

Presentation to the IT Directional Meeting

**June 19, 2013
Brynhild Haugland Room
State Capitol**



Agenda

Administration: Mike Ressler

Lisa Feldner New Position; Legislation Update; ITD Office Location Move

Enterprise Services: Gary Vetter

Major Incident Process; IT Procurement Manager; EA 2.0; Secure Remote Device Control; ConnectND Project Roadmap; SharePoint 2013; ArcGIS Online; Annual Customer Survey

Software Development: Doran Eberle

WebSphere 8 update; Application Lifecycle Management Tool; Windows 8 Compatibility Testing – Software Development; Internet Explorer 10 Compatibility Test – Software Development; App Scan – Application Security Testing; Software Development Contract Staff

Network Services: Duane Schell

Voice Project Update; StageNet 2015

Computer Systems: Dean Glatt

Mandan Data Center Upgrade; Windows 8 Direction; Office 2013 Direction; SQL Server 2005 Migration Project

Security / Accounting: Dan Sipes

2013-2015 Rates; Multi-Factor Authentication; Desktop Encryption; Encryption of Data at Rest; Oracle Contract; Disaster Recovery Update – SLA's and SRM



**Mike Ressler
Director**





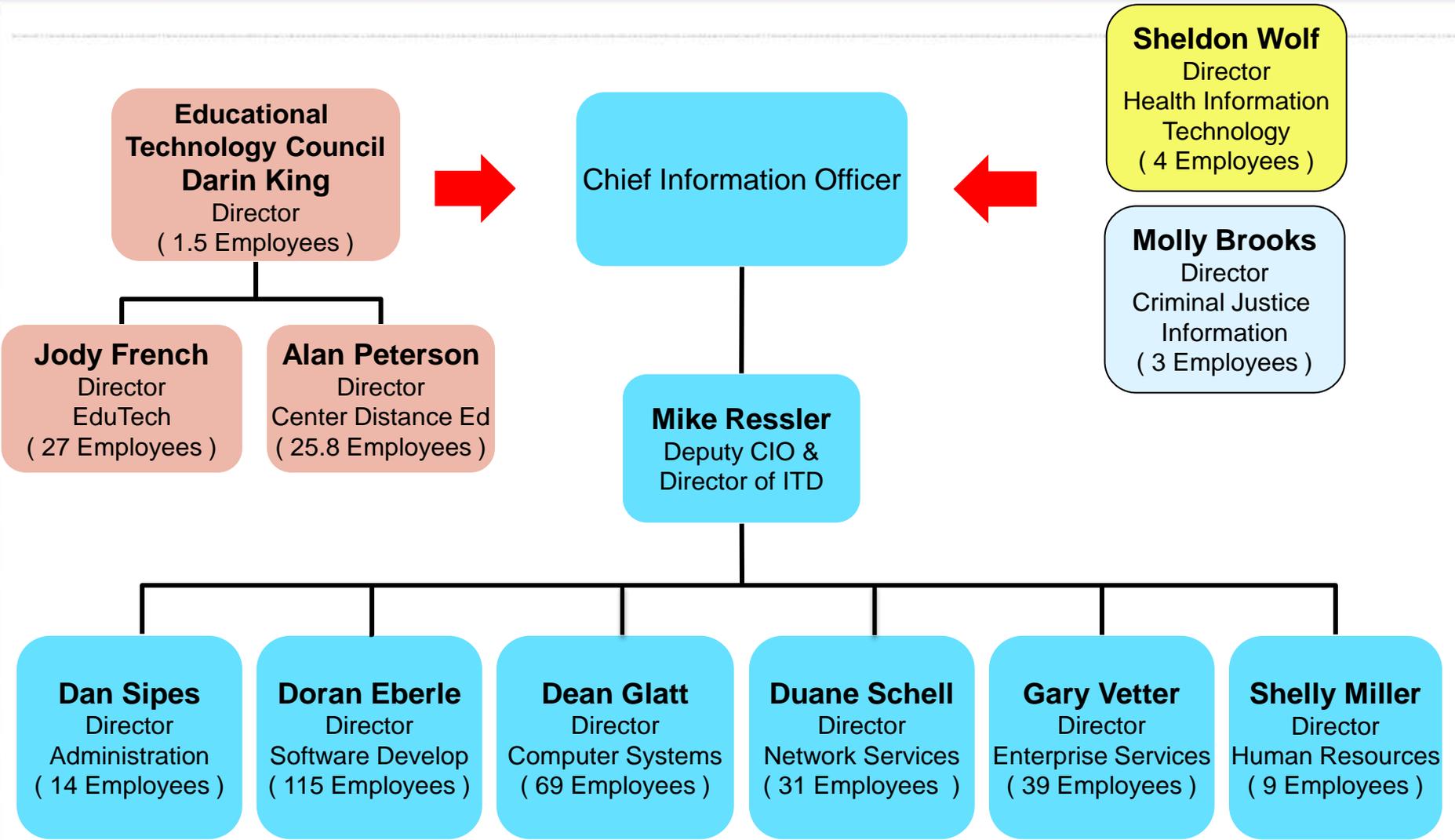
Lisa Feldner



**NDUS Vice Chancellor for IT
and Institutional Research**



July 2013





SB 2021 Section 5. Information Technology Project Planning

Executive branch agency, excluding Higher Ed, planning an IT project of \$100,000 or more needs to work with Information Technology Department to get recommendations on state standards and technology products before proceeding with the project.



New Legislation

- Legislature passed SB 2033 increasing the definition of a large IT project from \$250,000 to \$500,000.



New Legislation

- Legislature passed SB 2034 requiring all Executive Branch agencies follow directives as set out by the Governor's Executive Order for IT projects of \$500,000 and over.
- Requires the agency to work with a 5 member procurement committee (Attorney General IT attorney, IT procurement, ITD project manager, project sponsor and one other member from the agency).
- Executive steering committee (Agency head, agency sponsor, OMB director, CIO, and ITD project oversight analyst)



New Legislation

- Four members of the executive steering committee must agree on decisions relating to major project decisions affecting contracts, budgets, and project scope.
- Agency head and CIO will sign all contracts, revisions and scope changes.
- The procurement officer and primary project manager must meet the qualifications established by ITD and OMB.



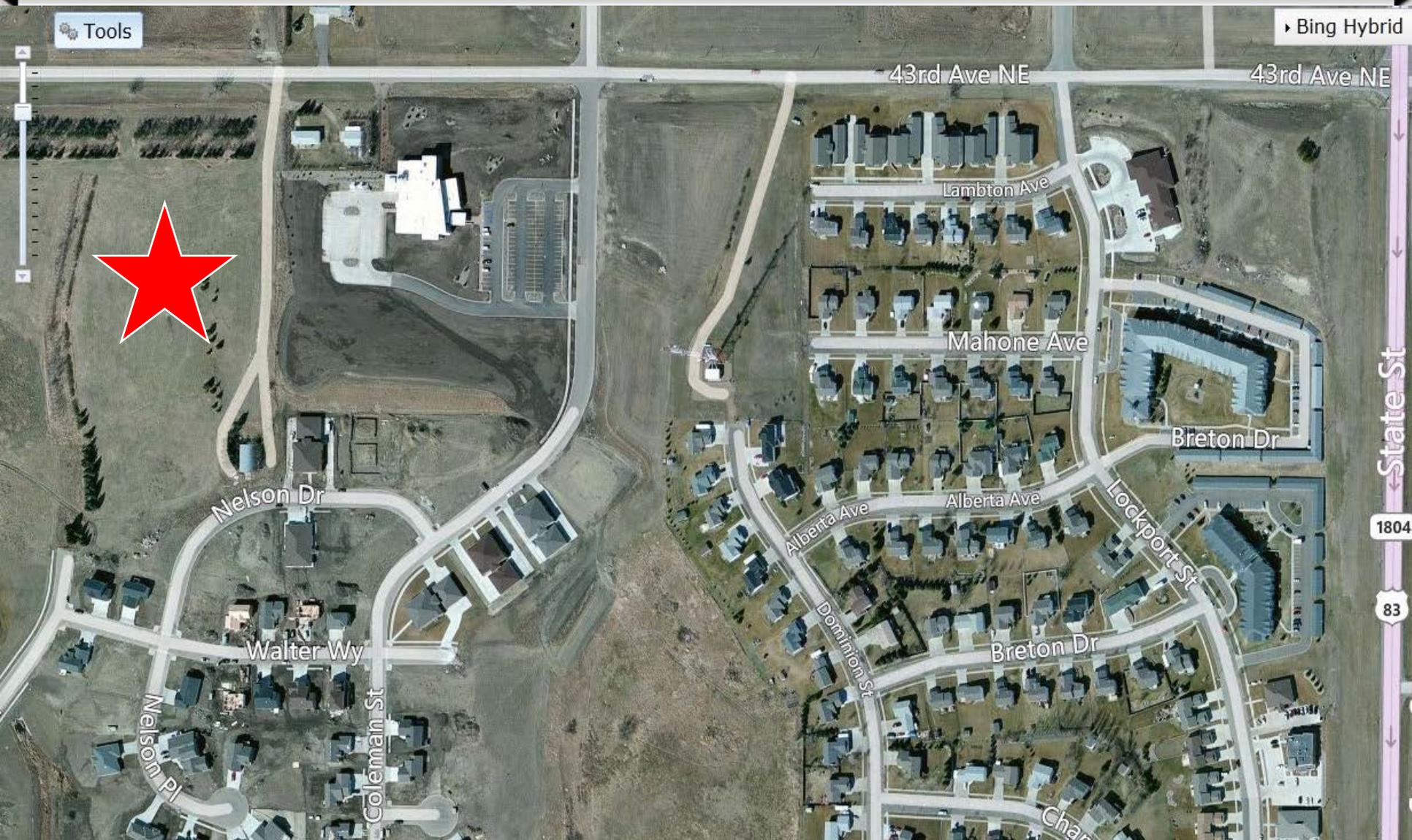
Desktop Support Study

- Prior to January 1, 2014, ITD shall conduct a study of all state agencies' information technology desktop support to determine the feasibility and desirability of centralization of desktop support services through ITD for all state agencies.
- The study must include a review of the support staff, associated costs to the respective agency, use of third-party information technology contractors, and a cost-benefit comparison of current state agencies' desktop support self services and desktop support services provided by the information technology department.
- ITD shall report its findings and recommendations to OMB, the Budget Section, and the Interim IT Committee prior to January 1, 2014.
- OMB shall provide a report to the Budget Section regarding the findings, recommendations, and any legislation required to implement the recommendations of the study.



ITD New Building





Tools

Bing Hybrid

43rd Ave NE

43rd Ave NE

Lambton Ave

Mahone Ave

Breton Dr

Nelson Dr

Walter Wy

Nelson Pl

Coleman St

Alberta Ave

Alberta Ave

Lockport St

Dominion St

Breton Dr

Char

State St

1804

83



Gary Vetter
Director

Enterprise Services
Division





Major Incident Process

Information Technology Department
setting expectations | delivering results | measuring outcomes

[ND State Government](#) | [ITD](#) | [Service Desk](#)

Service Alert

Short Description:
Voice mail

Incident Number:
495768

Number of Linked Incidents:
25

Currently experiencing technical issues with the Avaya voice mail system, the message waiting indicator light is not properly functioning. Technicians are currently working to resolve this issue as quick as possible. We apologize for this inconvenience. More updates will be sent once as information becomes available.

Follow public updates for this incident on ITD's [Twitter](#) page.

Thank you!

[Submit an Incident Online](#) Use this simple method to quickly log an incident in your own words

Tweets

- ITD** @ndgovitd

ConnectND State Portal Production Outage starting at 6/14/2013 5:00:00 PM and ending at 6/17/2013 8:00:00 AM has been IMPLEMENTED.

Expand

16 Jun
- ITD** @ndgovitd

SQL Server Maintenance starting at 6/16/2013 6:00:00 AM and ending at 6/16/2013 8:00:00 AM has been IMPLEMENTED.

Expand

16 Jun
- ITD** @ndgovitd

Active Directory Maintenance starting at 6/16/2013 10:00:00 AM and ending at 6/16/2013 10:30:00 AM has been IMPLEMENTED.

Expand

16 Jun
- ITD** @ndgovitd

SQL Server Maintenance starting at 6/16/2013 5:00:00 AM and ending at 6/16/2013 6:00:00 AM has been IMPLEMENTED.

Expand

16 Jun





IT Procurement Manager



Pat Forster

Retirement Party June 19th



Pam Schafer

July 1



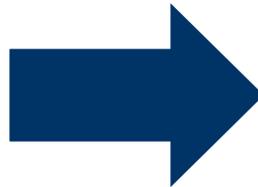
Enterprise Architecture 2.0

Architect Review Board

Architect Team

Domain Teams (10)

- Application Integration
- Application Software
- Communications
- Data / Information
- Desktop
- Document Management
- E-Government
- Security
- Servers and Storage
- Project Management



Architect Review Board

Architect Teams (4)

- Technology
- Application
- Data
- Business



Secure Remote Device Control

BOMGAR™

The Box That's Revolutionizing Remote Support

Securely Support Windows, Mac, Linux & Mobile Devices.





Project Roadmap

Recruiting Solutions implementation

August 2013 through February 2014

- Online job applications
- Expanded talent acquisition manager functions

Human Capital Management (HCM 9.2) Upgrade

Starting August 2013 through November 2013

Financial Supply Chain Mgmt. (FSCM 9.2) Upgrade

Starting Dec 2013 through approx. March 2014



SharePoint 2013

The new way to work together



SharePoint



ArcGIS Online

ArcGIS

FEATURES

PRICING

30-DAY FREE TRIAL

Sign In



The Mapping Platform for Your Organization

Create interactive maps and apps and share them with the rest of your organization. Realize new opportunities and gain insight into your data. Do this quickly and easily with nothing to install or setup.

30-DAY FREE TRIAL



North Dakota Workforce Lodging in the Bakken

This dataset represents western North Dakota workforce lodging locations ("crew camps") used by Bakken oil and gas workers.



Reach Your Users

Share your maps through blogs, social media, or custom apps. [Learn more](#)

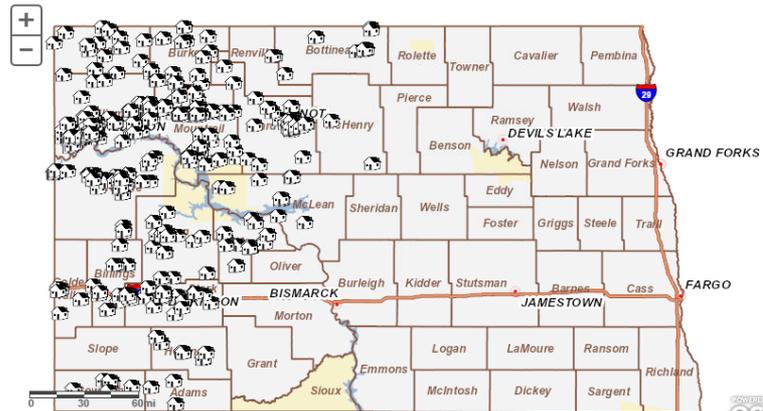


Go Mobile

Your maps can be accessed from anywhere. [Learn more](#)

Description

In August, 2012, the State of North Dakota began a project to map lodging locations of workers in the western part of the State. The State has seen an increase in the number of lodging establishments being created in conjunction with the oil boom in western North Dakota. Types of lodging establishments may include crew camps, motels, hotels, RV parks, mobile home parks and campgrounds. Lodging establishments often referred to as "crew camps" are modular structures, new and used, constructed with the intention of providing



The project sponsors are the ND Department of Health, ND De...





Annual Customer Survey



- Aligned with Mission
- Trusted Business Partner
- Preferred IT Provider
- Positive Customer Experience
- Easy to do Business With
- Services Meet Business Needs
- Builds Strong Relationships
- Provides Technology Direction



Doran Eberle
Director

Software Development
Division





WebSphere 8 Update



Status

- Nearing finalization and implementation
- 4 remaining applications
- All remaining applications are in the user acceptance phase
- Target completion date set for end of June 2013

Lessons Learned

- Dedicated team concept for development phase was effective
- Include ITD expertise, where applicable, in testing phase
- Formalize test plans and work closely with agency testers
- Version Control Synchronization - ensure production source matches deployed code
- Time/Schedule management for upgrade and agency maintenance demands



Application Lifecycle Management tool

Microsoft Team Foundation Server (TFS)

New Development Projects

- Analysis Artifact tracking (Requirements Traceability)
- QA Artifacts (Test Cases)
- Defect Management (Problem Logs)

SharePoint

- All project artifacts will be in SharePoint and TFS
- TFS utilizes SharePoint views

Customer Collaboration

- Customers will be able to view and edit Sharepoint and TFS artifacts
- Working through license negotiations. (TFS CALs)
- Access via web interface

Utilize TFS on the DHS Eligibility Project

Launch tool and processes on all new projects by end of 2013





Windows 8 compatibility– Software Development

Began compatibility testing of ITD development tools

No issues reported to date

Accomplished 20% of required testing

Dean Glatt will also address Windows 8 during his presentation

Windows 8 touchscreen functionality

- Current applications will not require augmentation
- Touchscreen capability will emulate current mouse functionality





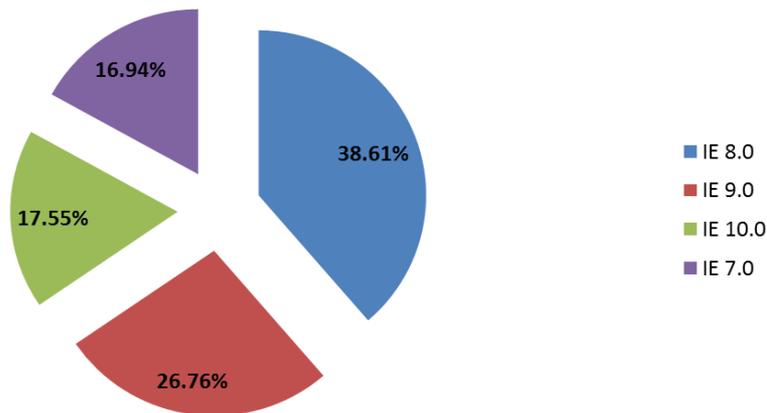
IE 10 compatibility testing – Software Development

ITD testing procedure is to test the current browser plus the two previous versions

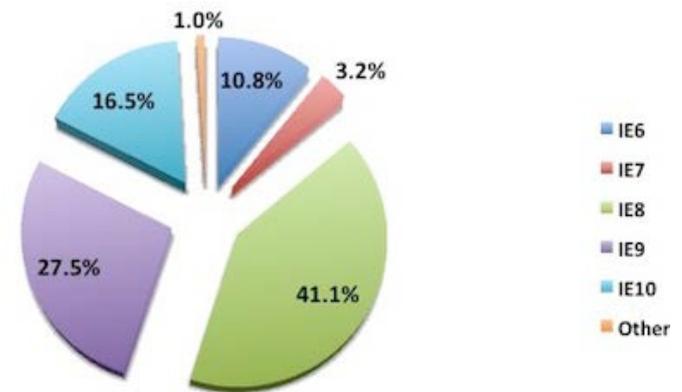
To date, Software Development is working on one IE10 compatibility incident

Report problems resolution through ITSM

nd.gov portal IE Usage May 2013



IE version distribution, May 2013



Source: Computer World



Application Security Testing (App Scan)

Security testing to determine application vulnerabilities in order to protect sensitive data

- Injection flaws (SQL, OS, and LDAP) occur when untrusted data is sent to an application as part of a command or query
- Cross site scripting (XSS) flaws occur whenever an application takes untrusted data and sends unintended content to a web browser

ITD Application risk assessment

- Assessment rating is determined by applying weighted risk to security concerns: I.E. personal data, public internet accessibility, ...
- Java applications have been assessed; .Net and vendor applications in the future
- 34 Java applications rank high in risk

Application scanning schedule

- Finalizing our schedule to scan the 25 high risk applications
- New applications to be scanned as part of SDLC process (ITD developed applications)



Application Security Testing (App Scan) cont..

Using IBM AppScan to execute security testing

- Quick scans: point AppScan at the front door of the app, leaving exploring/crawling/discovery of the app completely up to AppScan
- Deep scans: invasive and non-invasive scans for a more thorough exploration of the application
- Identify vulnerabilities and categorize high, medium and low

Remediation process / Agency Responsibility

- Report results back to agency
- Plan to remediate all vulnerabilities ranked high and medium
- ITD is determining processes and/or triggers that would cause applications that are not remediated to be isolated from the shared infrastructure

Education of development staff

- SANS training – 2 Java developers are taking Secure Coding class and will mentor ITD development team



Software Development Contractor Staff

Total Number of Contract Resources: 34

- 8 Business/Technical Analysts
- 5 Cobol/Natural Developers
- 2 CA Gen Developer
- 7 Java Developers
- 1 DBA
- 4 .NET
- 3 Quality Assurance
- 4 Web Designers



Duane Schell
Director

Network Services
Division





Voice Update

- Continuing with migration
- Cities Remaining
 - Williston
 - Bismarck - clean up
 - Grand Forks - clean up
 - 8,266 Phones Converted
- The end is near.....





Audio/Web Conferencing

- Reservation-less Audio Conferencing
- Web Conferencing
 - Presentations
 - Collaboration
 - Video
- July Availability





Other Items

- NDUS Data Center
 - Aug 2013
- FirstNet
 - Public Safety LTE network
- NDUS Video Solution Transfer
 - Provided by ITD July 1, 2013





STAGEnet 2015

- Contracts Expire
 - Internet
 - Ethernet Transport
 - Backbone
- RFP Fall 2013
- Requesting Stakeholder Feedback





**Dean Glatt
Director**

**Computer Systems
Division**





DR Data Center Upgrade

- Elevated commitment with regional utility company
 - Completed site feasibility assessment
- Improved Cooling System
 - Added additional unit for redundancy
 - Added cooling capacity
 - Increased power efficiency
- Improved Power Distribution
 - Added secondary power distribution
 - Increased UPS capacity
 - Increased power efficiency
- New fire suppression system



Windows 8 at ITD

- ITD Forum
 - <https://wiki.nd.gov/i/display/desktop/Windows+8+Help>
 - Contains List of Issues
- Impact
 - Forces support of a greater variety of form factors
 - Impacts the ability to standardize the PC and tablet hardware
 - Impact on agency app development
- Windows 8.1 (*due later this month*)



Windows 8 cont

- Concentrate effort on current Windows 7 upgrades for majority of users
- Do not lose focus on Windows XP upgrades (*11 years old*)
- Testing typically takes 12 months to test, plan and pilot
- Introduces tablets and other mobile form factors
- Real benefits are from the touch interface of which government widely doesn't have the hardware



Windows 8 cont

- BYOD will force support
 - Need to create and communicate policies to prepare (security, storage locations, etc)
- Will not be upgrading current 8.0 users to 8.1 until XP is complete
 - May require apps to be reinstalled
- Will change our Win 8.0 pilot to 8.1



Office 2013

- Should we move?
 - Needs to be studied in more detail
 - Few core functionality gains to the end user
 - Many productivity gains to online & mobile experience (Facebook, media, Sharepoint and cloud locations)
 - Need to get ahead of agencies to support Sharepoint, Cloud and mobile functionality.
- Licensing changes are complex
 - Shifting to per-user model
 - Software assurance changes: Need to analyze per-device versus per-user subscription
 - Number of devices charge: desktop, laptop, smartphone, tablet
 - Perpetual and subscription licenses, ProPlus



Office 2013 cont

- Cloud usage
 - Office web apps
 - Office 365 and Office Professional Plus w/Sharepoint
 - Software assurance changes
 - Number of devices charge: desktop, laptop, smartphone, tablet
 - Lync2010 Functionality



Office 2013 cont

- Features cont.
 - SharePoint
 - Project-related emails in Exchange and documents in SharePoint directly from the Outlook Inbox
- For developers
 - Javascript Object Model API
 - Portlet apps for Office
 - Windows 8 (Compatible or Ready?) Requires touchscreen usage and gestures; pinch, slide, stretch, swipe and tap. Modern UI interface



Office 2013 cont

- What's Missing?
 - Few Non-Microsoft mobile platforms
 - Licensing continually adjusts the way people work
- Will upgrade on a case by case basis



Office 2010

- **Updated user interface:**
Consistent Fluent UI, Backstage view, Paste Preview
- **New editing capabilities:**
Improved math equation support as well as the ability to edit pictures and videos and add screenshots within Office
- **New collaboration capabilities:**
Sharing of documents, presence information, synchronous coauthoring, and getting metadata suggestions from SharePoint 2010

Office 2013

- **Better mobile support:**
Modern-UI-style interface; Start screen on the initial screen; optimized for touchscreen usage
- **Increased leverage of the cloud:**
Trickle-down cloud distribution option (Office 365 ProPlus only); saving to the cloud can be the default; document location bookmarking across devices
- **Better integration with non-Microsoft services:**
Account capability in the Backstage view; Clip Organizer replaced with inserting files from online services



Office 2013 cont

- Gartner recommends:
 - If still running Office 2003, move to Office 2007, 2010 or 2013.
 - If Office 2007/2010 is sufficient and paid for, don't move to Office 2013.
 - Move to Office 2013 for employees using Windows-based touchscreens.
 - Move to Office 365 ProPlus to streamline upgrading.
 - Move to Office 2013 to get a standards-based Office development model.



SQL Server 2005 Migration

- Sunsets SQL Server 2005. Mainstream Support ended April 2011 and will be de-supported April 2016.
- ITD will be following Microsoft's SQL Server Product Lifecycle (generally five years mainstream support and five additional years extended support). Upgrade projects will begin soon after mainstream support ends. (<http://bit.ly/1929wq1>)
- Project plan is being drafted
- Tentative Schedule- Start: August 5, 2013 End: 1st Qtr 2014
- Communications letter and database inventory will be sent to all agencies.
- Many vendor built applications - agency will be responsible for contacting vendors. We will assist as requested.



SQL Server 2005 Migration

- Will follow implementation used during SQL 2000 upgrade project. Agencies will be assigned to groups. The groups.
- A couple iterations of the upgrade process are expected.
- Primary target platform for the databases is SQL Server 2012. This environment is hosted in our Private Cloud. Provides resource allocation flexibility and enhanced disaster recovery tools.

Agency Name	Count	Agency Name	Count
Aeronautics Commission	1	Insurance Department	4
Bank of ND	10	Job Service of North Dakota	2
Board of Higher Education	2	ND Highway Patrol	2
Criminal Justice Information Sharing	9	Office of Management and Budget	1
Department of Agriculture	3	Parks and Recreation	6
Department of Corrections	6	Retirement and Investment Office	3
Department of Emergency Services	9	Secretary of State	2
Department of Health	25	Securities Department	8
Department of Human Services	11	State Auditors Office	3
Department of Public Instruction	17	Tax Department	2
Department of Transportation	24	Veterans Affairs	2
Department of Trust Lands	1	Workforce, Safety and Insurance	3
Information Technology	54		



July 8 - August 2, 2013	August 12 - 30, 2013
<ul style="list-style-type: none">• Department of Health• Department of Emergency Services• Dept of Parks and Recreation	<ul style="list-style-type: none">• DOT• Job Service of North Dakota• ND Highway Patrol
September 2 - 20, 2013	September 23 - October 4, 2013
<ul style="list-style-type: none">• Dept of Public Instruction• Department of Human Services• State Land Department• UND	<ul style="list-style-type: none">• Bank of North Dakota• Department of Agriculture• Retirement and Investment• ND Veterans Affairs• Aeronautics Commission• DOCR
October 7 -18, 2013	October 21 - November 30, 2013
<ul style="list-style-type: none">• Office of Insurance Commissioner• State Auditors Office• Securities Department• Secretary of State	<ul style="list-style-type: none">• ITD• CJIS• Tax Department



**Dan Sipes
Director**

**Administrative
Services Division**





Miscellaneous Updates

- Oracle State Contract
 - For software and software maintenance renewals
 - Most state agency purchases for Oracle software and maintenance will be done by ITD
 - Must contact State Procurement Office for specific details



2013-2015 Rates

- Reminder that new Billing Rates will go into effect July 1, 2013
- Budgeted rates will go into effect for the following rates that were temporarily discounted:
 - Technology Fee
 - ConnectND
- Disk rates will remain at discounted levels for a few more months



Security Updates

- Multi-Factor Authentication
 - Expected to be implemented for pilot agencies by September 30, 2013
 - Administrator access to data center servers will require MFA
- Desktop Encryption
 - ITD is hosting a solution that works with self-encrypting drives
- Encryption of Data at Rest
 - Piloting a storage solution that is using disk level encryption
 - Contact myself or Dean Glatt if you have any interest



Disaster Recovery Reminders

- Background Information
 - <http://www.nd.gov/itd/support/service-level-agreements>
 - Enterprise SLA – RTO/RPO and Disaster Declaration (pages 7-8)
 - Hosting SLA – Data Backup and System Recovery (pages 3-4)
 - A limited subset of ITD hosting services have been architected for business continuity within their base rates.
 - Email, File/Print, AS/400, Basic Phone Services – one hour RTO
 - Mainframe and ConnectND – twelve hour RTO
- Agencies are responsible for their data & applications
 - Coordinate with ITD for specific application RTO's
 - VMware Site Recovery Manager (SRM)



New Billing System Overview

- One system but plan to keep separate billing invoices
 - Data Processing Billing (DP)
 - Telecommunications (TC)
 - We are assuming that in some agencies separate staff review the DP invoices vs. the TC invoices.
- Email notification when new reports/data are available
- Web-based access to reports and data
 - No separate report repository
 - Authenticated via active directory credentials
 - Assume users will have full read access to DP and TC data



New Billing System Overview

- Reducing the Number of Pre-Produced “Reports”
 - Invoice
 - Billing Summary by Department, Division, Charge Code
 - Detailed Listing of Miscellaneous Charges
- Query Function will allow customers to view all data for the current month or a specified data range
 - Data will be able to be filtered, sorted and exported
 - Query Fields - Bill Code, Dept, Division, Charge Code (any or all)
 - The extended date range should help agencies who want to export the data to Excel and project the next year’s budget



New Billing System Overview - Cost Breakouts



Department - Division - Project

- Department Number
 - Name will change to Customer Number
 - Format will stay the same (###.# e.g. 325.0)
- Division
 - Length will change from 2 to 4
 - This will allow agencies to use it for PeopleSoft Dept ID
- Project
 - Name will change to Charge Code
 - Planning to keep the length the same (15)



New Billing System - Functional Change Examples

- Telephone Cross Reference Report
 - Matrix style query showing each phone number and the features it is billed for
- Agencies will be able to run their own telephone activity queries
 - Query will be sortable and exportable
- Broadband Base and Add-On Charges
 - Currently broadband line costs are on the TC Bill and the add-on charge is on the DP Bill. All broadband charges will be on DP bill.



THANK YOU!!!