it were not for very capable users on the Library staff.

The Library has applied for a TIF grant that if funded, could reduce the amount of bond money required for the project.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	(1) IS Staff	Not Staff
Department Affected: Library initially and later Finance through interface			

4. COURT CLIENT/SERVER SYSTEM \$550,000

The need for the replacement of the antiquated mainframe Court system was recognized by the City as early as 1993. It was decided in the budget process for the current fiscal year to fund the replacement of the system using a combination of Court Technology Funds and General Funds. The new system will be able to more easily adjust for both the legislative changes and the multiple types of fees. It will also eliminate the need to do many manual processes by automating them. No software vendor is being considered other than vendors with numerous Texas successful court installations.

The objective is for the system to interface with the Finance system, GIS, Jail Management, Electronic Ticketing, Imaging, IVR, City Web site, Police Records, and various outside agencies. Since some of these systems have not been purchased or implemented, the interfacing process will be an ongoing project.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Yes
Departments Affected: Court, Finance, Police, GIS, Legal			

5. REPLACE OLDER NETWORK SERVERS AND HUBS \$68,000

Some of the City servers are no longer adequate to meet the needs of the increased number of users. These are the servers used as the primary domain server, the backup domain server, the e-mail server, and the GIS server. It is not cost justified to upgrade these old servers, and because of the reduced cost of hardware, adequate funds have been paid into the Computer Replacement Fund to replace the servers and hubs. These are critical servers to the citywide network. Increased processing speed and dependability will be gained through this replacement.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

6. UTILITY BILLING/COLLECTION CLIENT/SERVER SYSTEM \$330,700

This is another very old legacy mainframe system. The needs determined for the new system are too numerous to list, but a few of them are daily billing (rather than four times per month), maintaining history for rate studies, advance billing e-mails to commercial customers, remittance processing system, more rate type capabilities, and ease of use. In addition to the purchase of software and the hardware to run the software, a combination printer/mail processing system and payment scanning equipment will be needed. This system will interface with the Finance System, GIS, Imaging, IVR, Utility AM/FM System, and the City Web Site.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Need \$140,000
Departments Affected: Customer Service, Finance, Water Utilities, Sanitation, GIS, Print/Mail Services, and others for research purposes			

7. LIVE SCAN FINGERPRINT SYSTEM**\$90,918**

The previous system is obsolete and unable to interface with DPS in Austin or to the Police Records Management System. It will probably be installed as a stand-alone system in 2000-2001, but the installation will not be complete until it is networked with the Jail Management System and Records Management System. This system will allow the Police to obtain digital fingerprints and submit them to the database at DPS in Austin.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Yes
Departments Affected: Police			

8. AUTOMATED FINGERPRINT IDENTIFICATION SYSTEM (AFIS)**\$66,900**

The newest target date for the installation of this system is December 2000. We are dependent on the City of Dallas for the completion of this system. This system is used to search for person identification through the fingerprint database. It will initially be installed as a stand-alone system, but it will later be interfaced through the Jail Management System to the Records Management System.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Yes
Departments Affected: Police			

9. JAIL MANAGEMENT AND MUGSHOT SYSTEM**\$390,000**

This system will provide comprehensive management of inmates from book-in to release. It will eliminate time consuming manual processing and duplication of efforts currently employed. In addition, it provides a single collection point of fingerprints, mugshots, and Records Management System (RMS) data. It will provide initial connectivity and sharing of data with the Court, and hopefully, lead to ticket, warrants, etc. in the future. The Mugshot System should reduce much of the cost of film and film processing in addition to the time spent manually cataloging and filing pictures. It will be able to select a "best fit" line-up. This system will provide the much-needed interface between various police systems and the RMS.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Yes
Departments Affected: Police and Courts			

10. PAWN SHOP INFORMATION SYSTEM**\$19,000**

The pawnshop system will provide the ability for pawnshops to provide their data digitally to the Criminal Investigation Division (CID) that can be uploaded into the Records Management System preventing manual entry into both systems. The information can also be sent to TLETS to check for stolen items. Since a short timeframe is critical in locating stolen items, this system will greatly enhance locating the items and the perpetrator.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Yes
Departments Affected: Police			

11. IMAGING SYSTEM – PILOT PROJECT**\$200,000**

This will be the exciting start toward a citywide imaging and document management system. We will start with the City Secretary/Records Management area. Since IS will be working with the staff that are trained in records retention, we can benefit from their knowledge of indexing, destruction dates, and other requirements. The benefits gained from starting in this area will be felt by all departments, as it will make many records more readily available. We will start from a date and go forward in-house, but we will outsource previous records and all large maps and drawings. The maps in Public Works are really showing wear from usage, and those will be the first large documents to be imaged. This will be the start of a multi-year project.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Yes
Departments Affected: City Secretary's Office and Public Works			

12. SECOND PART OF TRAFFIC MANAGEMENT SYSTEM – SOFTWARE**\$10,500**

Twenty additional traffic controller software packages will be installed. These packages will be installed with the assistance from the software vendor.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None in this Package	To be purchased	None	Yes
Departments Affected: Traffic and Transportation			

13. WATER UTILITIES AUTOMATED MAPPING/FACILITIES MANAGEMENT (AM/FM) SYSTEM AND ARC FM/WATER SYSTEM FOR GIS \$81,000

This is a much-needed system that includes a full work order system for Water Utilities. It is integrated with the GIS system to enable changes to the infrastructure to be immediately reflected. This assures more accurate and up-to-date information to be maintained in the GIS system.

ArcFM is a Facilities Management application designed for water, wastewater, and storm sewer utilities. This application increases the efficiency of utility modeling and data maintenance through the implementation of a defined object model. ArcFM data sets more accurately capture the real world behaviors of the features they represent that in turn allow for more accurate and timely update.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Part-time to Full-time Staff	No
Departments Affected: Water Utilities and GIS			

14. REDUNDANCY TRANSFER PROGRAM & EMULATION SOFTWARE \$19,000

The redundancy transfer program is to automatically replicate the Fire CAD systems. Should the lead computer fail, the backup computer will contain the same information at the time of the failure to allow the dispatchers to immediately access the backup system. The emulation software will enable the end-users in Fire to access the screens for data entry and retrieval.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	Yes
Departments Affected: Fire			

15. FAMILY ADVOCACY CENTER – STARTUP COSTS \$218,330

This project includes the cost of installed fiber, servers, hubs, routers, computers, scanners, printers, and telephone system. The funding for this project will be from seized funds and from a portion of the supplemental request by the Police Department.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	See above
Departments Affected: Police			

16. TIME CLOCK SYSTEM – WATER UTILITIES**\$50,000**

The time clock system would record the hours worked by Water Utilities staff through recording information on a computer from the employees' identification cards. This would assist Water Utilities with their job costing, varied work schedules, and time entry for payroll. This system would interface with the Banner system and eliminate duplicate time entry being done presently.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Yes
Departments Affected: Water Utilities, HR, Finance			

17. CELLULAR DIGITAL PACKET DATA (CDPD) – POLICE MOBILE UNITS \$107,050

This will start a two-year project to move the Police mobile units from 800 MHz connections on the mobile laptops to CDPD. This will allow for more radios on the 800 MHz system, a redundant method of communicating, and an expansion of the coverage area for mobile data. The cost of the project will include a server, software licenses, and air cards. This project has been delayed until the completion of the Ericsson contract and until FIRE completes its CDPD project. A portion of this project may be further delayed waiting on COPS More grant funding that has been scheduled at a later date in 2001. The balance of the funds will be from seized funds.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	See above
Departments Affected: Police			

18. TELEPHONE NOTIFICATION SYSTEM**\$6,000**

By adding a module to our Automated Citizen Information System, the departments will be able to maintain telephone lists that will enable the system to call staff to report back to work, notify block captains of information, call staff for EOC activation, and various other announcements or emergency messages.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	Yes
Departments Affected: All City Departments			

19.COMPUTERS, THIN CLIENTS, LAPTOPS, PRINTERS **\$24,000**

Additional computer equipment is needed for the Water Utilities to be used with the new work order system and time clock system. Funding will be from the System fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: Water Utilities			

20.REPLACEMENT OF COMPUTER EQUIPMENT **\$250,000**

Computer equipment that has reached retirement age and can no longer meet the job requirements will be replaced with Computer Replacement Funds.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

Additional projects planned for Fiscal Year 2000-2001 that will be completed by the Information Services Department staff are:

1. The Projects Group will facilitate meetings with all departments to determine what needs are not being met by the Banner System used for financial and payroll processing. We hope to find that with additional reports programmed by IS and with additional training for the departments, the system will be made to meet their needs. If we determine that some vendor customization is needed, then we will request funds in the second year of the plan to meet those needs. The IS goal for this project is to advance the Banner System to an acceptable status for all departments.
2. The Senior Programmer Analyst for Fire will design and program systems for Fire reporting and EMS reporting. She has completed the system for Fire Inspections. All of the in-house systems will interface with each other and with Fire CAD. This project is being done in place of purchasing three modules at \$72,500.
3. Implement MrSID (Multi-Resolution Seamless Image Database) which stores digital photography in a compressed database. MrSID databases use the compression technology to generate high quality images at a minimum size. This technology will enable GIS to deliver seamless digital photography to the Web and internal clients more efficiently. The software was funded and purchased in 2000; the GIS staff has been trained to use it; and now it will be implemented.
4. Complete reports and any needed upgrades or interfaces for the Garage System built by IS staff.
5. Complete and test a major upgrade of the Banner System to Version 5.0. This upgrade is scheduled for the first quarter of 2001. Upgrades are included in the annual maintenance cost.

6. Complete the implementation of the Fixed Asset module for the Banner System.

7. GPS PROJECTS (DATA SET CONSTRUCTION)

Over the next couple of years, GIS will partner with multiple departments within the City to construct new data sets. These data sets will increase the functionality of the GIS as a whole.

STREET SIGNS (Start 1999-2000)

In cooperation with Traffic and Transportation, GIS will build an inventory of street signs that will include true location, condition type as well as other attributes.

TRAFFIC CONTROL SYSTEM (Start 2000-2001)

In cooperation with Traffic and Transportation, GIS will build an inventory of traffic control devices. This inventory will enable GIS to integrate with the new traffic control system.

HYDRANT LOCATIONS (Start 1999-2001)

In cooperation with Water Utilities Division of Public Works, GIS will construct an inventory of hydrants that will include true location, hydrant type, and condition as well as other attributes. This inventory will be used to enhance the current GIS hydrant data set.

STREET REPAIR LOCATIONS (Start 2000-2001)

In cooperation with Streets Division of Public Works, GIS will construct an inventory of repair locations that will include true location of the need repair, the condition, and the severity of the damage. This will enable Streets Division to better track and manage needed repairs.

WATER METER LOCATIONS (Start 2000-2001)

In cooperation with Customer Service, GIS will construct an inventory of water meters that will include true location, meter type, and account number as well as other attributes. This inventory will be used to enhance the current GIS meter data set as well as enable the integration with the new utility billing system.

8. Begin incorporating digital imagery of source documents and features into the GIS System. This will enable end-users to view associated information and pictures of features via the GIS.
9. Expand IGGI (GIS CD-ROM project) to include zoning ordinances, foundation form diagrams, construction plans and plats.
10. Develop GIS Address Matching System to enable the accurate and efficient mapping of addressed information. This system will enable City staff to generate geographically oriented mailing lists and geo code database records.
11. Develop comprehensive on-line training module for the GIS system. This training will be available to all staff and will enable users to train at their own pace and schedule.

PLAN FOR 2nd YEAR FISCAL YEAR 2001-2002

1. ENVISIONS SOFTWARE FOR FINANCE, IAC, & ICVB \$10,400

This software is to replace Create-A-Check, the software that is being used to print AP checks, payroll checks, direct deposit reports and purchase orders. Since Banner doesn't print these items, the information has to be downloaded from Banner and fed to the software to be printed. Envisions software will interface directly with Banner and reduce the number of processes needed to print the documents. This software offers better formats for the items to be printed.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None should be required	To be purchased	Existing Staff	No
Departments Affected: Finance, Purchasing, IAC, ICVB			

2. PERMITTING, INSPECTION AND CODE ENFORCEMENT \$200,000 APPLICATION AND WORKFLOW SOFTWARE & HARDWARE

This system is needed to replace the legacy programs on the mainframe. The ultimate system will be one that will track a permit application from its initiation through the project completion. It will allow staff from any affected department to know the status of the permit at any time, and it will speed up the process of moving the permit through the City requirements. This same system will need to track inspections during the project, code enforcement actions during and after the completion of the project, zoning cases, etc. The needs assessment for this system will be done during the first year of the plan.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: Building Inspections, Code Enforcement, Public Works, Community Development, Fire, GIS, and Finance			

3. TAX BILLING/COLLECTION SOFTWARE AND HARDWARE \$150,000

This software is to replace a very old mainframe legacy system. Due to changes in taxing exemptions and guidelines, our present system does not meet our needs. RFP will be sent out during the first year of the plan.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
Hope to use existing	To be selected	Existing Staff	No
Departments Affected: Finance, Customer Service, GIS, and others			

4. MODIFICATIONS TO BANNER SYSTEM**\$20,000**

A study will be done during the first year of the plan to determine any critical modifications needed for the Banner system. These funds are being requested for any modifications that IS cannot program without voiding the warranty on the system.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	If needed	Existing Staff	No
Departments Affected: All City Departments			

5. REPLACE ONE-HALF OF WAN SWITCHES TO 100 MB OR HIGHER \$50,000

Because the volume and size of the data flowing throughout the citywide area network, greater bandwidth is required.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

6. UPGRADE SERVERS & PCS TO WINDOWS 2000 OR MILLENNIUM \$150,000

Periodically, software houses force users to upgrade operating system (OS) software or the various application software packages will not work properly. The vendors will discontinue any enhancements, support or "bug" fixes to the older software.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

7. UPGRADE VOICE MAIL SOFTWARE – 2 VERSIONS**\$25,000**

To take advantage of enhancements and "bug" fixes, the City telephone voice mail system needs to be brought up to the current version.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

8. TRAFFIC MANAGEMENT SYSTEM-HARDWARE & SOFTWARE \$96,875

This is the third part of the implementation of the traffic management system. In addition to purchasing traffic controller software, this year a network server and software system is required to start connecting and monitoring the traffic controllers on a citywide system.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be purchased	Existing Staff	Yes
Departments Affected: Traffic & Transportation			

9. EQUIPMENT TO CONNECT TO INSTITUTIONAL NETWORK \$502,750

To enable the use of the Institutional Network fiber to be provided by Wide Open West, equipment is needed for each connection. These connections will be needed at City facilities and at traffic controllers. The cost shown is for ten City facilities and eighty-one traffic controllers. Traffic and Transportation expects to have funding through grants to purchase their connections.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Partially
Departments Affected: All City Departments			

10. IMAGING SYSTEM – COURT PORTION ONLY \$200,000

This will be a continuation of the imaging system started in the first year. This portion of the system will interface with the Court system and will be purchased with Court Technology Funds.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	Yes
Departments Affected: Court and Police			

11. SCADA FOR LAKE CHAPMAN PUMP STATION \$750,000

The Supervisory Controlled and Data System (SCADA) is critical to the timely monitoring and control of the Lake Chapman Project. This system will alarm the operators at the pump stations of any problems whether it be the need to adjust, start, stop, open or close a piece of remotely controlled equipment. The RFP for this purchase will be sent out during the first year of the plan.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Part-time to full-time	System
Departments Affected: Water Utilities			

12.INTERACTIVE VOICE RESPONSE & INTERACTIVE WEB SITE/E-COMMERCE SYSTEMS **\$60,000**

The Interactive Voice Response System (IVR) will allow for payments, inquiries, scheduling, and other services over the telephone. The Interactive Web Site and Electronic Commerce Systems will allow for the same types of processes over the Internet through the City web site. These systems will have to interface with the various City systems through secure connections. The Court portion of the system will be funded through the Court Technology Fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Partially
Departments Affected: All City Departments			

13.SATELLITE DATA TO SUPPLEMENT GIS **\$12,000**

By obtaining satellite data for the years when there is no fly-over, the GIS will stay more current in showing the build-outs that have occurred.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	Data	Existing Staff	No
Departments Affected: All City Departments			

14.KIOSK FOR COURT LOBBY **\$30,000**

A Kiosk located in the Court lobby would allow customers to do inquiries and make payments relating to their court cases without having to stand in line. This would initially only be used for payments where the charged admitted guilt and paid the fine. It could also be used for customers with a time pay agreement already established. Most inquiries could be made from the Kiosk. Using the original estimates of Technology Fund collections and Court technology purchases, funding may not be available from the Technology Fund for the Kiosk. Therefore, the plan reflects the need for General Fund money.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: Courts			

15.IMAGING SYSTEM FOR ADDITIONAL DEPARTMENTS **\$300,000**

This is to further expand the imaging system to Legal, Community Development, and Public Works.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

16. NORTH POLICE STATION—ALL TECHNOLOGY STARTUP COSTS AND EQUIPMENT **\$125,000**

This will include computers, printers, server, software, and connectivity to the City network. The Police anticipate funding these costs from grants and/or seized funds.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Possibly
Departments Affected: Police Department			

17. CDPD FOR POLICE MOBILE UNITS **\$174,000**

To relieve the heavy usage of the 800 MHz radio system, to provide redundancy for communication access, and to expand the coverage area, IS recommends gradually moving the Police mobile data units to CDPD. Funding should be available through the Computer Replacement Fund and Grants.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: Police Department			

18. ADDITIONAL COMPUTER EQUIPMENT FOR FAMILY ADVOCACY CENTER **\$50,000**

It will be necessary to complete the technology needs for the staff stationed at the Family Advocacy Center

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: Police Department			

19. COURT LINE MANAGEMENT & FILE MANAGEMENT SYSTEMS **\$59,500**

The Court Line Management System is an electronic version of the “take a number” system that allows you to be seated and not stand in line. As each clerk finishes with a customer, the computer signals the next customer number. The system maintains statistics on customers served per clerk, average time per customer, etc.

The File Management System tracks file location and who has the file checked out. Because of present requirements related to signatures, even with a complete imaging system, Court will still need to maintain thousands of files. Since those files are used by multiple clerks, this system should save staff time and customer aggravation.

These systems will be funded through the funds received for time payment fees.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	Yes
Departments Affected: Municipal Court			

20. PERSONAL COMPUTERS REPLACED**\$400,000**

Each year it will be necessary to replace some computers, printers, and other peripherals. These replacements will be funded through the Computer Replacement Fund

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

21. INCREASED MAINTENANCE COSTS ON 2000-2001 INSTALLS**\$734,507**

The increased maintenance costs include payments made to vendors and to the Computer Replacement Fund. Since the larger software application packages being purchased will replace mainframe legacy systems, maintenance to vendors will be required that the City has not had in the past. Most vendors now charge an average of 23% of total license fees each year.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	None	Existing Staff	No
Departments Affected: All City Departments			

Additional projects planned for Fiscal Year 2001-2002 that will be completed by the Information Services Department staff are:

- Continued development, maintenance, and enhancements of all City systems.
- Design and develop a file tracking system for Community Development.

**PLAN FOR 3rd YEAR
FISCAL YEAR 2002-2003**

**1. MAJOR UPGRADE OR REPLACEMENT OF POLICE COMPUTER \$1,700,000
AIDED DISPATCH AND RECORDS MANAGEMENT SYSTEMS**

The main systems for Police are reaching a maximum age and running on hardware and an operating system that we would like to get out of the City inventory. Presently, there is not a system that appears to improve what Police has, but some systems are in testing that could be proven by the third year of the plan. Police have been setting aside money each year in the Computer Replacement Fund to prepare for the needed replacement.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Partially
Departments Affected: Police			

2. REPLACE REMAINING WAN SWITCHES TO 100 MB OR HIGHER \$50,000

Because the volume and size of the data flowing throughout the citywide area network, greater bandwidth is required.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

3. KIOSK FOR CIVIC CENTER LOBBY \$30,000

A Kiosk located in the Civic Center lobby would allow customers to do inquiries and make payments relating to their court cases, water bills, and tax bills without having to stand in line.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: Courts & Customer Service			

4. FOURTH PART OF TRAFFIC MANAGEMENT SYSTEM – SOFTWARE \$28,375

Additional traffic software packages will be installed. These packages will be installed with the assistance from the software vendor.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None in this Package	To be purchased	None	Yes
Departments Affected: Traffic and Transportation			

5. EQUIPMENT TO CONNECT TO INSTITUTIONAL NETWORK \$313,350

To enable the use of the Institutional Network fiber to be provided by Wide Open West, equipment is needed for each connection. These connections will be needed at City facilities and at traffic controllers. The cost shown is for twenty City facilities and thirty-five traffic controllers. Traffic and Transportation expects to have funding through grants to purchase their connections.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Partially
Departments Affected: All City Departments			

6. IMAGING SYSTEM FOR ADDITIONAL DEPARTMENTS \$200,000

This is to further expand the imaging system to Finance, Purchasing, City Manager's Office, Inspections, Code Enforcement, and Customer Service

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

7. ELECTRONIC TICKET WRITERS & SOFTWARE \$350,000

With the addition of this system, Patrol can issue tickets electronically that can then be uploaded to the Court software. This system can prevent entry errors, slow down the growth of Court staff, and make the information more available to Police. The system will be partially funded through the Court Technology Fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Partially
Departments Affected: Police & Court			

8. COMPLETE IMPLEMENTATION OF PERMIT TRACKING AND WORKFLOW SYSTEM \$200,000

This portion of the system will more fully address the needs of Community Development and Public Works.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	No
Departments Affected: Community Development, Public Works, Building Inspection, Code Enforcement, GIS, and Finance			

9. CDPD FOR POLICE MOBILE UNITS**\$312,000**

To relieve the heavy usage of the 800 MHz radio system, to provide redundancy for communication access, and to expand the coverage area, IS recommends gradually moving the Police mobile data units to CDPD. Funding should be available through the Computer Replacement Fund and Grants.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: Police Department			

10. CDPD FOR WATER UTILITIES MOBILE UNITS**\$150,000**

To provide field access to the City network, particularly the Water Utility work order system.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	System
Departments Affected: Water Utilities			

11. NORTH POLICE STATION—ADDITIONAL COMPUTER EQUIPMENT \$62,500

This will include computers, printers, and software.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: Police Department			

12. SATELLITE DATA TO SUPPLEMENT GIS**\$12,000**

By obtaining satellite data for the years when there is no fly-over, the GIS will stay more current in showing the build-outs that have occurred.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	Data	Existing Staff	No
Departments Affected: All City Departments			

13. PERSONAL COMPUTERS REPLACED**\$250,000**

Each year it will be necessary to replace some computers, printers, and other peripherals. These replacements will be funded through the Computer Replacement Fund

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

14. INCREASED MAINTENANCE COSTS ON 2000-2002 INSTALLS \$1,398,349

The increased maintenance costs include payments made to vendors and to the Computer Replacement Fund. Since the larger software application packages being purchased will replace mainframe legacy systems, maintenance to vendors will be required that the City has not had in the past. Most vendors now charge an average of 23% of total license fees each year.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	None	Existing Staff	No
Departments Affected: All City Departments			

Additional projects planned for Fiscal Year 2002-2003 that will be completed by the Information Services Department staff are:

- Continued development, maintenance, and enhancements of all City systems.
- Design and develop a work order tracking and job costing system for General Services.
- Design and develop a work order and file tracking system for the City Attorney's Office.

**PLAN FOR 4th YEAR
FISCAL YEAR 2003-2004**

1. MAJOR UPGRADE OR REPLACEMENT OF JAIL SECURITY SYSTEMS \$360,000

This system, to control the jail doors, can no longer be repaired. It must have either a major upgrade or be completely replaced. Police have been setting aside money each year in the Computer Replacement Fund to prepare for the needed replacement.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	Partially
Departments Affected: Police			

2. IMAGING SYSTEM FOR ADDITIONAL DEPARTMENTS \$200,000

This is to further expand the imaging system to HR, Police, Fire, Environmental Services, Parks, General Services, Water, and others.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

3. FIFTH PART OF TRAFFIC MANAGEMENT SYSTEM – SOFTWARE \$29,375

Additional traffic software packages will be installed. These packages will be installed with the assistance from the software vendor.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None in this Package	To be purchased	None	Yes
Departments Affected: Traffic and Transportation			

4. EQUIPMENT TO CONNECT TO INSTITUTIONAL NETWORK \$313,350

To enable the use of the Institutional Network fiber to be provided by Wide Open West, equipment is needed for each connection. These connections will be needed at City facilities and at traffic controllers. The cost shown is for twenty City facilities and thirty-five traffic controllers. Traffic and Transportation expects to have funding through grants to purchase their connections.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Partially
Departments Affected: All City Departments			

5. CDPD FOR GENERAL GOVERNMENT MOBILE UNITS **\$120,000**

To provide field access to the City network for work orders, routing, and form completion. Some of these units will be replacements through the Computer Replacement Fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Partially
Departments Affected: Building Inspection, Code Enforcement, Court, Public Health & Environmental Services, Parks & Recreation, etc.			

6. ADDITIONAL CDPD UNITS FOR WATER UTILITIES **\$120,000**

To provide field access to the City network, particularly the Water Utility work order system.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	System
Departments Affected: Water Utilities			

7. CDPD FOR POLICE MOBILE UNITS **\$150,000**

To relieve the heavy usage of the 800 MHz radio system, to provide redundancy for communication access, and to expand the coverage area, IS recommends gradually moving the Police mobile data units to CDPD. Funding should be available through the Computer Replacement Fund and Grants.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: Police Department			

8. UPGRADE OR REPLACEMENT OF CITY SERVERS & HUBS **\$109,000**

To provide for growth of data and staff requirements, a portion of the servers and hubs will need to be upgraded or replaced. The funding will be through the Computer Replacement Fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	Yes
Departments Affected: All City Departments			

9. NORTH POLICE STATION—ADDITIONAL COMPUTER EQUIPMENT **\$32,500**

This will include computers, printers, and software.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: Police Department			

10. REWARD SOFTWARE FOR HUMAN RESOURCES**\$80,000**

This software will provide for multiple types of statistics, analysis, job description writing, etc.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be purchased	Existing Staff	No
Departments Affected: Human Resources			

11. CASH DRAWER SYSTEM**\$120,000**

This includes hardware and software that will interface with the Finance system. This system will be used by all departments who accept payments.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: Various Departments			

12. WEB ENABLED SOFTWARE**\$30,000**

This software increases the ease of use for citizens and staff to complete forms or to receive information from the City system through the Internet.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	To be selected	Existing Staff	No
Departments Affected: All City Departments			

13. SATELLITE DATA TO SUPPLEMENT GIS**\$12,000**

By obtaining satellite data for the years when there is no fly-over, the GIS will stay more current in showing the build-outs that have occurred.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	Data	Existing Staff	No
Departments Affected: All City Departments			

14. PERSONAL COMPUTERS REPLACED**\$200,000**

Each year it will be necessary to replace some computers, printers, and other peripherals. These replacements will be funded through the Computer Replacement Fund

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

15. INCREASED MAINTENANCE COSTS ON 2000-2003 INSTALLS \$2,053,966

The increased maintenance costs include payments made to vendors and to the Computer Replacement Fund. Since the larger software application packages being purchased will replace mainframe legacy systems, maintenance to vendors will be required that the City has not had in the past. Most vendors now charge an average of 23% of total license fees each year.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	None	Existing Staff	No
Departments Affected: All City Departments			

Additional projects planned for Fiscal Year 2003-2004 that will be completed by the Information Services Department staff are:

- Continued development, maintenance, and enhancements of all City systems.
- Design and develop Sanitation and Animal Control Dispatching System for Public Health & Environmental Services Department
- Design and develop Reservation and Scheduling System for Parks & Recreation Department

**PLAN FOR 5th YEAR
FISCAL YEAR 2004-2005**

1. UPGRADE SWITCHES FOR WIDE AREA NETWORK \$50,000

The present switches will need to be replaced with 1 GB or faster equipment. These replacements will be funded through the Computer Replacement Fund.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

2. AERIAL FLY-OVER OF CITY \$250,000

With continued growth and development of the City, an aerial fly-over of the area will need to be done every five years.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	Data	Existing Staff	No
Departments Affected: All City Departments			

3. SIXTH PART OF TRAFFIC MANAGEMENT SYSTEM – SOFTWARE \$30,825

Additional traffic software packages will be installed. These packages will be installed with the assistance from the software vendor.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None in this Package	To be purchased	None	Yes
Departments Affected: Traffic and Transportation			

4. EQUIPMENT TO CONNECT TO INSTITUTIONAL NETWORK \$450,960

To enable the use of the Institutional Network fiber to be provided by Wide Open West, equipment is needed for each connection. These connections will be needed at City facilities and at traffic controllers. The cost shown is to complete 100 City facilities and 180 traffic controllers. Traffic and Transportation expects to have funding through grants to purchase their connections.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Partially
Departments Affected: All City Departments			

5. CDPD FOR POLICE MOBILE UNITS**\$125,000**

To relieve the heavy usage of the 800 MHz radio system, to provide redundancy for communication access, and to expand the coverage area, IS recommends gradually moving the Police mobile data units to CDPD. Funding should be available through the Computer Replacement Fund and Grants.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: Police Department			

6. FOUR KIOSKS FOR REMOTE LOCATIONS**\$160,000**

The addition of the four Kiosks in remote locations will further the availability of the City to the citizens at all times. These Kiosks will allow for inquires of City data and ability to make payments to the City.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: All City Departments			

7. TELECONFERENCING & VIDEO CONFERENCING**\$50,000**

With the addition of this technology, meetings and training can be held across the City or across the world without leaving our office.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	No
Departments Affected: All City Departments			

8. CALL PILOT TELEPHONY SYSTEM**\$100,000**

By the addition of a telephony system to the City telephone system, both voice and written data between City telephones, computers, cell phones, pagers, and fax machines can happen without human intervention.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	To be purchased	Existing Staff	No
Departments Affected: All City Departments			

9. AVL FOR POLICE AND FIRE**\$1,015,750**

An automated vehicle locator system will show real-time on a map the location of each police and fire vehicle. This provides dispatchers with the visual awareness of the location of each vehicle. It can increase the safety of the police and firemen, and it can assist in reducing response time to our citizens. This system could be expanded to include general government employees working in the field.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	To be selected	Existing Staff	NO
Departments Affected: Police and Fire			

10. SATELLITE DOWNLINK FOR COUNCIL CHAMBER**\$5,000**

The addition of a satellite downlink to the Civic Center could provide information, on-line meetings, and training for City staff and for our citizens.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be selected	None	Existing Staff	No
Departments Affected: All City Departments			

11. PERSONAL COMPUTERS REPLACED**\$250,000**

Each year it will be necessary to replace some computers, printers, and other peripherals. These replacements will be funded through the Computer Replacement Fund

HARDWARE	SOFTWARE	IS STAFF	FUNDED
To be purchased	None	Existing Staff	Yes
Departments Affected: All City Departments			

12. INCREASED MAINTENANCE COSTS ON 2000-2004 INSTALLS \$2,314,249

The increased maintenance costs include payments made to vendors and to the Computer Replacement Fund. Since the larger software application packages being purchased will replace mainframe legacy systems, maintenance to vendors will be required that the City has not had in the past. Most vendors now charge an average of 23% of total license fees each year.

HARDWARE	SOFTWARE	IS STAFF	FUNDED
None	None	Existing Staff	No
Departments Affected: All City Departments			

Additional projects planned for Fiscal Year 2004-2005 that will be completed by the Information Services Department staff are:

- Continued development, maintenance, and enhancements of all City systems.
- Design and development of additional in-house applications as needs are determined.