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Goals and Objectives

Goal: 1 Improve service to the public and other state agencies by providing online systems that will allow point-of-origin data entry and retrieval. Web integration of systems is necessary to allow anywhere/anytime access to information and systems.

	Objectives	Timeframe	Accomplishments/Status
1	Develop and expand the DOT Internet web site to provide business data and information to the public and other agencies.	Ongoing	
2	Study and develop an application to allow the public to complete motor vehicle registration renewals, motor carrier credentials, driver record abstract requests, and other DOT transactions via Internet access.	01-03	Currently studying E-Commerce issues, and following the leadership of the ITD E-Commerce Team.
3	Improve existing systems, to allow point-of-origin data access and data entry for DOT staff at remote sites, and for cities, counties, and external contractors.	Ongoing	PACER system being developed will provide and collect construction contract bid information (EXPEDITE). New CARS system being studied will allow engineers and contractors to enter and access data at remote locations.

Goal: 2 Reduce cost of operations by reducing paper handling, by improving data integration, by eliminating data entry redundancy, and by improving staff productivity.

	Objectives	Timeframe	Accomplishments/Status
1	Improve integration of RIMS data to GIS by adding Latitude/Longitude fields, and correcting location information.	99-01	All inventory modules have been completed.
2	Develop a CARS system that will integrate data with finance system and PACER to reduce paper handling and manual processes.	01-03	Initial cost justification has been completed. Further analysis is currently being done to determine the optimal system and detailed costs.
3	Upgrade RIMS/PACER to improve ease of use, data, and report availability.	99-01	Phase 1B of PACER has been completed which has substantially reduced the time required to produce bid letting documentation. Further automation in upcoming phases will continue to improve efficiency.
4	Research and develop a document management solution for integration with all DOT divisions.	03-05	Feasibility study currently being completed.
5	Develop and implement an Intranet (Infobank) to enable users to share information more efficiently, and eliminate duplicate data storage	99-01	Lotus Notes - Business In A Box (BIAB) is being implemented first quarter 2000.

Goal: 3 Improve security and accountability by reducing the need for forms control, document control and by providing electronic audit of all transactions and financial transfers.

	Objectives	Timeframe	Accomplishments/Status
1	Develop CARS application that will eliminate data transfer on paper, and will provide online security and transaction accountability.	01-03	Initial cost justification has been completed, Further analysis is currently being done to determine the optimal system and detailed costs.
2	Develop document management system to reduce the dependency of paper documents.	03-05	Feasibility study currently being completed.
3	Provide on-line forms, policies, procedures, and information to employees and public, via the Internet or Intranet, to eliminate use of outdated information.	99-01	Lotus Notes (BIAB) is being implemented first quarter 2000.

Goal: 4 Position the DOT for the future by implementing, upgrading, developing and maintaining applications with a focus on system modernization.

	Objectives	Timeframe	Accomplishments/Status

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Goal: 4 Continued....

	Objectives	Timeframe	Accomplishments/Status
1	Evaluate all application change requests for the feasibility of modernizing the user interface, or re-engineering the application	Ongoing	
2	New application development will provide users with Graphical User Interfaces (GUI), and will include utilities for integration of data to desktop applications.	Ongoing	
3	New application development will utilize relational databases and open systems development to insure compatibility with emerging technologies.	Ongoing	
4	New application development will utilize databases and applications that are Web enabled, or can be easily converted to a Web enabled application.	01-03	
5	Analysis will be completed to determine the optimum desktop suite, which will allow seamless exchange of data with external agencies and public customers, and will provide the best overall benefit to the DOT.	01-03	Analysis will be completed this biennium.

Goal: 5 Meet the needs required by changes in business processes, government regulations and technological growth.

	Objectives	Timeframe	Accomplishments/Status
1	Implement technology that will improve roadway safety to the public and highway maintenance operations.	Ongoing	
2	Educate the users, and maximize their ability, through tools and training, to get information and perform the tasks required complete their assigned duties.	Ongoing	
3	Implement new technology so that we are compatible with the industry or other government agencies. However, we will insure the technology is proven to minimize the risk to the DOT	Ongoing	
4	Implement new initiatives or system changes to keep us compliant with all government regulations.	Ongoing	

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
100 Appl Support/Maint	1	Maintenance/Base	Ongoing					
-Responsible for support and maintenance of all DOT business applications identified in the Significant Business Applications Table of this IT Plan. -Reviews all system problems and initiates corrective action as necessary. 2001-2003 estimate is less than 99-02 because costs were shifted to activity 200 LAN/WAN Network support. -Reviews all system change requests, evaluates necessity and practicality, and completes or supervises the necessary changes.					**IT PLAN ESTIMATED COST**	$8,184,135	**$5,646,029**	$5,928,327
					BASE BUDGET REQUEST		**$5,646,029**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

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Activity Continued...

100 Appl Support/Maint 1 Maintenance/Base Ongoing

-Provides support for a large number of small applications including DOT developed systems and purchased systems.
-Responsible for systems analysis prior to development of projects, system testing, documentation and user training.
-Provides strategic planning support to DOT Divisions/Districts for the development of Business Plans and IT Plans.

Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
101 ELEC DOC MGT/FORM AU	5	New Initiative	07/2001	06/2005			
IT PLAN ESTIMATED COST					$111,200	**$659,765**	$917,631
BASE BUDGET REQUEST						**$659,765**	
OPTIONAL BUDGET REQUEST						**$0**	
BUDGET NONAPPROPRIATED						**$0**	

Large Establish an Electronic Document Management System (EDMS) for the Department of Transportation that would allow files, created both internally and externally, to be electronically stored, indexed, and retrieved. The system will include document imaging capabilities. Naming conventions and retention schedules are also a part of the project's scope. A document management system would be implemented in the Drivers License Division the 01-03 biennium, and the implementation for the rest of the DOT would occur in the 03-05 biennium.

Costs for the 1999-01 biennium were for a feasibility study conducted by an consultant.

Develop on line forms for high use processes which integrate user data to mainframe applications. Some of the specific forms are the employee timesheet, purchase order, claim for payment.

Cost includes the addition of 1 IT staff position for both 01-03 and 03-05.

Justification:

1) Enhanced searching capabilities.
2) Documents received hard copy can be routed electronically.
3) Retention schedules can be enforced via the system.
4) Standard naming conventions will be established and enforced.
5) Easier retrieval of documents.
6) Setup of file folders in a top-down approach to catagorize documents allows documents of a similar subject to be stored together.
7) Security for electronic documents can be controlled much easier than paper documents can be.
8) Reduced duplication of paper files as electronic access will be given to staff.
9) Increased work efficiency; easier to route documents for review, etc.
10) Will reduce the number of copies currently being made on copy machines.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
102 SR22/26 Elect Filing	18	Enhancement/Upgrade	07/2001	06/2002				
					IT PLAN ESTIMATED COST	$0	**$54,600**	$5,400
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Program modifications which will allow for the electronic filing of SR22/26 insurance filings from the major insurance providers. Application would utilize the AAMVAnet network and would require modifications to existing mainframe programs and network transactions.

This activity will be completed in th 1999-2001 biennium using base operations dollars.

Justification:

Electronic filing would eliminate the need for the paper documents and required input by DL&TS staff. This is not a new procedure as there are states which have already implemented the process. The biggest issue is whether of not we have the insurance carriers with the volumes to justify the program costs. 10% of one FTE savings should be realized.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
103 Motor Carrier Sy Rpl	11	New Initiative	07/2001	06/2003				
					IT PLAN ESTIMATED COST	$0	**$139,600**	$62,800
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Develop a replacement for the Interstate Reciprocity Program (IRP)/Interstate Fuel Tax Agreement (IFTA) /Single State Registration System (SSRS) motor carrier systems.

Justification:

The current TR2 system was developed in 1982 and has become increasingly difficult to maintain by ITD and is in need of a rewrite into a DB2 or Oracle database. A rewrite will also provide for the capability of joining the IFTA/IRP Clearinghouse which would provide for the electronic filing of the monthly transmittals.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
104 SSN Verification	23	New Initiative	07/2003	06/2004				
					IT PLAN ESTIMATED COST	$0	**$0**	$64,040
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Creation of an on-line verification of a driver's Social Security number by electronically checking with the Social Security Administration's database via the AAMVAnet network. This would insure compliance with the Immigratio Reform Act. The interface, network traffic etc. would be handled in the same manner as the current Commercial Drivers License/Problem Driver Pointer System (CDLIS/PDPS) inquiry and response system. Cost are currently at $.03 per inquiry. Costs would drop on an annual basis as only one verification would be required per driver and a 'flag' set.

Justification:

Current system is a manual validation of the driver's Social Security Number which can be falsified. The Federal government is increasing it requirements on verification.
The Federal government may require that a verified Social Security number is on the drivers license, encrypted or un-encrypted. This system would insure that every Social Security number was verified. This system would insure that every Social Security number was verified.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
105 E-Commerce	9	New Initiative	07/2001	06/2003				
					IT PLAN ESTIMATED COST	$0	**$203,603**	$0
					BASE BUDGET REQUEST		**$203,603**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Development of E-Commerce application solutions for various DOT systems. Examples include Motor Vehicle renewal payments, driver record abstract requests, motor carrier credentials (renewals, weigh increases, supplements), crash reports, duplicate licenses, engineering plans and bids.

Justification:

These applications would improve current services by giving the public the ability to obtain services via the internet, which would eliminate the need for contacting the department either by phone or in person.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
107 GPSwith AVL	20	New Initiative	07/2003	06/2004				
50 new snow plows would have Global Positioning Systems (GPS) with Automated Vehicle Locators (AVL) installed that could be used for tracking vehicles.					**IT PLAN ESTIMATED COST**	$0	**$0**	$94,875
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Justification:
In cases of emergencies which require plows to escort another emergency vehicle, the nearest snow plow could easily be located. If the public would call a complaint where a section of road is blocked or nearly blocked, the nearest plow could be sent to correct the problem. This proposal would be to use this on 50 snow plows.
Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
110 E-Learning/Tracking	19	New Initiative	07/2001	06/2002				
A system would be purchased to provide electronic delivery of training to DOT staff. This could encompass training via the Web and/or Computer Based Training (CBT) courses. A system would be developed to track employee training. Training courses would be entered into the system. Employees would be able to register for classes on-line. The system would generate reports, such as training by classification. The system would also allow for HRD to develop and track a career training 'ladder' for employees based upon their classification as well as management responsibilities.					**IT PLAN ESTIMATED COST**	$0	**$52,040**	$7,760
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Justification:
E-Learning Benefits
1) Training can be taken when convenient for the employee and at the employee's pace.
2) Reduced cost of training (ie no travel expenses, no instructor fees, no room rental).
3) Faster delivery of training to a wider audience.
4) Provides a flexible framework that can handle any content (i.e. audio, video, text, etc.).
5) Should the maintenance sections become Internet enabled, e-learning would be a cost-effective method for delivery of training.
6) E-learning allows for a virtual classroom with 'live' collaboration.
Training Tracking Benefits
1) Stream-line training process.
2) Provide decision making support.
3) Help to ensure employees are receiving the necessary training.
4) Training 'ladder' designed specifically for each employee.
Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
113 Gov Acct Std Board34	17	New Initiative	07/2001	06/2003				
					IT PLAN ESTIMATED COST	$0	**$200,000**	$0
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

There may be a requirement of all states to develop and maintain cost of infrastructure such as roads and bridges. It is uncertain at this stage where the data is located or if it is even available because no guidelines have been written for reporting purposes. Minor or major modifications may be required on the existing finance or roadway inventory systems.

Justification:
This may be required by GASB and supported by OMB. The system will provide the total value of our roads and bridges.
Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
115 DDLS Replacement	10	Enhancement/Upgrade	01/2001	06/2003				
					IT PLAN ESTIMATED COST	$67,472	**$67,000**	$14,000
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Develop a Request for Proposal, vendor selection and implementation of a new digital imaging system for the issuance of driver licenses, permits and identification cards. Full conversion and install required by 07/03. Contract terms would be for either 4 or 5 years. Estimated cost of $2.50 per card.

This activity will be completed in the 1999-2001 biennium from base operation dollars.

Justification:
The current 7 year vendor contract expires 12/31/02. Because of the age of the equipment and technological advances in both hardware and software a new system will benefit both the DL employees and the general public. Additional emphasis needed in the expanding of the use of the 2D bar-code, speed of the issuance and greater accessibility of the stored images.
Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
116 DL Auto Tst Sys Repl	6	Enhancement/Upgrade	07/2001	06/2003			
IT PLAN ESTIMATED COST					$0	**$472,480**	$43,200
BASE BUDGET REQUEST						**$472,480**	
OPTIONAL BUDGET REQUEST						**$0**	
BUDGET NONAPPROPRIATED						**$0**	

Large The current automated drivers license testing system needs to be replaced. Systems may be leased or purchased, however a purchase would appear to be the best financial option. The lease cost would be $336,000 per biennium with a 4 year lease.

Justification:
The current automated testing equipment (JUNO) is 9 years old and it is becoming increasingly difficult to maintain the hardware and software. There are continued failures of the system throughout the State. Purchasing or leasing a new testing system would allow moving from a DOS environment to Windows environment, and an upgrade of all hardware.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
118 RIMS Milestone	13	Enhancement/Upgrade	07/2001	06/2005			
IT PLAN ESTIMATED COST					$281,536	**$150,000**	$150,000
BASE BUDGET REQUEST						**$0**	
OPTIONAL BUDGET REQUEST						**$0**	
BUDGET NONAPPROPRIATED						**$0**	

Large The existing Milestone program is being studied to determine the degree of enhancement or development effort required. The effort may range from minor modifications to the existing systems, to a major redevelopment of a client server application. The estimate is based on a major redevelopment.

The Milestone program is a process which provides division managers with basic information necessary to estimate their division work load, reach work scheduling decisions, and coordinate project activities to ensure proper coordination of the total development schedule and to attain the goals and objectives set forth in the Statewide Transportation Improvement Program. The Milestone program provides for the effective scheduling and monitoring of an endless number of activities which are required prior to the actual letting of a construction contract. It creates a communications relationship between divisions which allows them to identify delays in activities which would lead to projects not meeting the bid deadline.

Justification:
The perceived benefits which could come from changing the Milestone program would be the addition of person-hours to each activity to help divisions more effectively plan work loads, a system-wide alert of overdue activities to better notify other affected users, and an improved and easier to use system for all users. Overall, this system drives the project management, and has to meet the needs of this task.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
120 Priority Lst Sys Upg	14	Enhancement/Upgrade	07/2001	06/2003			
				IT PLAN ESTIMATED COST	$0	**$151,404**	$0
				BASE BUDGET REQUEST		**$0**	
				OPTIONAL BUDGET REQUEST		**$0**	
				BUDGET NONAPPROPRIATED		**$0**	

The business function for scheduling construction projects has changed. The past practice had projects scheduled by funding type which is too broad of a blanket to plan and schedule highway projects. The new process will schedule projects by work type. Work types are a more detailed description of the work needed on the roadway.
Likewise, scoping of projects has significantly changed and will need to be enhanced. This would give planners a better picture of what the scope of the project will be before it goes into the design stage.

Justification:

The benefits for enhancing/upgrading the existing Priorities system will be as follows: The new process will result in being able to identify more low-to-medium cost highway projects. By being able to easily identify these types of projects, the DOT will be better able to increase the overall quality and perhaps quantity of highway projects completed. Planners will have a better handle on the type and amount of work needed on our highway system. By breaking down needs into work types, planners will be better able to analyze, sort and prioritize highway projects. Thus, resulting in a better highway system for the state of North Dakota.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
122 PATHWAY Unit Supt	24	Enhancement/Upgrade	07/2001	06/2003			
				IT PLAN ESTIMATED COST	$70,000	**$70,000**	$70,000
				BASE BUDGET REQUEST		**$0**	
				OPTIONAL BUDGET REQUEST		**$0**	
				BUDGET NONAPPROPRIATED		**$0**	

The hardware that is used in the Pathways Van to collect data, and the hardware used to analyze the data needs to be upgraded.

Justification:

- The equipment used to digitize the video, and to view the digitized video will need to be upgraded to improve the image response time and make the process as efficient as necessary.
- The video collected by the PATHWAY Van will be digitized this year, and be made available to engineers for:
-Development of project concept reports, utilizing all available data for project justification in addition to downloading images to be included in documentation.
-Data verification ie; does a particular roadway sign exist, does striping exist, does a turning lane exist, in what kind of condition is it?
-Images of several roadways could be viewed all at once making a project selection decision more timely, versus traveling to each of the different sites which may be several hundred miles apart.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
125 CARS System Dev	7	Enhancement/Upgrade	10/1999	06/2003			
Large				**IT PLAN ESTIMATED COST**	$166,592	**$473,840**	$243,304
				BASE BUDGET REQUEST		**$473,840**	
				OPTIONAL BUDGET REQUEST		**$0**	
				BUDGET NONAPPROPRIATED		**$0**	

A new system will be developed to replace our existing dos-based CARS System.
The system allows the project managers and inspectors of a construction project to record the construction activitys as they occur. It generates reports for haul sheets, change orders, paving reports, piling reports, and force accounts as the data is collected. The system must generate progress reports, progressive estimates and claim for payments from which the contractor will be paid. The activity records will be used to audit the project and create a quantity book report. The system will have the capability to fill in materials testing forms. The record keeping data and material testing results should be transferred electronically from field office to district office, material lab and/or central office and back again if necessary. In addition to the DOT, this system will be used by city, county and consultant engineers for record keeping of projects processed by the DOT.

The 03-05 cost includes one additional IT staff required for application support.

Justification:

The current system was written in Dbase III in 1984 and is a stand alone, paper based system with an enormous amount of redundant data entry. This system also requires a DOS environment. This system also has limitations that are effecting system and personnel performance. The new system would save time, streamline workflows, and allow data integration.

1999-2001 costs were conduct a feasibility study for the new system.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
126 Enhance Orthophoto	22	Enhancement/Upgrade	07/2003	06/2005			
Large				**IT PLAN ESTIMATED COST**	$0	**$0**	$433,440
				BASE BUDGET REQUEST		**$0**	
				OPTIONAL BUDGET REQUEST		**$0**	
				BUDGET NONAPPROPRIATED		**$0**	

Purchase additional software and hardware to obtain 70 percent Orthophoto backdrop in Highway Plans and obtain an Orthophoto system that will perform more functions than our current system does. This would involve going into softcopy photogrammetry. Softcopy Photogrammetry gives the user the ability to view digital data in stereo and work with a stereo picture instead of line drawings.

Justification:

- There is a need to provide more photo images on I-29 highway projects.
- This would provide a clearer picture on project data. Example of images being used on a project is I29 in Fargo. This has helped show people very clearly, the impact of project designs.
-Softcopy Photogrammetry provides new capabilities, more efficient operations and will allow highways to be designed faster.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
127 Maint Sec Automation	12	Enhancement/Upgrade	07/2001	06/2002			
				IT PLAN ESTIMATED COST	$0	**$46,550**	$46,550
				BASE BUDGET REQUEST		**$0**	
				OPTIONAL BUDGET REQUEST		**$0**	
				BUDGET NONAPPROPRIATED		**$0**	

Provide each DOT Maintenance Section with a desktop computer system with connection to the Internet for accessing radar and weather information. This will include 67 PC's for rural sections and 28 PC's for district sections. The PC's will be provided by using those units which would have normally been salvaged as part of the DOT's replacement cycle. No additional new hardware will be purchased. This would be for dial up access.

Justification:

- Provide up to date radar and weather information
- Access to Maintenance Management System
- Input time sheets and equipment disposals
- Send and receive E-mail
- Receive electronic communication

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date	99-01	01-03	03-05
131 Proj Dev Tools	8	Enhancement/Upgrade	07/2001	06/2003			
IT PLAN ESTIMATED COST					$0	**$349,840**	$73,960
BASE BUDGET REQUEST						**$349,840**	
OPTIONAL BUDGET REQUEST						**$0**	
BUDGET NONAPPROPRIATED						**$0**	

Large Additional CADD workstations and software are required to support the increase in construction projects. The additional workstations will be used by engineers in the district offices. There are presently about 100 design engineers using the CADD systems.

The following design tools are required to enhance the project design process and to improve the quality of the final design. Some of these are stand alone packages, and some are add-ins to existing CADD tools being used.

KLT ATLAS: Our current software stereoplotter data collection system needs to be upgraded to an improved data collection software system.
Global Changer: This CADD add-in package will provide a global origin change of all files selected in a project.
SpecChecker: This CADD add-in package will detect and correct errors to a set of standards automatically.
Rename Plus: This CADD add-in package will provide the user the ability to globally change file names, extensions, directories, full paths and reference file attachments, all while maintaining the integrity of the reference file attachment.
Concrete Detailing: This tool will enhance our GEOPAK application by improving our reinforced concrete design capabilities by supporting highly detailed layouts.

GPS Utilization Tool : Two individuals in Design currently use GPS in our preliminary surveys to get control data, target ties, topography, and Digital Terrain Data (DTD) elevations for improvements to highways. Additional software is need for survey & photogrammetry employees as they need the same ability to process and integrate GPS data with conventional total station data and import this data to MicroStation/GEOPAK.

Justification:

The increase in CADD workstations and software is necessary to keep up with the increase workload being driven by Transportation Enhancement Authorization (TEA21) funding requirements.
All of these tools are required to provide DOT engineers with enhanced functionality, increased productivity and the ability to complete projects in a more effective and timely manner.

2003-2005 - Ongoing maintenance costs

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
132 GIS Integration	21	Enhancement/Upgrade	07/2001	06/2003				
					IT PLAN ESTIMATED COST	$0	**$141,841**	$70,000
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Additional copies of GIS software, as well as additional hardware, and upgrades to PC hardware are required to allow better, faster and less expensive access to data. These tools are required for:
* Maintaining links between RIMS data and GIS
* Allow for integration between MicroStation and GIS
* Allowing for Orthophotos or scanned images to be used in GIS
* Linking Digital Video through GIS
* Improving Server/Storage Needs
* Upgrade to software/hardware

Justification:
These tools will enhance the ability of employees to access, analyze and report on data. They will also improve productivity by automating the present process of manual compilation of multiple source data.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
200 LAN/WAN Network Sprt	2	Maintenance/Base	Ongoing					
					IT PLAN ESTIMATED COST	$2,235,473	**$5,340,634**	$5,607,666
					BASE BUDGET REQUEST		**$5,340,634**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Responsible for procurement, installation, administration and support services for the DOT local area network/wide area network (LAN/WAN), personal computers, computer peripherals, and operating systems. Also provides help desk services and support for e-mail applications, and miscellaneous desktop applications. Includes all hardware replacement costs, hardware maintenance costs, software maintenance costs, software upgrades, and software licensing fees.

Increase in 01-03 costs include costs transferred from other activities and rate increases.

Costs for FY 01-03 and 03-05 include a 5% biennial increase plus the addition of one IT staff member for increased support. This staff member will found internally from the existing FTE allotment for the DOT.

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
202 IP Video Teleconfer.	25	New Initiative	07/2001	06/2003				
					IT PLAN ESTIMATED COST	$44,637	**$50,010**	$25,000
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Provide teleconferencing from point-to-point and multi-point connections utilizing existing bandwidth over the LAN/WAN network with Internet Protocol addressing (IP) between NDDOT Central and District Offices.

The system would be implemented through add-on interface video cards internal to existing pc's at a cost of approx. $500.00 per pc.. The system would be significantly enhanced and increase system security by installing and maintaining a conferencing video bridge server. ($15,000.00)

Justification:

Would provide face-to-face communications in addition to data collaboration between desktop applications. Would reduce travel time and maximize employee resources by eliminating or greatly reducing "windshield" time.

Would enhance network maintenance and training activities by assisting the client remotely in manipulating their software and data.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
203 Dsktp Suite Upg/Repl	15	Enhancement/Upgrade	07/2001	07/2002				
					IT PLAN ESTIMATED COST	$0	**$244,338**	$0
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

The desktop suite currently used in the department is Corel WordPerfect Suite 8. This will need to be upgraded in the next biennium. Products under evaluation are WordPerfect Office 2000 and Microsoft Office 2000.

Justification:

1) At some point, vendors stop providing bug fixes and support to prior releases of products.
2) Utilizing a current release of software provides end-users with the latest technological advances, which in turn, should make the end-users more productive.
3) Training on products that are of a current release and are an industry standard is easier to obtain in our geographical area.

Impact on other activities:

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Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
300 Radio Netwk Oper/Spt	3	Maintenance/Base	Ongoing					
NDDOT provides a state wide network for radio communications between NDDOT maintenance, construction and administrative offices. In addition, the NDDOT provides maintenance and communications engineering services to State Radio, Highway Patrol, Facilities Management Division and State Agency Radio System (Oil and Gas and Water Commission). The system consists of 40 strategically located tower sites enabling 99% coverage of the entire state.					**IT PLAN ESTIMATED COST**	$863,006	**$861,423**	$904,495
					BASE BUDGET REQUEST		**$861,423**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
301 Radio Twr Replace	16	Enhancement/Upgrade	07/2001	10/2002				
The NDDOT operates and maintains the state radio communications network for both the NDDOT and other state agencies. Current conditions requires that the NDDOT relocate one of the existing 40 sites to accommodate changing environmental conditions.					**IT PLAN ESTIMATED COST**	$0	**$120,000**	$5,000
					BASE BUDGET REQUEST		**$0**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Justification:
The Bismarck radio antenna site is currently hosted on the roof of the State Capitol Building. Radio signal coverage for the NDDOT and State Radio is not well served by this location due in part to the surrounding topography (hills and valleys) that encompasses the Bismarck area (loss of coverage to the north and west). A location to the northwest of the existing site would provide up to a 30% increase in coverage and would prevent NDDOT from having to build an additional site in the area. Benefits would also be achieved to the appearances of the capitol structure by removal of the 7 existing antennas on the Capitol building roof.

Impact on other activities:

Activity	Priority	Activity Type	Start Date	End Date		99-01	01-03	03-05
400 Telecommunications	4	Maintenance/Base	Ongoing					
Base operations for telephone services in central office, districts, and maintenance sections. Also cellular telephone service for central office, districts, and maintenance sections.					**IT PLAN ESTIMATED COST**	$1,168,362	**$1,116,692**	$1,172,527
					BASE BUDGET REQUEST		**$1,116,692**	
					OPTIONAL BUDGET REQUEST		**$0**	
					BUDGET NONAPPROPRIATED		**$0**	

Total Agency	**IT PLAN ESTIMATED COST**	$13,192,413	**$16,611,689**	$15,939,975
	BASE BUDGET REQUEST		**$15,124,306**	
	OPTIONAL BUDGET REQUEST		**$0**	
	BUDGET NONAPPROPRIATED		**$0**	