Table of Contents

Page 3  Letter from Tim Brown
         Executive Director,
         NWRDC

Page 4  Letter from Mehran Basiratmand
         Chair, NWRDC Policy Board

Page 6  2010 Service Highlights

Page 7  Facility Benefits

Page 8  Accomplishments

Page 10 NWRDC Outreach

Page 11 Financial Report

Page 15 Policy Board

Page 17 People Who Make the Difference
Letter from Tim Brown
Executive Director, NWRDC

Welcome to Northwest Regional Data Center (NWRDC)’s FY 2010-2011 Annual Report. I appreciate you taking time to review this information and hope that it will give you a greater insight into our activities. As we work for you, our stakeholders, we want to ensure that we keep you as informed as possible of our achievements for the past year as well as our efforts to improve our services to you for the coming year.

NWRDC has gone through many changes over the past year. We have added new customers to our Mainframe, Server Hosting, and Tallahassee Fiber Loop cost centers, resulting in the addition of several new staff specializing in Windows, UNIX, and storage administration. Two facilities improvement projects were completed, increasing power availability through our UPS and generator systems. Both projects were completed on time and under budget. A storage consolidation project has begun that will allow NWRDC to provide more aggressive pricing in its Storage as a Service offering. All of these efforts are undertaken with the goal of cutting costs to NWRDC customers while improving the level of service.

As we enter into NWRDC’s 40th year, we continue to look for opportunities to better serve our customers. Looking back, we have come a long way from the mainframe group founded in 1972. However, we continue to face many of the same challenges. Technology is an ever changing field. The world continues to evolve into a 24x7 market, with service expectations around the clock. NWRDC looks forward to continue its work with you, our customer, in indentifying areas of need where we can work together. These efforts might include investigating new service offerings or looking for better efficiencies in our existing services. It is our goal to make sure the customer gets “the best bang for the buck.”

I would like to thank all of our customers for their continued trust and support, as well as our Policy Board for its commitment and service to NWRDC. We could not do it without you! As always, if NWRDC can be of any service, please let us know.

Sincerely,

Tim Brown
Executive Director
Letter from Mehran Basiratmand
Chair, NWRDC Policy Board

Dear NWRDC Customers:

On behalf of my colleagues on the Northwest Regional Data Center Policy Board and the dedicated staff and service-centric management team, I would like to invite you to review the Center’s annual report and the list of major accomplishments for the Fiscal Year 2010-2011.

The mission of NWRDC is to provide high quality leading-edge and legacy technology services to address the needs of education, government and non-profit institutions under the umbrella of economy of scale, cooperation, collaboration, shared facilities and expertise.

NWRDC is governed by its customers through a Policy Board composed of customer representatives. Through its authority to establish subcommittees, including the Management Committee and NWRDC Technical Committee, the Policy Board provides its customers with a broader role in shaping the future direction of the Center. The Management Committee is chaired by Mr. Michael Barrett. Michael brings a wealth of technical leadership experience to this subcommittee.

In mid-2009, NWRDC was named Florida’s first non-state primary data center. In the 2010 legislative session, this designation was re-affirmed. This designation allows the Center to continue serving state agency customers in collaboration with Florida’s two State data centers. NWRDC’s primary customer focus is to serve K-12, State College System, State University System, and Florida Department of Education customers; however, the Center provides vital services to several state agencies, city and county governments, and various consortia and non-profit groups. We are very proud to have the opportunity to support these customers as well.

As this report articulates, NWRDC has several exciting plans for the future, including offering new solutions for large-scale data storage and expanding both application hosting and Software as a Service. During the past year, the Policy Board enacted a progressive flat rate for mainframe cost recovery. This adjustment has provided substantial savings to many mainframe-based customers, as this service remains an integral part of NWRDC’s service offerings.
Business continuity, managed services and server hosting are also major areas of focus. NWRDC is moving beyond mere hosting and collocation services to more advanced offerings in this arena. NWRDC continues to balance cost-saving measures combined with the latest technological solutions to address the requirements set forth by its customers. This is of particular importance as we all continue to face growing concerns over budget reductions, both for state and local governments as well as K-12 and higher education.

In conclusion, we would like to thank our customers for providing constructive feedback to the Policy Board during our quarterly meetings, as well as expressing appreciation to the NWRDC staff and management on jobs well done on a regular basis. Please feel free to continue sharing your thoughts and suggestions to improve services. This is our Data Center and our vision is to maintain the highest quality of service.

Mehran Basiratmand
Chairman, NWRDC Policy Board, 2010- Present
At the heart of NWRDC’s continuing efforts is a commitment to provide the best computing service to our customers. This year we have focused our service lines into the following categories:

**Mainframe Hosting Service**
NWRDC operates an IBM z/OS mainframe and maintains a rich set of software environments. Our full-service mainframe hosting and support allow customers to benefit from a shared resource model operating within the IBM mainframe. A private Logical Partition (LPAR) environment is also available for customers who require such support.

**Managed Server Hosting Service**
The Server Hosting services range from managed virtual servers and managed physical servers to managed collocation services, for either production or disaster recovery purposes. Customers can also use NWRDC’s enterprise-level managed storage solution for critical programs and data back up. Our managed server hosting services, where customers can see dramatic savings compared to owning and managing their own servers, networks, bandwidth, also removes the risks, responsibilities and inconveniences from customers.

**High Availability Network**
NWRDC owns and manages a 14.3 mile fiber optic loop, the Tallahassee Fiber Loop (TFL), that surrounds the Tallahassee Metropolitan Area. The TFL is the only source in Tallahassee to connect to the Florida LambdaRail (FLR), the primary network provider for NWRDC. NWRDC’s connection to FLR provides up to 10 Gb of bandwidth to Internet2 and FLRNet, as well as a connection to the Internet.

**Software as a Service (SaaS)**
NWRDC offers SaaS in a shared cost model. The costs typically associated with supporting internal applications such as servers, software, support licenses, technology training, etc., can be significantly reduced by hosting the application at a central location. In its centralized application management environment, customers enjoy rapid deployment, reduced total cost of ownership, simplified budget development with predictable monthly costs and maintenance and upgrades included.
Facility Benefits

NWRDC’s facility plays a vital role in providing a secure, enterprise-wide, reliable, and redundant infrastructure for the delivery of our customers’ mission-critical systems.

We utilize data center management standards and best practices to ensure high-quality computing services are available to all customers.

Facility facts include:
- 96 feet above sea level
- 25 miles away from coast line
- Total 10,000 Square Feet Raised Floor
- Category 3 Hurricane proof facility
- 10 foot Clear Ceiling Height
- N+1 UPS Systems and Generator Plants and 8000gal Fuel Capacity Service
- 1000+ Amp Utility Service from Tallahassee Electric Company
- ASCO 2000 Amp Emergency Power Transfer Switch
- 10 Liebert 20 ton/ CRAC Units Providing 100% Redundancy (w scalability)
- Redundant Pumps and Monitoring Controls – all critical systems
- Five (5) Carrier Air Handler Units (AHU) for Office and Electrical room service
- Two (2) Carrier Make Up Air Handler Units (MAU) for UPS Battery Room
- Halon 1301 fire suppression system with a multi-zone fire control detection throughout
- 7/24/365 Onsite Security with Video Surveillance
- Security Cameras with DVR Storage Capability
- Electric Strike/Magnetic Door Locks
- Keyscan Security Control System
- High Security Proximity Card Access
- All External Door Entrances, Mechanical, Electrical, and Telco Rooms Secured
Accomplishments

Cost Reduction - The 2010-2011 fiscal year budget represents a $1.3 million reduction in expenses compared to the previous year. This reduction was made possible through renegotiating contracts required for the support of our customers, cutting software that showed little or no usage, and reducing our mainframe size to eliminate unused capacity.

Flat-rate Billing - NWRDC mainframe charges have always been based on the number of CPU seconds used each month plus DASD and tape usage. This resulted in customer invoices that fluctuated from one month to the next, making it difficult for customers to plan usage. In an effort to resolve this issue, the Policy Board approved a flat-rate billing model effective July 1, 2010. Under the new billing methodology, each customer’s flat monthly charge is calculated based on their utilization for the previous year. This rate is inclusive of all mainframe services: CPU, Disk and Tape.

Mainframe z10 Upgrade – IBM announced discontinuation of capacity on demand for the NWRDC’s current z9 mainframe on June 1, 2010. The Policy Board approved our proposal to purchase an IBM z10 mainframe processor. The z10 was successfully installed on July 17, 2010 and this upgrade allows NWRDC to remain flexible to meet customers’ needs.

Mainframe Software Upgrades and Conversions – NWRDC’s mainframe team has completed multiple software upgrades, including Control-M from BMC, ODE from Phoenix Software and Code-1 Plus from Pitney Bowes. The team has also implemented the Tmon Monitoring Suite from Allen Systems Group, Log Analyzer from CA, IBM’s Debug Tool and Fault Analyzer, and VSAM Recover for CICS from IBM.

New Customer Added – City of Jacksonville has joined NWRDC’s mainframe service.
Disaster Recovery Testing – NWRDC’s annual DR testing went very well on April 8-9, 2011. This was our first test under our new SunGuard contract. Many NWRDC customers participated in the successful test.

State Agencies Data Center Consolidation – Senate Bill 1892, which was passed by the Florida Legislature in 2008 and signed into law by Governor Crist, requires all eligible nonprimary (agency) data centers to be consolidated into a Primary Data Center by 2019. These data center consolidation efforts are continuously making progress. The Florida Department of Revenue has completed its system management transition to NWRDC staff. As of June 30, 2011, various data centers within the Florida Department of Education have been consolidated into NWRDC’s facility through multiple phases.

CYCIISS Project Continues to Perform – Since 2009, NWRDC has been hosting and managing the Florida Children and Youth Cabinet Information Sharing System (CYCIISS) in its data center facility. The CYCIISS initiative is a data and information sharing system through which multiple department and agency systems can be queried and the resulting data elements displayed, sharing information within and between the cabinet member agencies. NWRDC has continued to support this project as it has smoothly transitioned into production.

VMware Infrastructure Upgrade – The Open System team successfully transitioned its virtual infrastructure off the Nexsan storage to the Dell Equalogic platform. In addition, the environment was upgraded to vSphere 4.

FLR 10Gb Upgrade – On December 6, 2010, NWRDC cut over to a new 10Gb connection that increased the available bandwidth and the level of redundancy of the data center.

UPS Upgrade – A major UPS upgrade was successfully completed in January, 2011.

FDLE\Homeland Security Assessment – As NWRDC has been listed as a critical asset for the State of Florida by AEIT and Florida State University, we are required to complete an annual security assessment. The onsite review was completed on September 7, 2010 with favorable assessment results.
NWRDC Outreach

NWRDC goes beyond its core mission of providing superior information technology services and support to customers by reaching out to the community with data center tours. The tour invites people of a variety of ages to spend time at our state-of-the-art facility and get to know the daily operation of a data center. In particular, NWRDC takes great pride in helping 50 Large Guys, a local learning program to enrich their classroom curriculum through site visits and make a positive impact on young people.

The Center also offers a year-round internship program in the Mainframe service area. The program gives students great work experience on various challenging projects and tasks with considerable training and supervision. This year, Michael Hughes and Grant Gingell joined the program and worked on the RDZ/COBOL project.

As part of our commitment to exceptional customer service, NWRDC started to launch quarterly webinars that offer timely insights about recent product evaluations and industry trends. “IBM’s Debug Tool” illustrates the use of the IBM Debug Tools in support of Batch as well as CICS COBOL applications. “DB2 Version 8, What You May Have Missed” provides in depth product knowledge to the DB2 customer community.

NWRDC staff have also delivered several conference presentations. Tim Brown presentated “Shared Data Center” at the annual Educause conference. Steve Menard presented“IBM Debug Tool and Fault Analyzer: How to Use the Latest Mainframe Debugging Tools From IBM” at the FAEDS annual conference.
## Total Revenue by Type For Fiscal Year 2010 - 2011

<table>
<thead>
<tr>
<th>Revenue Type</th>
<th>Total Percentage</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Agency</td>
<td>44%</td>
<td>$3,697,614.41</td>
</tr>
<tr>
<td>Higher Education</td>
<td>41%</td>
<td>$3,458,420.01</td>
</tr>
<tr>
<td>K-12 School Districts</td>
<td>11%</td>
<td>$911,210.00</td>
</tr>
<tr>
<td>Local Governments</td>
<td>3%</td>
<td>$248,766.31</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>$113,277.09</td>
</tr>
<tr>
<td><strong>Total Revenue by Type</strong></td>
<td><strong>100%</strong></td>
<td><strong>$8,429,287.82</strong></td>
</tr>
</tbody>
</table>

### FY 2010-11 Revenue By Type

- **State Agency**: 44%
- **Higher Education**: 41%
- **K-12 School Districts**: 11%
- **Local Governments**: 3%
- **Other**: 1%
## Total Revenue by Cost Center For Fiscal Year 2010 - 2011

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Total Percentage</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainframe</td>
<td>60%</td>
<td>$5,067,672.25</td>
</tr>
<tr>
<td>Server Hosting</td>
<td>31%</td>
<td>$2,615,359.37</td>
</tr>
<tr>
<td>Software as a Service</td>
<td>5%</td>
<td>$439,142.78</td>
</tr>
<tr>
<td>Tallahassee Fiber Loop</td>
<td>3%</td>
<td>$254,581.95</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>$52,531.47</td>
</tr>
<tr>
<td><strong>Total Expenses by Cost Center</strong></td>
<td><strong>100%</strong></td>
<td><strong>$8,429,287.82</strong></td>
</tr>
</tbody>
</table>

**FY 2010-11 Revenue By Cost Center**

- Mainframe: 60%
- Server Hosting: 31%
- Software as a Service: 5%
- Tallahassee Fiber Loop: 3%
- Other: 1%
### Total Expenses by Type For Fiscal Year 2010 - 2011

<table>
<thead>
<tr>
<th>Expense Type</th>
<th>Total Percentage</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and Benefits</td>
<td>30%</td>
<td>$2,426,592.09</td>
</tr>
<tr>
<td>Software Maintenance</td>
<td>25%</td>
<td>$2,028,806.50</td>
</tr>
<tr>
<td>Replacement Reserve-Other Capital Outlay</td>
<td>12%</td>
<td>$941,057.75</td>
</tr>
<tr>
<td>Contractual Services</td>
<td>6%</td>
<td>$468,431.28</td>
</tr>
<tr>
<td>Utilities</td>
<td>6%</td>
<td>$457,724.14</td>
</tr>
<tr>
<td>Other Capital Outlay</td>
<td>4%</td>
<td>$328,638.01</td>
</tr>
<tr>
<td>Replacement Reserve-Interfund transfer</td>
<td>3%</td>
<td>$276,178.07</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>3%</td>
<td>$236,972.28</td>
</tr>
<tr>
<td>Repairs &amp; Maintenance</td>
<td>2%</td>
<td>$192,814.17</td>
</tr>
<tr>
<td>Replacement Reserve-Expenses</td>
<td>2%</td>
<td>$183,290.08</td>
</tr>
<tr>
<td>Auxiliary Fees</td>
<td>2%</td>
<td>$174,806.00</td>
</tr>
<tr>
<td>Hardware Maintenance</td>
<td>2%</td>
<td>$140,960.64</td>
</tr>
<tr>
<td>Supplies</td>
<td>1%</td>
<td>$109,268.91</td>
</tr>
<tr>
<td>Memberships &amp; Subscriptions</td>
<td>0%</td>
<td>$39,415.50</td>
</tr>
<tr>
<td>Travel &amp; Training</td>
<td>0%</td>
<td>$29,279.83</td>
</tr>
<tr>
<td>Insurance</td>
<td>0%</td>
<td>$26,677.16</td>
</tr>
<tr>
<td>Printing &amp; Duplicating</td>
<td>0%</td>
<td>$5,748.84</td>
</tr>
<tr>
<td>Rentals</td>
<td>0%</td>
<td>$3,244.00</td>
</tr>
<tr>
<td>Freight &amp; Postage</td>
<td>0%</td>
<td>$1,419.09</td>
</tr>
<tr>
<td>Other Personal Services</td>
<td>0%</td>
<td>$1,000.00</td>
</tr>
<tr>
<td><strong>Total Expenses by Type</strong></td>
<td><strong>100%</strong></td>
<td><strong>$8,072,324.34</strong></td>
</tr>
</tbody>
</table>

**FY 2010-11 Expenses By Type**

- Salary and Benefits
- Software Maintenance
- Replacement Reserve-Other Capital Outlay
- Contractual Services
- Utilities
- Other Capital Outlay
- Replacement Reserve-Interfund transfer
- Telecommunications
**Total Expenses by Cost Center For Fiscal Year 2010 - 2011**

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Total Percentage</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainframe</td>
<td>52%</td>
<td>$4,190,686.41</td>
</tr>
<tr>
<td>Server Hosting</td>
<td>25%</td>
<td>$2,011,930.66</td>
</tr>
<tr>
<td>Replacement Reserve</td>
<td>17%</td>
<td>$1,400,525.90</td>
</tr>
<tr>
<td>Software as a Service</td>
<td>4%</td>
<td>$305,004.97</td>
</tr>
<tr>
<td>Tallahassee Fiber Loop</td>
<td>2%</td>
<td>$124,297.98</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>$39,878.42</td>
</tr>
<tr>
<td>Total Expenses by Cost Center</td>
<td>100%</td>
<td>$8,072,324.34</td>
</tr>
</tbody>
</table>

**FY 2010-11 Expenses By Cost Center**

- Mainframe: 52%
- Server Hosting: 25%
- Replacement Reserve: 17%
- Software as a Service: 4%
- Tallahassee Fiber Loop: 2%
- Other: 0%
The NWRDC Policy Board brings together the Center’s major customers. Policy Board membership is determined based on the percentage of revenue paid to the Center and is reviewed annually.

For term 2010-2012, the Board elected Mehran Basiratmand, Chief Technology Officer of FAU to succeed Michael Dieckmann, Senior Associate Vice President of Information Technology & CIO of UWF as Chairman of the Board. Michael Barrett, Associate Vice President & CIO of FSU was elected to the Vice Chair position.

Ramon Padilla, former Assistant Vice Chancellor of the Florida Board of Governors, announced his resignation from the Board in December 2010 due to job change. In addition, Ron Lauver, former Chief Information Officer of the Florida Department of Education announced his retirement in March, 2011. Both Ramon and Ron have been Board members since 2005 and their dedication, commitment, outstanding leadership and contributions were greatly appreciated. The entire NWRDC community wishes them continued success and thanks them for their support.

Mehran Basiratmand, Chair
Chief Technology Officer, Florida Atlantic University

Michael Barrett, Vice Chair
Management Committee Chair
Associate Vice President & CIO, Florida State University

Stephen Bowen
K-12 Representative
MIS Director, Florida State University Schools

George Ellis
Associate Vice President for Information Technologies, University of South Florida
Keith (Kit) Goodner
Assistant Deputy Commissioner, Division of Accountability, Research and Measurement, Florida Department of Education

Melanie Haveard
Executive Director, ITS, University of West Florida

Levis Hughes
Management Committee Member
Bureau Chief, Office of Student Financial Assistance, Florida Department of Education

Michael A. James
Interim CIO/Director iRattler Application Management, Enterprise Information Technology, Florida A&M University

Gene Kovacs
Assistant Vice Chancellor, State University System of Florida Board of Governors

Randy McCausland
Technical Committee Chair
Director, Infrastructure & Application Support, Florida State University

Tony Powell
Small User Representative
CIO, Florida Department of Revenue

David Stokes
Chief Information Officer, Florida Department of Education

Peter Taylor
Management Committee Member
Associate Director, Admin Software, Florida International University
People Who Make the Difference

It is the dedication and professionalism of NWRDC staff that make this data center a success. Fiscal year 2010-2011 has witnessed 2 internal promotions and 0 turnover rate, with 4 new employees joining the NWRDC team.

NWRDC continues to provide its staff opportunities to grow and develop job and career enhancing skills through training and career development. In the 2010-2011 fiscal year, Tim Brown became a Certified Information Systems Auditor and Cody Burger successfully passed the CCIE - Security exam. Through 3 sessions of the IT Infrastructure Library® (ITIL) training, 14 staff members were certified with ITIL v3 Foundations.

We also worked with Florida State University in combining our operations staff to achieve efficiency. The combined team will cover both NWRDC and the FSU data center in the Sliger Building and will provide 24/7 on site operator coverage.

**Senior Management Team**

Tim Brown  
Executive Director

Mikal Haney  
Assistant Director

Bill Teasley  
Assistant Director

Sharon Pearson  
Assistant Director
Our mission:

NWRDC is committed to providing superior information technology services and support, utilizing professional staff expertise with a state-of-the-art data center to deliver customer-specific solutions at affordable prices.
2010-2011 Annual Report
PUBLISHED BY

Northwest Regional Data Center
2048 East Paul Dirac Drive
Tallahassee, FL, 32310
www.nwrdc.fsu.edu

PHONE NUMBER
850-245-3500

FAX NUMBER
850-245-3570

NWRDC EXECUTIVE DIRECTOR
Tim Brown

This document is available in printed format upon request. Please contact Annie Zhang at annie_zhang@nwrdc.fsu.edu for assistance.