NORTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT
DISTRICT INFORMATION SERVICES
TECHNOLOGY PLAN
2011-2015
### GOALS

<table>
<thead>
<tr>
<th>Leverage our people asset to improve student success</th>
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<tbody>
<tr>
<td><strong>Training:</strong></td>
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<tr>
<td>• Ellucian Live – Deborah,</td>
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<td>• Business Intelligence &amp; Analytics - Deborah</td>
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<td>• CENIC - Boaz</td>
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<tr>
<td>• CISOA/3CBG – Tom, Deborah, Adam, Richard, Jason, Chris, Brad, Mike, Fred, Hani</td>
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<tr>
<td>• CISOA Certification - Fred</td>
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<td>• Educause – Mike, Deborah, Fred, Tom</td>
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<td>• Student Success Summit – Fred</td>
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<td>• Groovy/Grails – Brad</td>
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<td>• CISCO Certification – Boaz</td>
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<tr>
<td>• Library System - Richard</td>
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<tr>
<td><strong>Collaboration:</strong></td>
</tr>
<tr>
<td>• Single Signon</td>
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<tr>
<td>• Bookstore Integration</td>
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<tr>
<td>• Institutional Effectiveness reporting</td>
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<tr>
<td>• Student Success initiatives including Priority registration, Orientation, Ed Planning, Appointments, Online Catalog/Schedule</td>
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<tr>
<td>• Print Shop</td>
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<td>• District wide DNS</td>
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<tr>
<td>• Wireless Anaheim</td>
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<tr>
<td>• Imaging</td>
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<tr>
<td>• Data Warehouse (researchers)</td>
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</table>

### STATUS

provide staff training opportunities for:

- New technologies
- Mobile solutions
- Testing strategies to streamline testing efforts
- Information Security

Investigate the use of collaboration tools such as Sharepoint and myGateway for use across the district; help employees learn to use them for improved service to students and better productivity.

### ACTIVITIES

- Provide staff training opportunities for:
  - New technologies
  - Mobile solutions
  - Testing strategies to streamline testing efforts
  - Information Security

- Investigate the use of collaboration tools such as Sharepoint and myGateway for use across the district; help employees learn to use them for improved service to students and better productivity.

### DISTRICT-WIDE STRATEGIC PLAN/CHANCELLOR GOAL (S) ADDRESSED

#### Strategic Plan:
- District Objective 1.1
- District Objective 1.2
- District Objective 1.3
- District Objective 2.1
- District Objective 4.1
- District Objective 4.2

#### Chancellor’s Goals:
- Increase Student Success
- Organize & Expand a District-wide Staff Development Program
  - Continue with Accreditation Compliance
<table>
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<tr>
<th>GOALS</th>
<th>STATUS</th>
<th>ACTIVITIES</th>
<th>DISTRICT-WIDE STRATEGIC PLAN/CHANCELLOR GOAL (S) Addressed</th>
</tr>
</thead>
</table>
| Leverage our systems asset to improve student success | Wireless:  
- Board approved purchase of wireless equipment; implementation in progress  
myGateway:  
- Luminis 4.3 in production  
- Investigating new products  
Staff Assignment Sheets:  
- Payroll project analysis continues  
Imaging:  
- Document imaging system analysis underway for HR, Financial Aid, Finance  
Mapper:  
- Payroll process analysis begun to address Payroll/Benefits  
Curricunet:  
- No progress with vendor  
Student Success Initiatives:  
- Degree Works implementation in progress; live for counselors  
- Comevo implementation completed  
- SARS/Bookit – Regroup interface expected Fall 2014  
- Priority Registration implemented Fall 2014  
Network Upgrade  
- Proposal for Bond Measure should it move forward to upgrade network to 10Gb and provide District-wide Wireless  |  
- Investigate wireless alternatives for the Anaheim campus to improve student access to services and improve staff productivity  
- Implement myGateway 2.0 with the following objectives:  
  - Unify communication for better student/staff collaboration  
  - Consolidate items that are replicated across district servers  
  - Blend off-campus and on-campus worlds for students so they are encouraged to use the system  
  - Provide mobility of system functions  
  - Establish communities for learning and students success  
  - Improve security  
  - Improve content delivery that will assist students and staff  
- Automate staff assignment sheets for better efficiency  
- Provide a comprehensive and integrated Imaging strategy across the district to improve records retention and access for Board minutes/agenda items, Finance documents, Human resources documents and Student documents  
- Provide self service solutions for International Students including SEVIS and CCCApply  
- Retire Mapper by moving the Health Sciences, Payroll and Benefits components to Banner to eliminate redundancy and improve staff/student efficiency  
- Integrate Curricunet with Banner for streamlined tracking of courses from creation to Chancellor Office approval  
- Implement Students Education Plan/Degree Audit to improve student success  
- Implement Student Planner/Calendar for registration (shopping cart style registration)  
- Upgrade the Network by 2017  |  
| Strategic Plan:  
District Objective 1.2  
District Objective 1.3  
Chancellor’s Goals:  
Increase Student Success  |
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<tr>
<td>Encourage innovation and explore new and better technologies that can make our student/staff more successful</td>
<td>Testing: • Centralized testing of annual Financial Aid changes</td>
<td>➢ Explore better automated testing for system upgrades to improve staff efficiency and reduce errors</td>
<td>Strategic Plan: District Objective 1.2 District Objective 1.3</td>
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<td></td>
<td>• Testing for DegreeWorks being done at campuses</td>
<td>➢ Expand use of Virtualization using district-wide standards for:</td>
<td>Chancellor's Goals: Increase Student Success</td>
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<td>Lecture Capture: • Not economically feasible at this time</td>
<td>• Desktops; staff and student</td>
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<td>Unified Communications: • Awaiting CENIC VoIP offering details</td>
<td>• Servers</td>
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<td>Mobile: • New apps under development</td>
<td>• Network</td>
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<td>One Card System: • No work done on this project; no user interest</td>
<td>➢ Explore lecture capture tools for improved instruction</td>
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<td>Textbook Alternatives: • Completed pilot project; e-books available</td>
<td>➢ Investigate Unified Communications alternatives once the CENIC pilot project is completed</td>
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<td>Anti-virus/Malware: • Diversified anti-virus/anti-malware products to improve effectiveness and reduce costs</td>
<td>➢ Develop mobile applications for improved student self service for:</td>
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<td>Communication with Students: • Purchased new product; live July 2014</td>
<td>• Tablet Devices</td>
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<td>Student Success Act of 2012: • Comevo (Orientation), DegreeWorks (Ed Plan), SARS/BookIT (Appointments) implementations in progress</td>
<td>• Smart Phones</td>
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<td>Video Conference: • Upgrade completed to new provider</td>
<td>• Laptops/netbooks</td>
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<td>Other: • Continue transitioning external applications requiring access to Banner data to API based access</td>
<td>• Expand one-card services to minimize the number of cards a student needs</td>
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<td>• Implement textbooks alternatives which decrease student costs including:</td>
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<td></td>
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<td>• Text rentals</td>
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<td>• E-texts</td>
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<td>• Free texts</td>
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<td>➢ Investigate and select desktop protection for anti-virus/malware to improve reliability of systems</td>
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<td>➢ De-invest in e-mail; re-invest in other technologies to move effectively communicate with students</td>
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<td>➢ Upgrade Video Conference Capability</td>
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<td>➢ Investigate Internet Broadcast Capability</td>
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**Strategy #2: Provide High Quality Customer Service**

Information Services can best accomplish this goal by focusing on the following goals:

- Improving the responsiveness to user (staff and student) needs to aid in their success, and
- Collaborate across the district to provide better service, eliminate redundancy and improve user satisfaction.

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| Improve responsiveness to user needs | Self Service:  
- Developing SARS/BookIT system for appointment scheduling; Regroup implementation in Fall 2014  
- Assisted with selection of Online Application for HR  

Distance Education:  
- Switching from Snapshot to SIS Integration for both campuses  

Emergency/Informational Notifications (students/staff):  
- Acquired Regroup for notification to replace One-call Now, SARS Call and Banner messaging |  
- Increase use of self service applications for:  
  - Appointments  
  - Financial aid  
  - Employee payroll/personnel forms  
  - Other applications  
- Improve delivery of Distance Education through a cost effective consolidated system  
- Implement notifications to students and staff for informational messages (see Disaster Preparedness below) |

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District Objective 1.2  
District Objective 1.3 |
| Chancellor's Goals:  
Increase Student Success |
<p>| Maintain Financial Stability |</p>
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</table>
| Collaborate across the district to improve service to the end user | Collaboration Across District:  
  - Formed workgroups consisting of representation from all technology areas to implement:  
    o Single Sign On  
    o Active Directory  
    o Centralized Authentication System  
    o Shared DNS services  
  - Service Level Agreement process to delineate responsibilities  
Technical Advisory Committee:  
  - Completed and functional committee  
Network:  
  - Network upgrades performed to improve response and performance including a move to the fiber ring  
Parking Permit:  
  - Completed for Cypress & Fullerton  
Data Warehouse/Key Performance Metrics:  
  - Project underway to improve ARGOS and develop Data Warehouse  
  - Creation of common Institutional Effectiveness Reporting Tools using ACCJC format  
Cloud Applications:  
  - District to move to Office 365; Cypress first  
  - eLumen for SLO processing at Fullerton in progress  
  - Expanded use of OCDE imaging underway  
County Payroll Integration  
  - Payroll project analysis in progress with Ellucian | ✓ Improve collaboration across the district I.S. and ACT units by sharing expertise and networking  
  - Use the newly formed Technical Advisory Committee to:  
    o Improve communications on technology strategies across the district  
    o Develop standards for improved efficiency across the District  
    o Create a Technology Plan for the district based on the Educational & Facilities Master Plan and campus technology plans  
  - Consolidate network equipment into fewer devices i.e. combined firewall, VPN etc. where practical  
  - Use common network vendors across district to contain costs  
  - Streamline parking permit process across district for cost savings and student convenience  
  - Explore best way to implement single sign-on for all district applications (i.e. InCommon, LDAP, etc)  
  - Create a central data warehouse for research to support data-driven decision making  
  - Implement a dashboard of key performance metrics  
  - Leverage cloud applications for cost containment and ease of access for students/staff including:  
    o Email across the district  
    o Shared applications such as office appliances  
    o Virtual labs  
    o Storage  
  - Improve integration of Banner with county applications | Strategic Plan:  
  District Objective 2.1  
  District Objective 4.1  
  District Objective 4.2  
Chancellor’s Goals:  
  Increase Student Success  
  Continue with Accreditation Compliance  
  Maintain Financial Stability |
## Strategy #3: Plan for the Future

Information Services can best accomplish this strategy by focusing on the following goals:

- Plan for the refresh of technology to insure current/relevant systems,
- Respond quickly to changes in the environment, and
- Prepare for emergency and business interruptions.

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| Maintain current and relevant systems | Technology Upgrade and Refresh:  
  - District office staff moved to System 7  
  Standards:  
  - Began update to Cabling Infrastructure Standards  
  - TCC Developed the following standards:  
    o Mobile Computing Device Guidelines to include BYOD  
    o Working on standards for Single Signon using CAS, Shibboleth and AD  
  Social Media:  
  - Social Media Guidelines developed and social media handled by campuses  
  Open Source:  
  - Investigated library and others; determined not to move in this direction due to security and other concerns  
  - Using open source framework for mobile applications  
  - Used open source framework for student ID retrieval | Plan for technology upgrade and refresh to insure systems are current and usable  
  - Upgrade systems before end of life declared by vendor  
  - Develop standards to create a district wide environment whereby resources can be shared for:  
    o Virtualization  
    o Virtual desktop  
    o And other technologies  
  - Leverage social media for student/staff benefit  
  - Investigate Open source alternatives for existing and new systems such as the Library System |

| DISTRICT-WIDE STRATEGIC PLAN/CHANCELLOR GOAL (S) Addressed | Chancellor's Goals:  
Increase Student Success  
Maintain Financial Stability |
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| Disaster Preparedness/Business Continuity | Backup:                                                              | Investigate off-site co-location facility for hot backup  
• Requested funding for offsite backup  
• Purchased Regroup for notifications to students and staff replacing SARSCall, One Call Now and Banner notification-improved performance  
Data Protection:  
• Responded to numerous incidents-took corrective action  | Chancellor's Goals:  
Maintain Financial Stability |
|                                   | Emergency Planning Activities:                                       | Participate in district Emergency planning activities and offer technology assistance for that effort  
• Establish and communicate best practices to protect staff and student data stored on district computers  
• Implement effective emergency notification systems (see Improve Responsiveness to User Needs above)  |                                                                                                                                         |
|                                   | Data Protection:                                                     |                                                                                                                                         |                                                                                                                                         |
|                                   |后备:                                                                 |                                                                                                                                         |                                                                                                                                         |
| Respond to environmental changes  | Carbon Footprint:                                                     | Monitor carbon footprint of data center and equipment  
• All but one server moved to virtual environment  
Alternative Energy Sources:  
• None found to date  | Chancellor's Goals:  
Maintain Financial Stability |
|                                   |                                                                       | Investigate alternative energy sources  |                                                                                                                                         |
**Strategy #4: Meet Legal and System Requirements**

As an institution of higher education, NOCCCD must adhere to the law and requirements put forth by other outside agencies. The objective is compliance with these mandates to insure a sound education for our students.

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</table>
| Meet legal mandates and obligations | Records Retention:  
- Expanding use of OCDE archival system  
Red Flag & Peer-to-peer Compliance:  
- Policies and processes in place; completed  
Accreditation:  
- Implementing Institutional Effectiveness report  
Security Awareness:  
- Articles in CaTT continue  
- Emphasized in Banner training courses  
Accessibility:  
- DegreeWorks team to address issues with product  
PCIDSS:  
- Worked with Bursar offices at both campuses to complete PCI DSS annual certification survey  
Other:  
- Retired use of SSN for login to myGateway |  
- Review record retention strategies when implementing Imaging solutions for compliance  
- Meet requirements of “Red Flag” legislation to insure privacy of students and staff  
- Implement peer-to-peer compliance strategies  
- Implement systems in such a way as to make e-Discovery easy  
- Provide assistance in meeting Accreditation requirements  
- Establish a security awareness program for end users  
- Review systems for compliance with accessibility requirements  
- Work with areas throughout the district that accept payment cards and assure that Payment Card Industry Data Security Standards are met. |  
| Strategic Plan: | District Objective 1.3  
District Objective 4.1  
District Objective 4.2 |  
| Chancellor’s Goals: | Increase Student Success  
Continue with Accreditation Compliance  
Maintain Financial Stability |