# NORTH DAKOTA
## UNIVERSITY SYSTEM
### CORE TECHNOLOGY SERVICES

# TECHNOLOGY CONSOLIDATION IN HIGHER EDUCATION

Darin King, Vice Chancellor of IT, North Dakota University System

# North Dakota University System

# NDUS Governance

- **North Dakota State Board of Higher Education**
  - Appointed
  - Policy, Procedure and Strategic Direction

- **System Chancellor**
  - Vice Chancellors (Finance, Academics, Strategy, IT)
  - Operational

# NDUS Core Technology Services

- Created to deliver the requirements of North Dakota Century Code

- 130 Staff
  - Infrastructure, Operations, Peoplesoft, Enterprise Solutions, Administrative Services

- Hybrid Cloud Data Center in Grand Forks, ND

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# North Dakota Century Code

- ## **N.D.C.C. 15-10-44**
  - Directs the SBHE to manage and regulate IT
  - Policies, procedures, standards
  - Strategic planning and reporting

- ## **N.D.C.C 15-10-44.1**
  - Identifies required services
  - Goal to create operational and fiscal efficiencies, and improved quality of service

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# Consolidation Strategy

- Effectively manage and enhance existing consolidated services

- Identify new services that create efficiencies or improved service

- Respond to institutional needs

- Cloud?

SaaS

PaaS

IaaS

Vendor Hosted

NDUS Data Center

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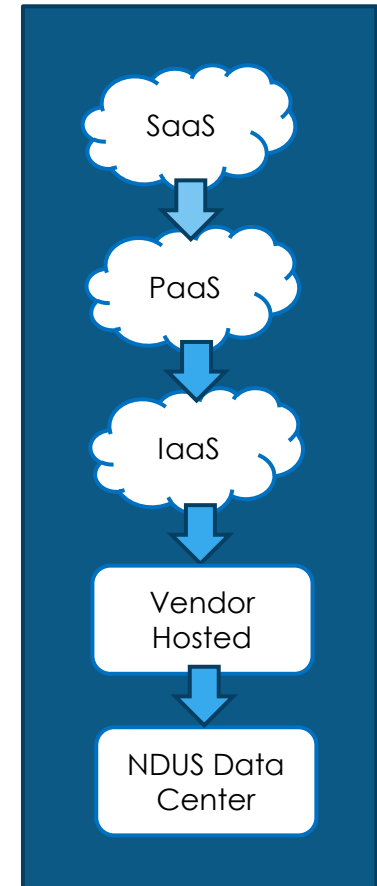
# Consolidated Services

- **Finance, HR, Student, Document Imaging**
  - Peoplesoft
  - Perceptive Content
- **Learning Management**
  - Blackboard
- **Communications & Collaboration**
  - Microsoft Office 365
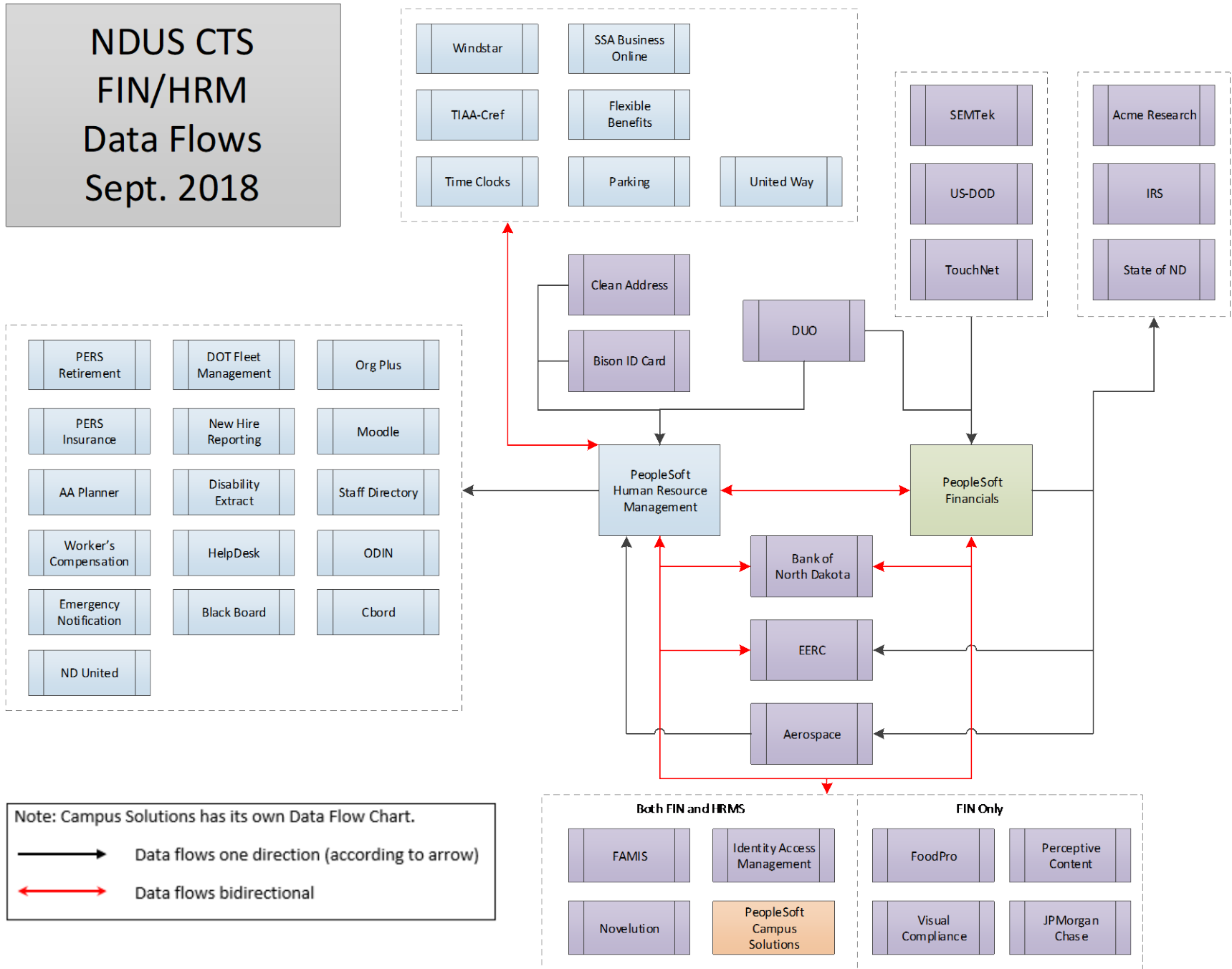
**\*\* Prior to 2013**

- **Information Security**
  - Intrusion detection / prevention
  - IAM
  - Endpoint
  - DLP
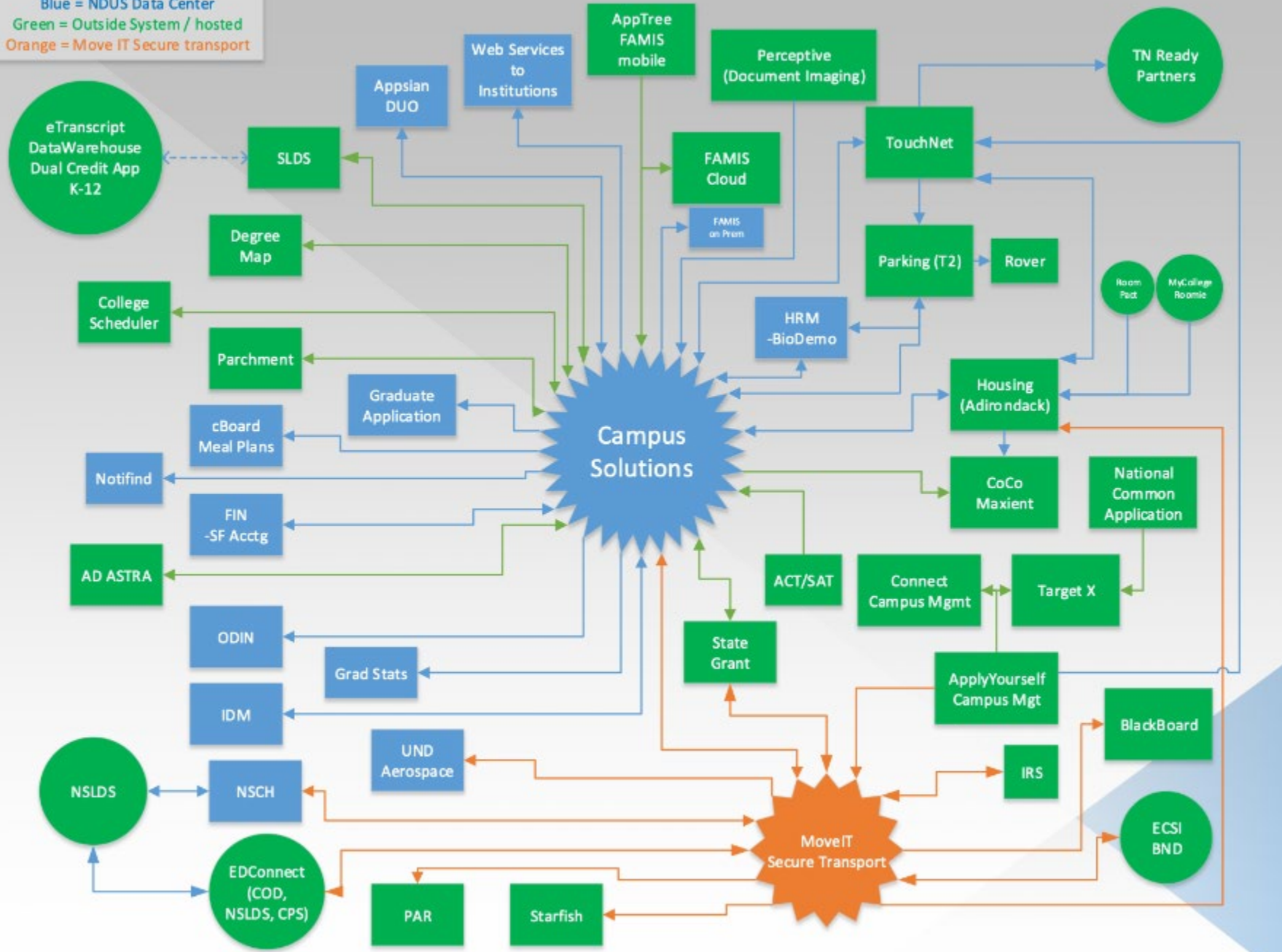  - MFA
  - Security Ops Center
- **State of North Dakota**
  - Network
  - Libraries
  - Security

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NDUS CTS
FIN/HRM
Data Flows
Sept. 2018

**Windstar** | **SSA Business Online**
**TIAA-Cref** | **Flexible Benefits**
**Time Clocks** | **Parking** | **United Way**

**SEMTek** | **Acme Research**
**US-DOD** | **IRS**
**TouchNet** | **State of ND**

**Clean Address**
**Bison ID Card**
**DUO**

**PERS Retirement** | **DOT Fleet Management** | **Org Plus**
**PERS Insurance** | **New Hire Reporting** | **Moodle**
**AA Planner** | **Disability Extract** | **Staff Directory**
**Worker's Compensation** | **HelpDesk** | **ODIN**
**Emergency Notification** | **Black Board** | **Cbord**
**ND United**

**PeopleSoft Human Resource Management**

**PeopleSoft Financials**

**Bank of North Dakota**
**EERC**
**Aerospace**

Note: Campus Solutions has its own Data Flow Chart.

⟶  Data flows one direction (according to arrow)

⟷  Data flows bidirectional

**Both FIN and HRMS**
**FAMIS** | **Identity Access Management**
**Novelution** | **PeopleSoft Campus Solutions**

**FIN Only**
**FoodPro** | **Perceptive Content**
**Visual Compliance** | **JPMorgan Chase**

# Office 365

- **Previous State (2014)**
  - 13 different O365 tenants
  - 4 on prem Exchange
- **Current State (2016)**
  - Single Office 365 tenant
  - Institutional identity retained
  - Some administrative challenges

- **Efficiencies**
  - ~$250,000 year savings in licensing/hardware
  - Automated account provisioning from IAM
  - Enhanced integrations
  - HR efficiencies
  - Consistent retention
- **Lessons Learned**
  - Give and take
  - Patience

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# Learning Management System

- **Previous State (2016)**
  - 3 different LMS
  - 6 different infrastructure environments
  - Numerous shadow systems
- **Current State (2019)**
  - Single, hosted (SaaS) LMS for all 11 campuses

- **Efficiencies**
  - ~$500,000 year savings in licensing/hardware
  - Automated provisioning data
  - Enhanced integrations
  - HR efficiencies
  - Scalability
- **Lessons Learned**
  - SaaS
  - Governance

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# Information Security

- **Previous State (2013)**
  - No centralized group
  - Unquantifiable risk
  - Lacking policies, procedures, standards
- **Current State (2020)**
  - NDUS Security Team
  - Info Security Council
  - Common Toolsets
  - Policies, procedures, standards

- **Efficiencies**
  - Toolset licensing
  - Visibility
  - Operational
  - Collaboration
    - Campus
    - State
- **Lessons Learned**
  - Have a plan
  - Governance
  - Reduced risk

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# Lessons Learning

- **Governance**
  - User Groups
  - Councils
  - Enterprise Governance
- **P³M**
  - Project Management
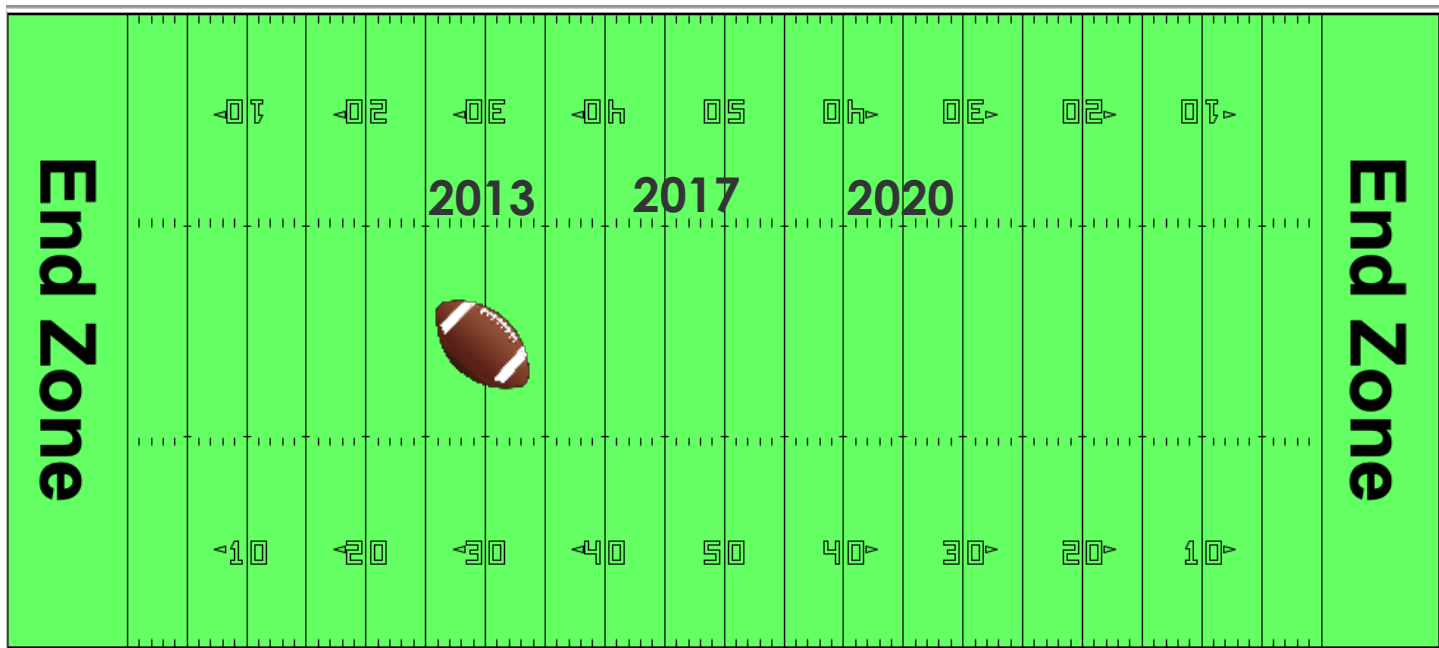  - Procurement
    - Contract Mgmt
  - Planning

- **Collaboration**
  - Service
  - Trust
  - History
  - Shared Vision
- **Common Sense**
  - Business first
  - Compromise
  - Negotiate

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# Persistence

# QUESTIONS?

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