Presentation to State Information Technology Advisory Committee (SITAC)

September 20, 2006

Dakota Carrier Network ~ Board Room, Bismarck

Lisa Feldner, CIO
Information Technology Department

Welcome

Jeff Swank, IT Business Analyst
Information Technology Department

Explanation of Ranking Process

Explanation of Ranking Process

- Projects over $250,000 with General Fund dollars
- Agencies completed self-ranking sheet
  - Summary
  - Detail

Explanation of Ranking Process

- Projects will be present in Agency number order
- Project presentation will consist of:
  - 3-minute review by agency
  - 2-minute questions and answer
  - 2-minute to record your ranking of the project
- Results will be tallied and presented for final review
- Results will be published

Jeff Swank, IT Business Analyst
Information Technology Department

Project Ranking

Secretary of State
Jim Silrum – Deputy SOS

Migrating Applications to Secretary of State Knowledge Base (SOSKB) – Phase 2

Migrating Applications to SOSKB – Phase 2

- Project Overview
  - SOSKB built by NC SOS & used in 15 states
  - Customize SOSKB for ND requirements
  - Migrate SOS data from AS/400 to SOSKB
- Project Benefit
  - E-Gov services in SOSKB – None presently
  - 30% of customers will use E-Gov immediately
  - 70% of customers will use E-Gov soon after
  - More efficient use of SOS staff members

Migrating Applications to SOSKB – Phase 2

- Impact of delay
  - E-Gov services needed now
  - Current software – too costly to improve
  - SOS staff will no longer keep up with work
- Summary
  - Phase 1 is changing UCC to SOSKB
  - Phase 2 will change Bus. & Lic. to SOSKB
  - Customers need E-Gov services now
  - Customer benefit and ROI will be immediate

Migrating Applications to SOSKB – Phase 2

- Questions?

Migrating Applications to SOSKB – Phase 2

- Ranking

ITD / Enterprise Architecture
Nancy Walz

Business Intelligence Initiative

Business Intelligence Initiative

- Project Overview
  - EA study team recommendation
  - Toolset proof-of-concept planned
  - Kick start a competency center – 2 GF FTE
  - Methodology, best practices, governance, data stds
- Project Benefit
  - Consistent, coordinated approach
  - Less reliance on vendors
  - Knowledge sharing, training opportunities
  - **More successful BI projects!**

Accuracy + Access + Analysis = Intelligence

Business Intelligence Initiative

- Impact of not doing
  - False starts / rework
  - Independent efforts
  - Barriers to information sharing
- Summary
  - Better to do it right than do it over
  - General funds needed up front to build the framework

Accuracy + Access + Analysis = Intelligence

Business Intelligence Initiative

- Questions?

Accuracy + Access + Analysis = Intelligence

Business Intelligence Initiative

- Ranking

Accuracy + Access + Analysis = Intelligence

Office of State Treasurer

Kelly Schmidt, State Treasurer

Tax Distribution Re-write

Tax Distribution Re-Write

- Project Overview
  - Replaces an antiquated system (1970's)
  - Distributes tax dollars to over 500 political subdivisions

- Project Benefit
  - Accuracy and Functionality
  - Time and Cost efficiency
  - Adaptability to future needs

Tax Distribution Re-write

- Impact of delay
  - System Reliability
  - Limited Service Providers
  - Expensive to Update & Maintain
  - 2 year project…we need to start now.
- Summary
  - “This is a high risk system critical to the State Treasurer’s Office.” 2003-05 State Audit report.

Tax Distribution Re-write

- Questions?

Tax Distribution Re-Write

- Ranking

Department of Public Instruction
David Massey, Asst Superintendent

Foundation Aid

Foundation Aid

- Project Overview
  - The Governor's Commission on Education Improvement is currently studying the State Aid Payment System for K-12 education, which calculates entitlements and manages the monthly payments to school districts
  - The preliminary results indicate changes in the funding formulas which will require a rewrite of the existing 11-year old Mainframe system
  - Move to utilize data in a relational database
- Project Benefit
  - Modernize the current payment system by integrating with ORS relational database system
  - Flexible reporting
  - Flexible Payment Management System to meet further legislative changes

Foundation Aid

- Impact of Delay
  - The ability to distribute payments to schools on a timely and efficient basis will be compromised
  - Failure to implement the project may result in an interruption in cash flow to school districts
- Summary
  - Anticipated short period to implement partial system
  - Project Management has been included in the costs
  - Additional Cost Risks identified

Foundation Aid

- Questions?

Foundation Aid

- Ranking

Department of Public Instruction

David Massey, Asst Superintendent

ESPB Coming Off Mainframe

ESPB Coming Off Mainframe

- Project Overview
  - ESPB Moving Off Mainframe
  - Tight Integration of Mainframe Interfaces
- Project Benefit
  - Accuracy & Availability of Data
  - Continue to Share Data With ESPB Without Complexity

ESPB Coming Off Mainframe

- Impact of Delay
  - Complex Interfaces between ORS, Mainframe & ESPB Needed
  - Duplicate Data Reporting
- Summary
  - Coordination Between Agencies is Preferred

ESPB Coming Off Mainframe

- Questions?

ESPB Coming Off Mainframe

- Ranking

Department of Human Service
Jennifer Witham

Medicaid Systems Project Phase II

Medicaid Systems Project – Phase II

- Project Overview
  - Replace current Medicaid Management Information System (MMIS), Pharmacy Point of Sale (POS), and Decision Support System (DSS)
  - Current MMIS is 28 years old, very rigid and unstable
- Project Benefit
  - Increased services to provider community
  - Enable recipient centric service delivery
  - Flexible architecture and improved system management capabilities

Medicaid Systems Project – Phase II

- Impact of delay
  - Current system's limitations will continue to make it difficult to meet federal and state mandated program changes
  - Manual review processes will continue to cause unnecessary delays in claims payment
  - By not moving forward with current procurement, the Department faces a 12-18 month reprocurement process and risks losing Centers for Medicare and Medicaid Services enhanced funding
  - Additional cost impact of mainframe hosting environment
- Summary
  - It is in the State's best interest to move forward with the current replacement contracts
  - Ongoing system management will be controlled through state resources

Medicaid Systems Project – Phase II

- Questions?

Medicaid Systems Project – Phase II

- Ranking

Department of Human Services
Jennifer Witham

Child Welfare System Front End Redesign

CWS Front End Redesign

- Project Overview
  - Replace current user interface
  - Three separate systems will be integrated into a single presentation layer
  - Maintain back end system design/infrastructure
- Project Benefit
  - Improved planning case management capabilities to assist families in addressing all major life areas
  - Reduction of redundant data management and ineffective workflow processes
  - Enhanced reporting capabilities

CWS Front End Redesign

- Impact of delay
  - County workers will continue to manage treatment plans across three disparate systems
- Summary
  - Very cost effective
  - Improved work processes without system replacement

CWS Front End Redesign

- Questions?

CWS Front End Redesign

- Ranking

Department of Human Services
Jennifer Witham

Client Information Sharing System

Client Information Sharing System

- Project Overview
  - Single client view across DHS services and programs
  - Implementation of a Master Client Index (MCI)
  - Creation of client eligibility “hub” in 2007-2009
- Project Benefit
  - Increase ability to identify utilization trends in client base
  - Prepare DHS for emerging e-Health initiatives
  - Base infrastructure needed to create eligibility “service” – extendable to other DHS systems

Client Information Sharing System

- Impact of delay
  - Required for eligibility systems interface to new MMIS
  - MCI will enhance utility of data warehouse and business intelligence implementation
- Summary
  - Currently eligibility information is stored in four separate systems – will create single view
  - Extendable architecture to incorporate all client-based systems

Client Information Sharing System

- Questions?

Client Information Sharing System

- Ranking

Break
Time

Jeff Swank, IT Business Analyst
Information Technology Department

Project Ranking

Department of Emergency Services presented by:
Col. Bryan Klipfel, Superintendent, North Dakota Highway Patrol

Computer Aided Dispatch (CAD)

Computer Aided Dispatch (CAD)

- Project Overview
  - Computer Aided Dispatch allows end-to-end tracking of an occurrence from the moment a call is received through deployment of resources, investigation, tracking, analysis and reporting.
- Project Benefit
  - Electronic Dispatch
  - Officer Safety
  - Disaster Response

Computer Aided Dispatch (CAD)

- Impact of delay
  - Inability to utilize needed mobile data functionality
  - Increased costs of maintaining fragmented databases
  - No reduction in workload
- Summary
  - CAD would provide fire, EMS and law enforcement with efficient dispatch of 911 emergency calls. It will also help ensure a high quality of service to the citizens of North Dakota.

Computer Aided Dispatch (CAD)

- Questions?

Computer Aided Dispatch (CAD)

- Ranking

Department of Emergency Services
Greg M. Wilz, Director, Division of Homeland Security

Emergency Alerting System (EAS) Satellite Notification

Emergency Alerting System (EAS) Satellite Notification

- Project Overview
  - EAS satellite notification provides radio and television broadcasters the ability to receive and transmit emergency messages via satellite
- Project Benefit
  - Satellite technology vs. radio relay
  - User friendly activation and dissemination of emergency messages
  - A system that works for all entities to protect the citizens in North Dakota

Emergency Alerting System (EAS) Satellite Notification

- Impact of delay
  - Potential for loss of life and property damage
  - Continued failures in current system
  - Loss of public confidence in system
- Summary
  - Providing warning systems to citizens in North Dakota is essential to public health and safety
  - The current system does not have the capabilities required to perform the needed functions of public health and safety

Emergency Alerting System (EAS) Satellite Notification

- Questions?

Emergency Alerting System (EAS) Satellite Notification

- Ranking

Department of Emergency Services

Greg M. Wilz, Director, Division of Homeland Security

Grants Management Software

Grants Management Software

- Project Overview
  - The number of grants and the dollars associated with the grants require detailed recordkeeping which is not provided in the PeopleSoft system.
- Project Benefit
  - Accurate tracking and monitoring of grants
  - User friendly application and reporting by grant recipients in a true web-based environment
  - Detailed reporting capabilities and tracking of grant performance measures

Grants Management Software

- Impact of delay
  - Excessive personnel costs in awarding, tracking, monitoring, and closeout of grants
  - Additional reporting requirements for recipients of grant funds
  - Potential loss of funding
- Summary
  - A user friendly system will enable State and local entities the best opportunity to fund projects and address the needs of North Dakota
  - The current system does not have the capabilities required to perform the needed functions of grants management

Grants Management Software

- Questions?

Grants Management Software

- Ranking

Department of Emergency Services
Russell R. Timmreck, Director, Division of State Radio

Additional State Radio Towers

Additional State Radio Towers

- Project Overview
  - The statewide infrastructure of radio towers that serve State Radio and the Department of Transportation have identified areas of inadequate coverage. Following the completion of the migration from analog to analog/digital radio network, testing will determine the areas needing additional tower coverage.
- Project Benefit
  - Local law and first responders will have radio coverage in areas that are lacking towers
  - A statewide interoperable communication system provides an all encompassing structure for the public health and safety of all citizens in North Dakota

Additional State Radio Towers

- Impact of delay
  - Law enforcement officer safety
  - Potential loss of life
  - Costs in the future will continue to grow
- Summary
  - A statewide interoperable communication system provides an all encompassing structure for the public health and safety of all citizens in North Dakota
  - The current system has areas that lack coverage and must be addressed

Additional State Radio Towers

- Questions?

Additional State Radio Towers

- Ranking

Department of Corrections and Rehabilitation
John Hagan MD, Kathleen Bachmeier RN MSN

DOCR/Prison's Division Inmate Medical System

Inmate Medical System

- Project Overview
  - Electronic medical record
  - Physician order entry with pharmacy interface
  - Real time medical communication between prison and county jails regarding inmate medical issues.
- Project Benefit
  - Multiple providers may have assess at the same time.
  - Current medical information less risk of errors
  - Real time interaction between pharmacy, nurses and physicians

Inmate Medical System

- Impact of delay
  - Lost or misplaced records
  - Delay in current vital information of charts
  - Legal defence problems
  - Increase costs of operating current medical records
- Summary
  - Tripled Inmate population past ten years
  - Movement of inmates within corrections
  - Impact on Counties and Prison Division stakeholders.
  - Recommendations of ACA, Institute of Medicine, Auditors, Risk Prevention.

Inmate Medical System

- Questions?

Inmate Medical System

Ranking

Department of Corrections & Rehabilitation

Dave Krabbenhoft, Director of Finance & Administration

Integrate Field Service Operations into ITAG

Integrate Field Service Operations into ITAG

- Project Overview
  - The Docstars system was created in-house in 1998 to track and manage all offenders on parole or probation in the state, including interstate compact offenders. The system was built internally by the DOCR I.T. division at a cost of $30,000. Much of that cost was attributed to server hardware and server software. DOCSTARS was built for ease of use and to satisfy the specific needs of field services. In July 2001 the agency investigated the feasibility of moving all agency offender management functions to a centralized system.
  - The logical choice for centralization was to move field service operations from Docstars to the ITAG system. The ITAG system is the core system that provides offender management for all DOCR inmates, including juveniles located at YCC and in the community (community supervision). ITAG is a generic offender management system that provides for many of the core functions of managing inmates. ITAG does not provide for all the special unique capabilities that are by nature specific to ND Parole and Probation (Field Services) operations. ITAG would fulfill 60% of ND Parole and Probation needs, but would require considerable customization to support current operations.
  - Recent audit by state auditors office recommends Docstars consolidation with the ITAG system.
- Project Benefit
  - There will be efficiencies gained, but any specifics regarding Return of Investment (ROI) in such an endeavor is not available.
  - Offers a ‘Centralized depository of both field services offenders (community) and inmate (institution) information.
  - Increased capabilities for field services operations

Integrate Field Service Operations into ITAG

- Impact of delay
  - Eventually Docstars will require a rewrite or integration with ITAG, the agency has just upgraded Docstars infrastructure (servers) which will provide another 5 years of utilization.
  - No impact to operations at the current time unless the scope of Docstars utilization is expanded beyond its operational capabilities due to business or legislative mandate.
  - Current stakeholders not impacted.
- Summary
  - The agency needs to yet define the true value of centralization, since moving to a centralized offender management system will increase the cost of managing offenders. Centralization is key to realizing efficiencies when implemented in locations with large prison populations, whether these gains can be realized for the ND Department of Corrections has yet to be determined.
  - Additional funding would also be needed in the event the system needed to be enhanced or modified to support new legislative or political processes. A prime example of the dynamics of Field Service activity include ongoing initiatives with sex offenders and their reporting and supervision requirements. Changes in any aspect of community supervision will most likely require tweaking or operational changes with the Information Technology that tracks and manages the data.

Integrate Field Service Operations into ITAG

- Questions?

Integrate Field Service Operations into ITAG

- Ranking

Mike Ressler, Deputy CIO
Jerry Fossum, Director, Telecommunications
Nancy Walz, Division Director, IT Policy & Planning
Mark Molesworth, IT Policy & Planning

SITAC Business

Mark Molesworth, Enterprise Project Management

PMUG Recommendations

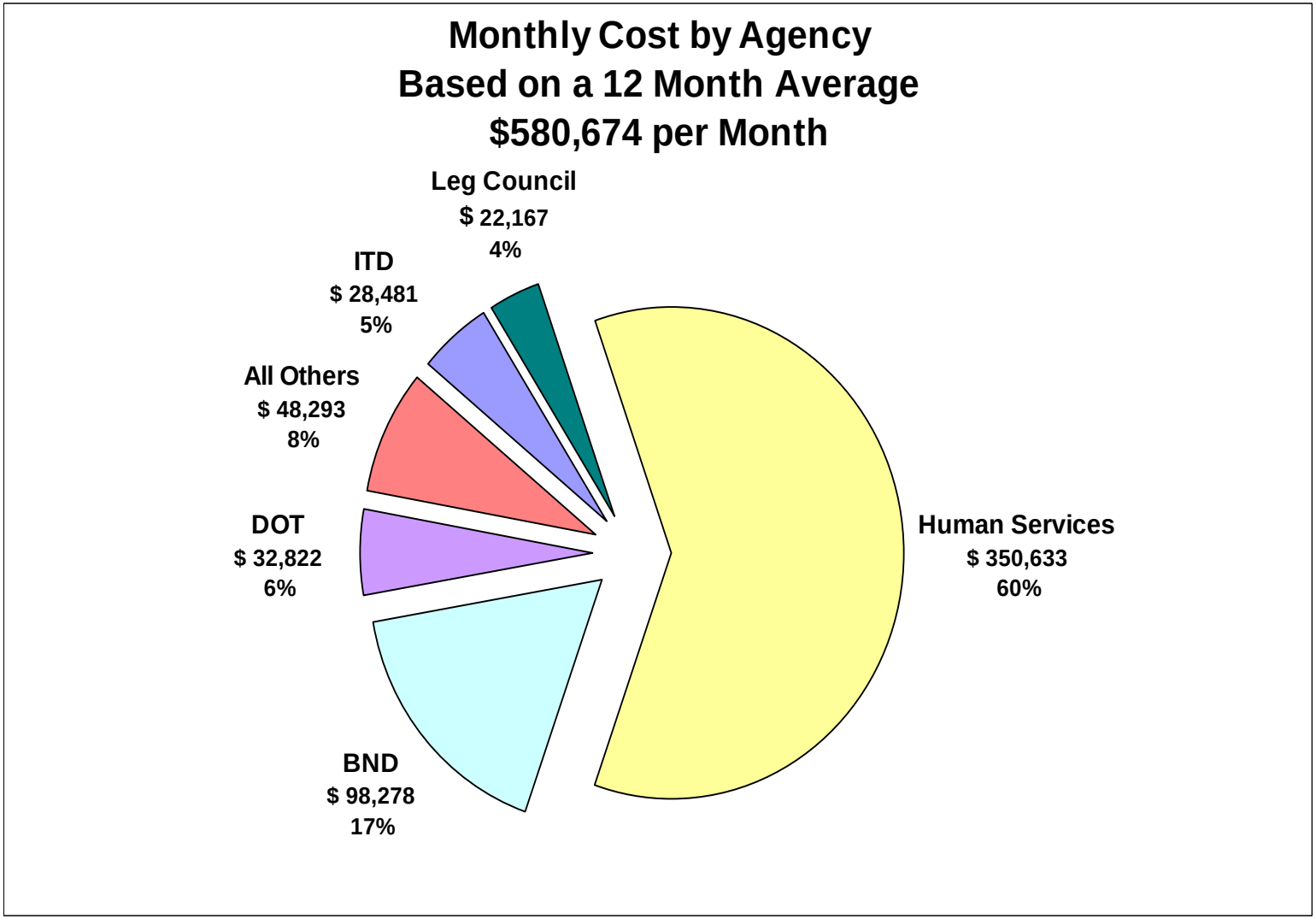
Mike Ressler, Deputy CIO

Mainframe Migration

Reasons for the Mainframe Migration Project

- Reduce operating cost by $1,900,000 per year.
- Technical support staff is difficult to find and existing ITD staff is eligible to retire in the next 5 years.
- All new agency applications are being written to run on platforms other than the mainframe system. The last applications on the system will be required to pay for the high costs of operating the mainframe.

Monthly Cost by Agency



Mainframe Migration Project Budget

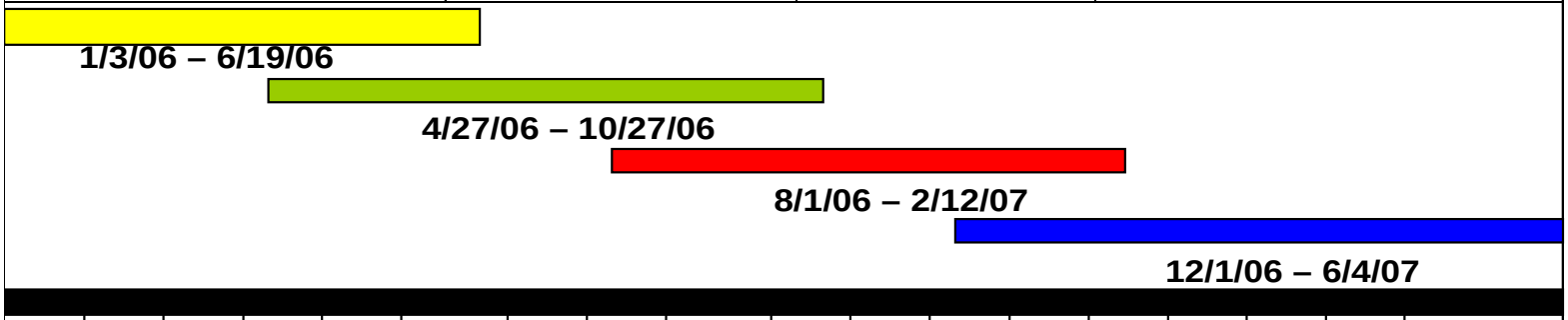
New Hardware / Software	$ 3,368,274
Consultants / Labor	$ 4,903,000
Total	$ 8,271,274

Borrowed $6,000,000 in February 2006

(from Bank of America at 3.57%)

Note will be paid off in December 2010 by savings from decreased operating costs

Original Migration Phase List



Phase I	Phase II	Phase III	Phase IV
Office of Attorney General	North Dakota Game and Fish	Department of Transportation	Department of Human Services
Bank of North Dakota	Office of the State Treasurer	Highway Patrol	Office of the Secretary of State
Office of Insurance Commissioner	NDPERS	State Radio	
Office of Management and Budget	Job Service North Dakota	North Dakota University System	
North Dakota Department of Health	ITD – Part 2	Department of Public Instruction	
ITD – Part 1	Department of Human Services – Stand Alone Applications		
Workforce Safety and Insurance			

Jan 06	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June 07

Reasons for the Delay

- Need for 3 Computer Environments was Delayed due to State Resources being Over-Committed
- Development of New Security Processes
- Process Development for Software Developers and Computer Operations Staff

Mainframe Migration Project

Cost Impact Resulting From Delay

Additional Costs will be Covered from the Contingency Line Set Aside for this Project

Impact of Change Statements	Cost
Project Extension – Software AG	$0
Building 3 Computer Environments	75,000
Security Enhancements	50,000
Software Development & Operations	13,000
Consultant Travel	80,000
Batch Software Evaluation	5,000
Total	$223,000

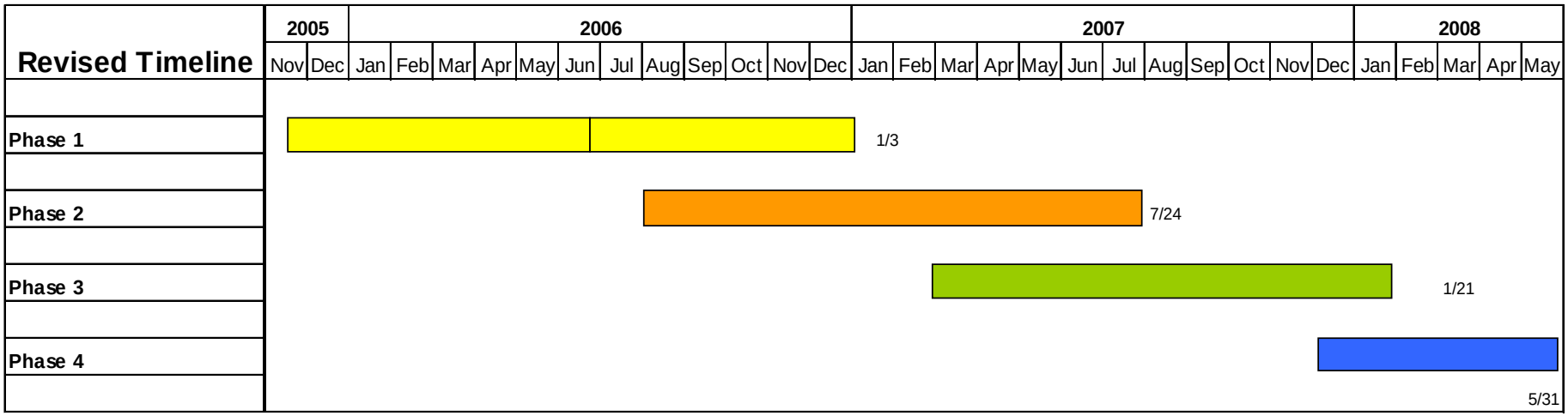
Revised Budget

New Hardware / Software	$ 3,368,274
Consultants / Labor	$ 4,903,000
Total	$ 8,271,274

Savings from removal of mainframe will be delayed 1 year

Note will be paid off in December 2011 from savings in decreased operating costs

Revised Migration Phase List



Phase 1	Phase 2	Phase 3	Phase 4
Office of Attorney General	North Dakota Game and Fish	Department of Transportation	Department of Human Services
Bank of North Dakota	Office of the State Treasurer	Highway Patrol	Office of the Secretary of State
Office of Insurance Commissioner	NDPERS	State Radio	
Office of Management and Budget	Job Service North Dakota	North Dakota University System	
North Dakota Department of Health	ITD – Part 2	Department of Public Instruction	
ITD – Part 1	Department of Human Services – Stand Alone Applications		
Workforce Safety and Insurance			

Corrective Measures

Reviewed Schedule and Adjusted Dates

Vendor Added Additional Resources to Project – Fixed Bid

Analyzing a New JCL Tool - Save on Staff Training Time and Provide a Smoother Implementation

Jerry Fossum, Directory Telecommunications
Information Technology Department

StageNet Infrastructure Services 2006

Why?

- Expected 9% price increase over three years
- E-rate requirements
- Purchasing rules
- Need more capacity

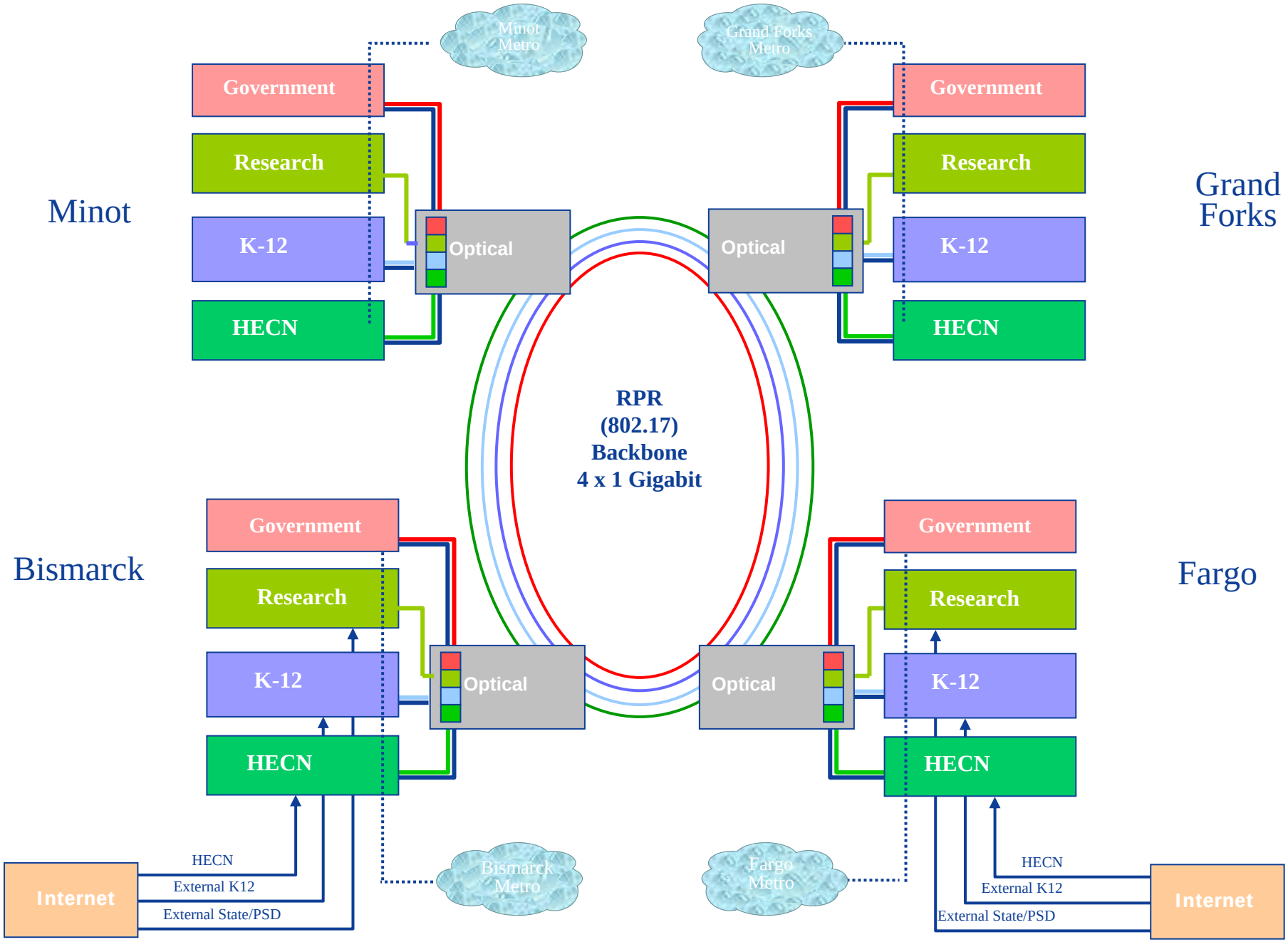
STAGEnet 2006 – Project Overview

- Provide network infrastructure for the next 7-10 years.
- Address goals and business requirements for:
  - increased bandwidth
  - reliable and survivable service
  - higher level of security and privacy
  - Increased mobility
  - flexible network access
  - stable cost

STAGEnet 2006 –Transport - Backbone

- Backbone
  - ✓ RPR (802.17) Technology
  - ✓ 4 1Gb ethernet ports/node
  - ✓ 4 Network Nodes
  - ✓ Co-Location with Provider
  - ✓ Metro Fiber Interconnects
  - ✓ Term of 7 to 10 Years

STAGEnet 2006 Backbone



Implementation

- Implementation tasks have begun.
- The release of the RPR backbone was originally scheduled for June 12th.
  - Due to supplier delays, it was tentatively moved to August 4th and then continually shifted until August 28th.
  - Had hoped to migrate K12 and Higher Education during the summer months to minimize the impact to those entities.
  - This extends our schedule significantly as we have fewer windows in which to perform the work.
  - It also caused us to change the approach in the migration regarding the order of the changes and required a lot of rework time.

Implementation cont.

- Fargo Facilities – The original schedule had the Fargo facilities ready for move in by May 30th. This included racks, power, and fiber cabling. The racks were not ready for install until mid-July and power was not available until August

What is Being Done?

- Weekly meetings with DCN to discuss progress.
- Monthly meetings with State Gov't, Higher Ed. and K-12 to discuss progress.
- Revised the migration plan to reflect the current issues
- Currently testing the network.
- Should start Migration next week

Nancy Walz, Directory Policy and Planning
Information Technology Department

Review State IT Plan Goals & Objectives

Jeff Swank, IT Business Analyst
Information Technology Department

Review Project Ranking Results

Thank you!