

10:30am

Agenda Item #:

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date: August 30, 2011

Public Hearing

Consent Regular
 Workshop

Submitted by: Information Systems Services

I. EXECUTIVE BRIEF

Title: Overview of Palm Beach County's fiber-optic network, including community collaboration projects and a proposed new rate structure for external customers.

Summary: This workshop will provide the Board an overview of the expanded role of the County's fiber-optic network in serving both County and non-County agencies, including the County's role in community projects sponsored by the Palm Beach Broadband Collaborative. Additionally, staff will preview proposed changes in the rate structure for network services provided to external customers.

Background and Policy Issues: Since the early 1990's, Palm Beach County has invested in the construction and maintenance of a high speed broadband network to serve county government. From its inception as a local area network linking the Governmental Center to the main courthouse, the network has grown to more than 340 miles of County-owned fiber-optic cable serving 6,000 employees at 321 different sites. The County network handles voice, video and data applications, and is an essential tool for providing employees access to their business applications and the Internet. The network serves all Board departments and constitutional officers, except for the Sheriff's Office which maintains a separate network leased from AT&T.

Beginning with the School District in 2006, there has been an increasing level of interest on the part of various external agencies to connect to the County's network. The primary incentive for collaborating with the County is the offer of low-priced Internet service and access to disaster recovery facilities. Commodity pricing for Internet services is available through Palm Beach County's direct connection to the Florida LambdaRail ("FLR"), which is a statewide fiber-optic network operated by a not-for-profit corporation established by the major universities in the State University System. In 2007, Palm Beach County became the first local government in Florida to connect to the Florida LambdaRail through an agreement which allows the County to resell FLR services. As a "aggregator" of FLR services, Palm Beach County is able to pass on Internet service cost savings, to other public sector organizations.

(Continued on page 3...)

Attachments

1. PowerPoint Presentation Slides
2. List of Existing Agreements with External (Non-County Government) Agencies

Recommended by: Steve Bordelon Aug. 15, 2011
Department Director Date

Approved by: [Signature] 8/12/11
County Administrator Date

I. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact

Fiscal Years	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Inc (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	_____	_____	_____	_____	_____
# Additional FTE Positions (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Is Item Included in Current Budget	Yes <input type="checkbox"/>		No <input type="checkbox"/>		
Budget Acct Number(s):	Fund _____	Dept. _____	Unit _____	Object _____	

B. Recommended Sources of Funds / Summary of Fiscal Impact

Court Information Technology Fund
Justice Information System Maintenance

C. Department Fiscal Review: Robert C. Beal 8/16/11

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. & Control Comments:

The fiscal impact is indeterminable at this time.

WS 8/16/11 SW 8/16/11 OFMB 8/18/2011 Dr. J. Jacobson 8/18/11
8/15/11 Contract Administration

B. Legal Sufficiency:

Paul F. J. - 8/18/11
Assistant County Attorney

C. Other Department Review:

Department Director

THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.

Continued from page 1...

Palm Beach County's broadband network resources, including both fiber-optic and wireless capabilities, are powerful economic enablers. The County network's interconnection with the Florida LambdaRail provides access to Internet2 (a separate internet community restricted to education and research purposes), significantly lowers the cost of Internet service and provides statewide connectivity for disaster recovery programs.

To promote the concept of shared services in the public sector, Information Systems Services (ISS) has sponsored several "IT Partnering" seminars which have been well attended by representatives of municipalities, education, health care, and non-profit organizations. These contacts have led to numerous agreements for the County to provide network services to outside agencies with all parties benefiting – the customer agencies receive increased network bandwidth at wholesale rates; Palm Beach County receives revenues under this cost sharing agreement; and overall costs to the taxpayers are reduced from this expanded use of the public network.

Our collaboration initiatives include membership in Palm Beach Broadband, and have led to the County's participation in several community projects which support education and economic development. These include the Pleasant City "Digital Divide" project in West Palm Beach, WiFi service for the Everglades Youth Camp in the J.W. Corbett Wildlife Area, and extending County network services to the FAU campus in Jupiter thereby enabling Scripps and Max Planck Florida Institute to access the Florida LambdaRail. Additionally, the County is partnering with Habitat for Humanity in a first-of-its-kind pilot project to provide wireless Internet services for families in neighborhood projects located in Jupiter and Riviera Beach.

As shown in the attached PowerPoint slides, our workshop discussion will focus on the County's network resources and projects, and will hopefully provide the Board with a better understanding of our directions within County government and the community at large. Numerous shared services agreements have been established, each having been approved as consent items on the Board's meeting agenda. However, a "big picture" overview of our various initiatives has not been presented to the Board of County Commissioners. This presentation will also fulfill a commitment that ISS made in response to an internal audit recommendation that such an overview be provided to the Board of County Commissioners.

ISS Network Collaboration Projects

Presentation to the Palm Beach County
Board of County Commissioners

WORKSHOP
August 31, 2011



Introductions

- ▶ Steve Bordelon, ISS Director
- ▶ Mike Butler, ISS Network Division
- ▶ Chuck Spalding, Palm Beach Broadband
- ▶ Jody Gleason, Executive Director
Education Commission of PBC

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Conducting County Business

- ▶ 321 Network Attached Facilities
- ▶ >6,000 Employees
- ▶ Connectivity to Centralized Computing Resources and the Internet



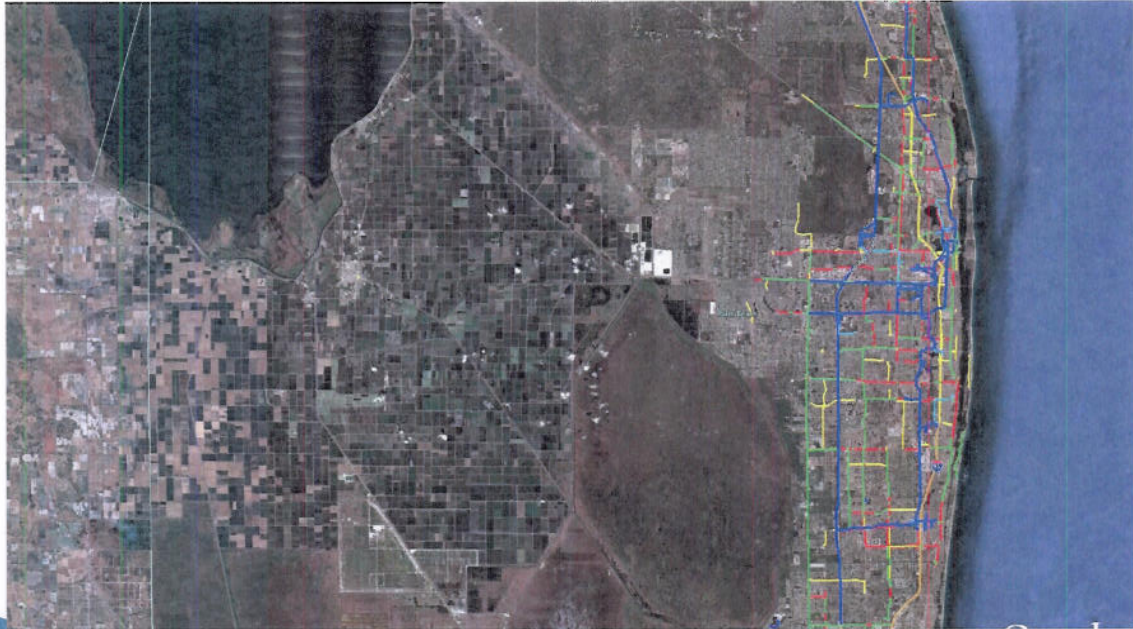
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ISS Services Comprised of:

- ▶ Business Applications, Desktops & Servers, Video Conferencing, and Voice Services
- ▶ Network Connections (Circuits)

4

Palm Beach County Fiber



5

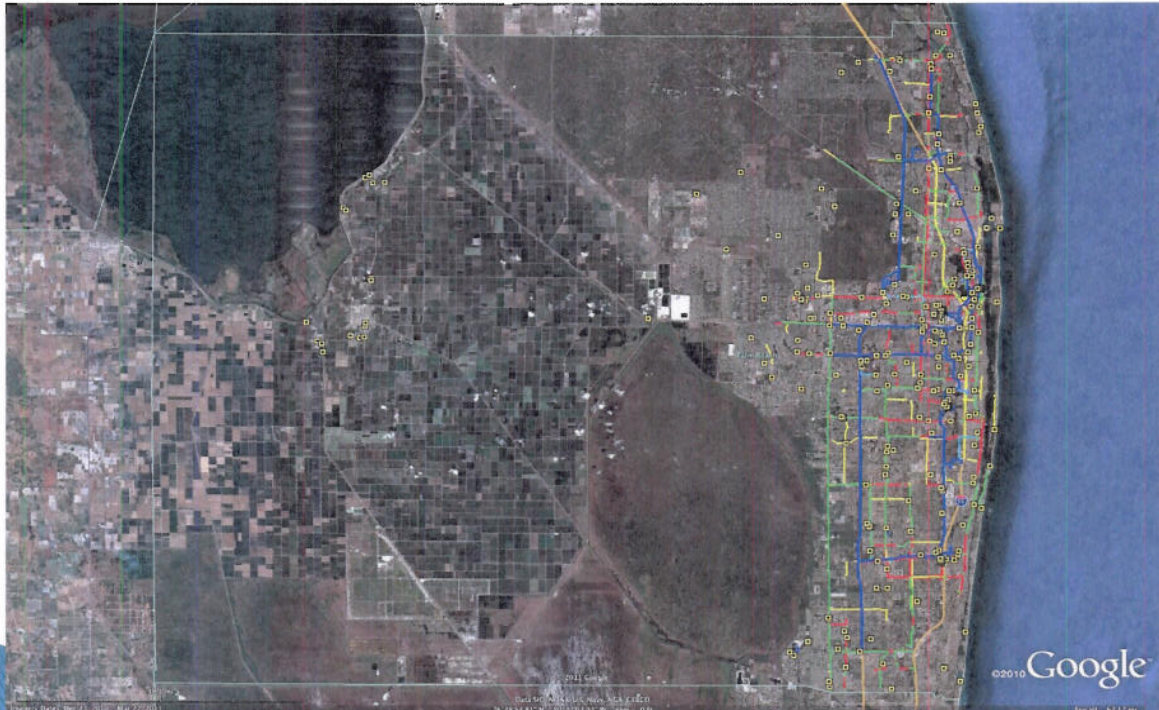


**Centralized
Business
Applications**



6

Palm Beach County Facilities



7



Physical Connections

- ▶ 81% of Circuits- AT&T Lease
- ▶ 19% of Circuits- PBC-owned
- ▶ Permanent Requirement for Circuits
 - Ownership of infrastructure makes fiscal sense
 - Quick payback
 - Largest county-owned fiber network in Florida



Installing Fiber
Optic Cable

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ISS Business Partners



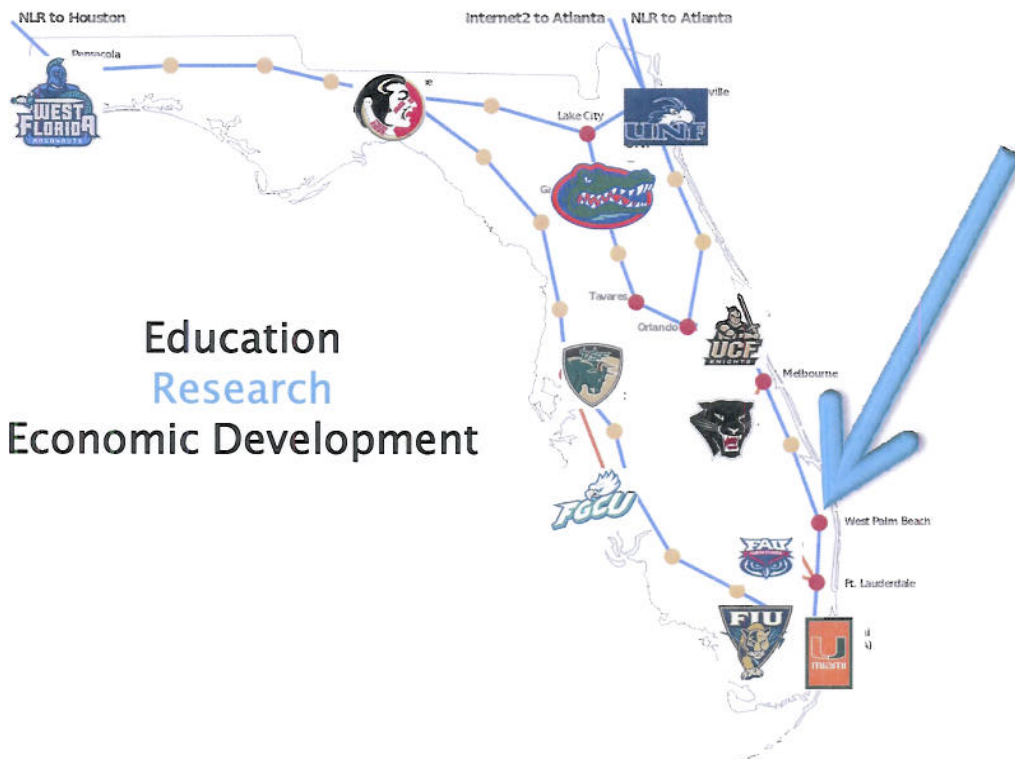
- Physical Circuits between PBC Buildings
- Voice Services
- Internet Access

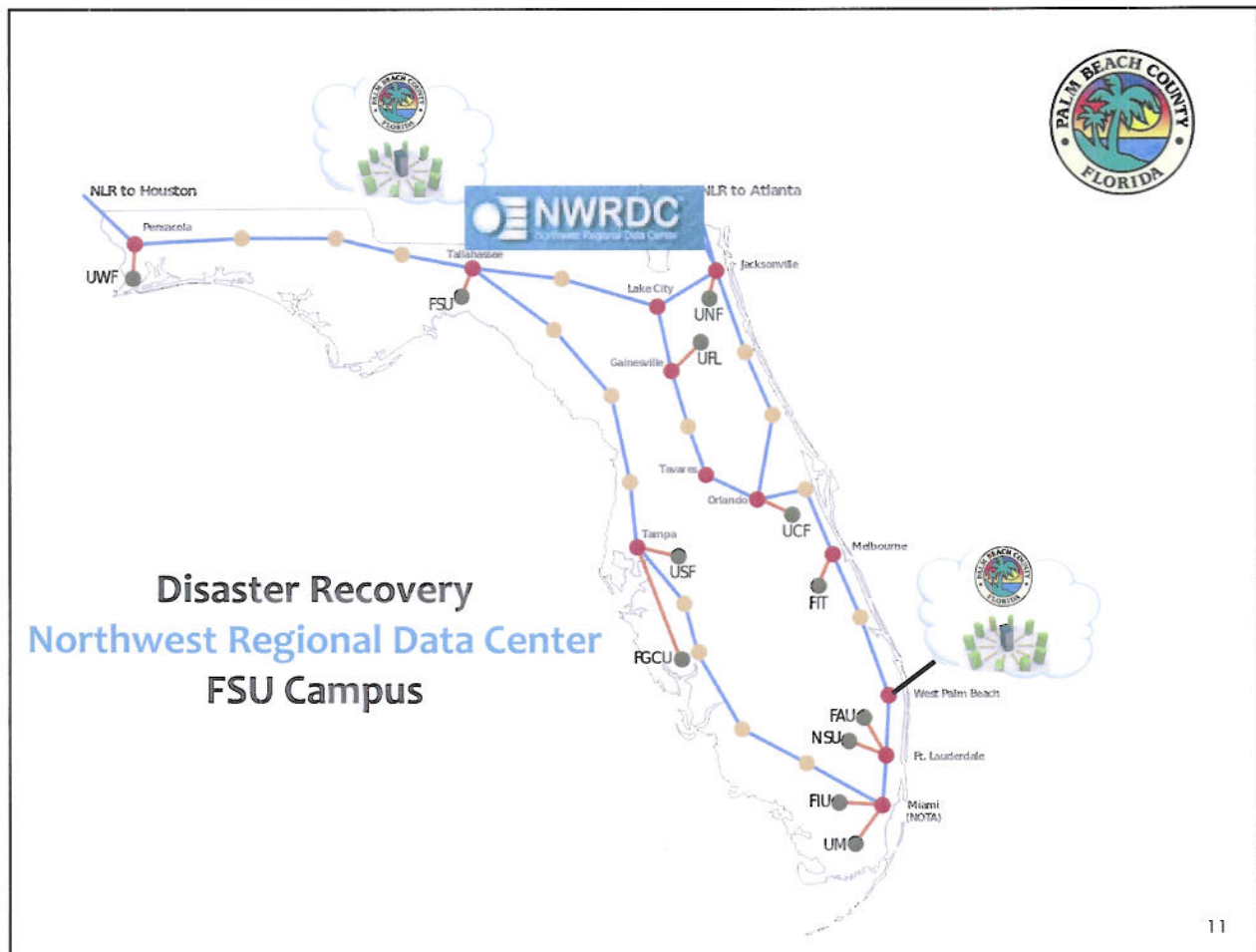
Florida LambdaRail

- Internet Access
- Fiber-optic Network owned by the major universities for research, education and economic development



Florida LambdaRail





Network Cost Containment

- ▶ Consolidated Networks – Fire-Rescue, Library
- ▶ Reduced Reliance on Leased Circuits
 - connect through County-owned fiber, WiMax projects
- ▶ Circuit Audits – self-audit and o/s utility auditor
- ▶ Service Agreement Revenues
- ▶ Telecom Contract Negotiations

Palm Beach Broadband



▶ Five PBC Agencies

▶ Created via Interlocal Agreement in 2006



PALM BEACH STATE COLLEGE

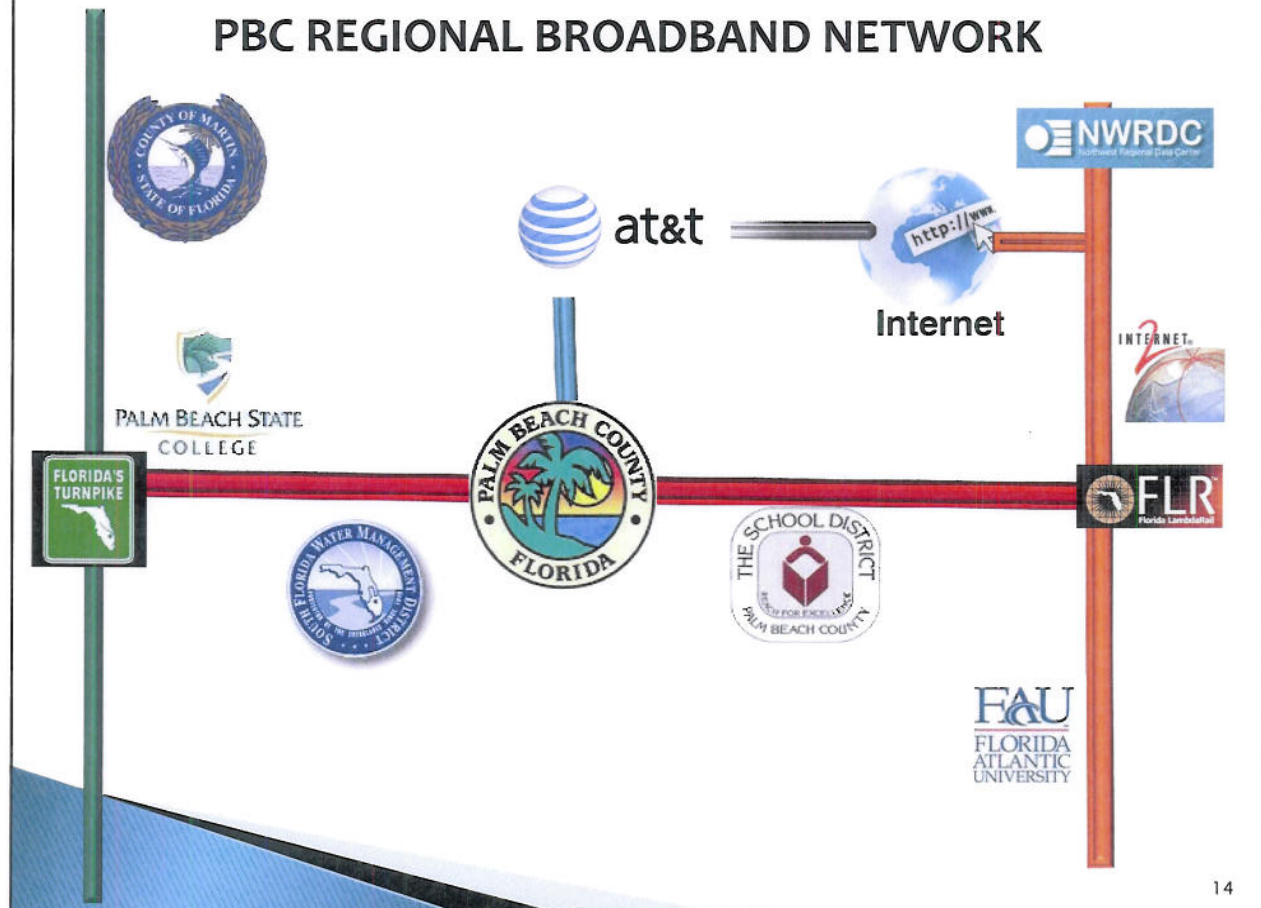
▶ Leverage Technology for the Group and the Community

▶ Leverage Private Fiber Optic Network owned by Palm Beach County Govt



Palm Beach County Education Commission, Inc.

PBC REGIONAL BROADBAND NETWORK



Network Service Agreements

- ▶ Education – School District, FAU, PBSC
- ▶ Government – Jupiter, Palm Beach Gardens, West Palm Beach, Boynton Beach, Delray Beach, Juno Beach, Riviera Beach, etc.
- ▶ Health Care – Health Care District
- ▶ Non-Profit – South Florida Fair, Seacoast Utilities Authority, Families First, Kravis Center, etc.
- ▶ Other – Children’s Services Council

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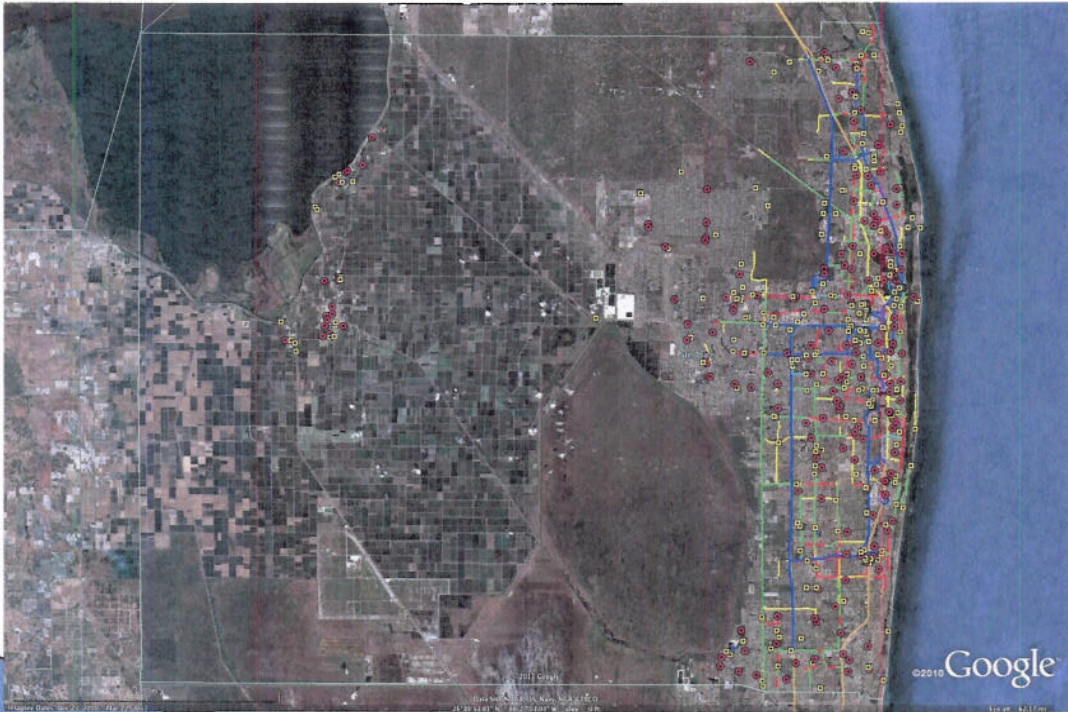


Collaboration Projects

- ▶ Pleasant City/Coleman Park– West Palm Beach
- ▶ WPB Housing Authority
- ▶ Everglades Youth Conservation Camp

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Palm Beach County Schools



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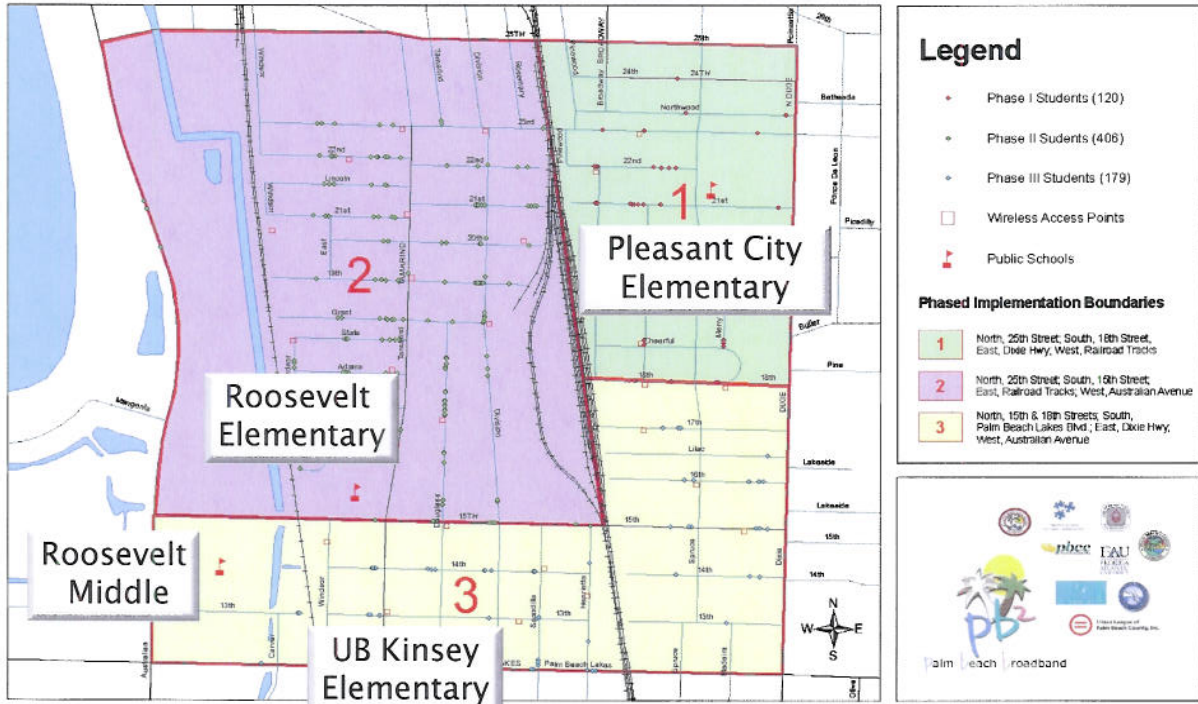
Pleasant City Digital Divide Project



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Palm Beach Broadband Wireless Network

West Palm Beach Quantum Implementation Plan



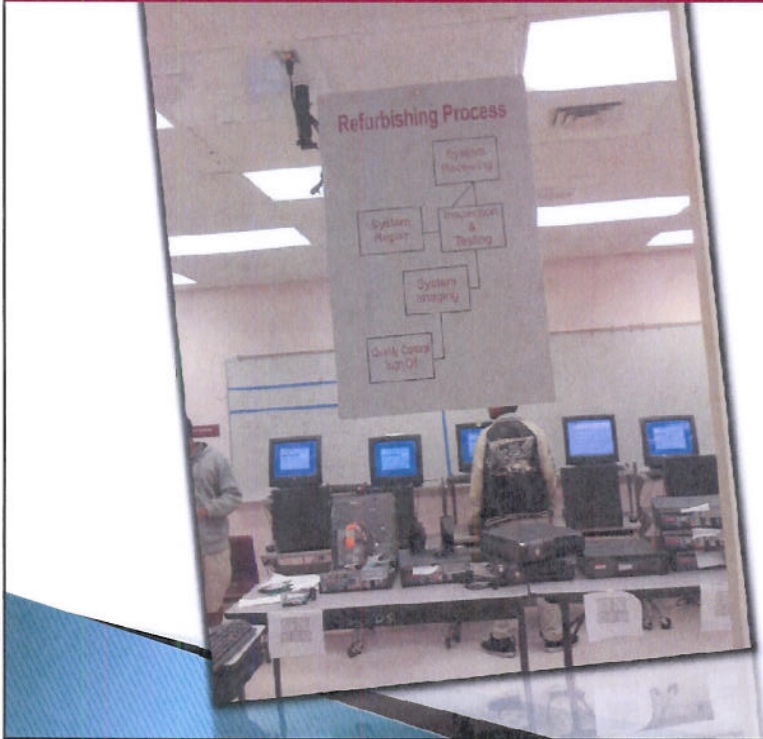
SURPLUS COMPUTERS



Recycling
Computers
Donated by
School Board and
Palm Beach
County



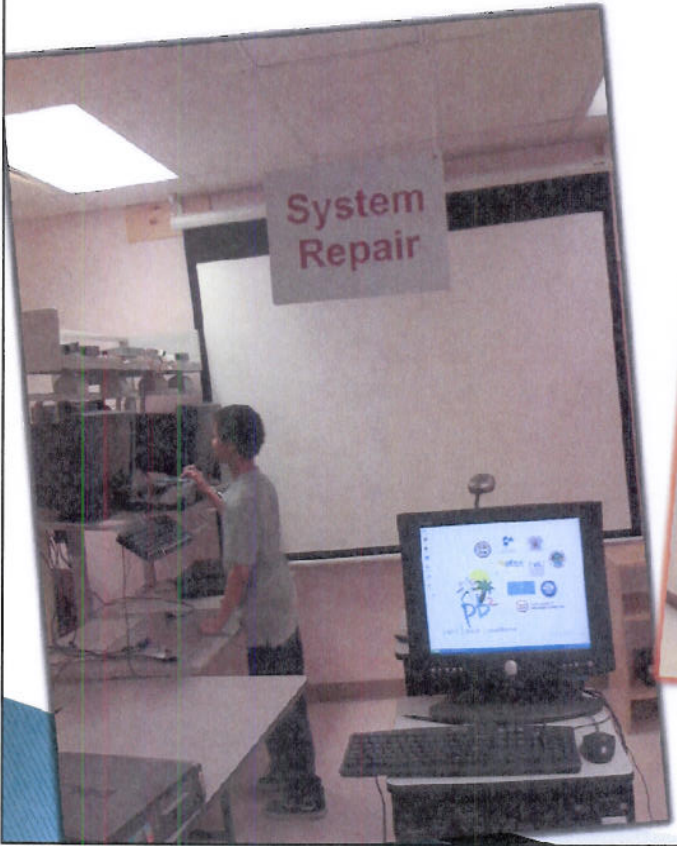
Roosevelt Community Middle Magnet School for Math, Science, Technology and Pre-Med



DIGITAL DIVIDE Refurbishment Lab

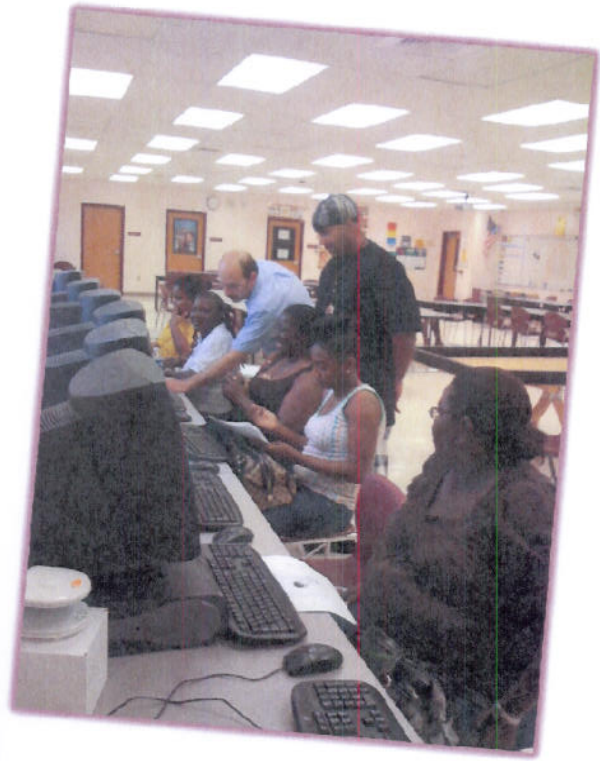
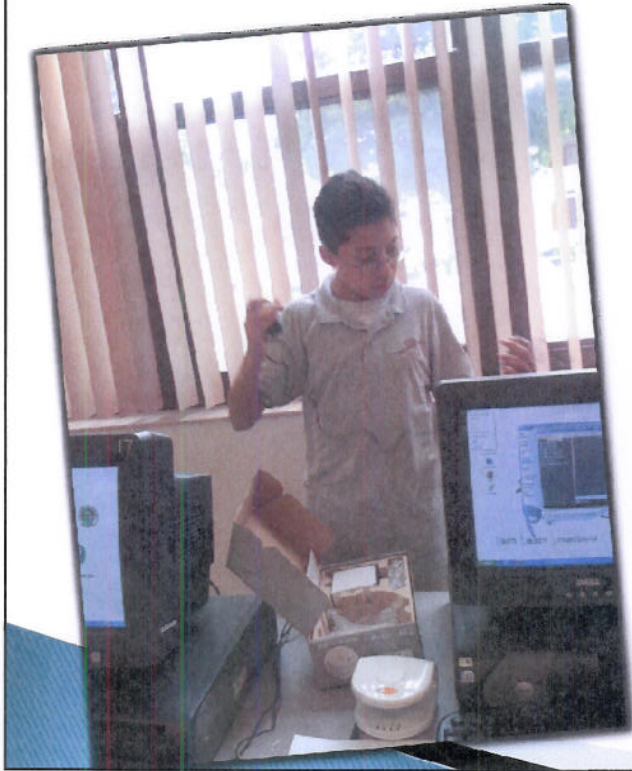
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STUDENT TRAINING

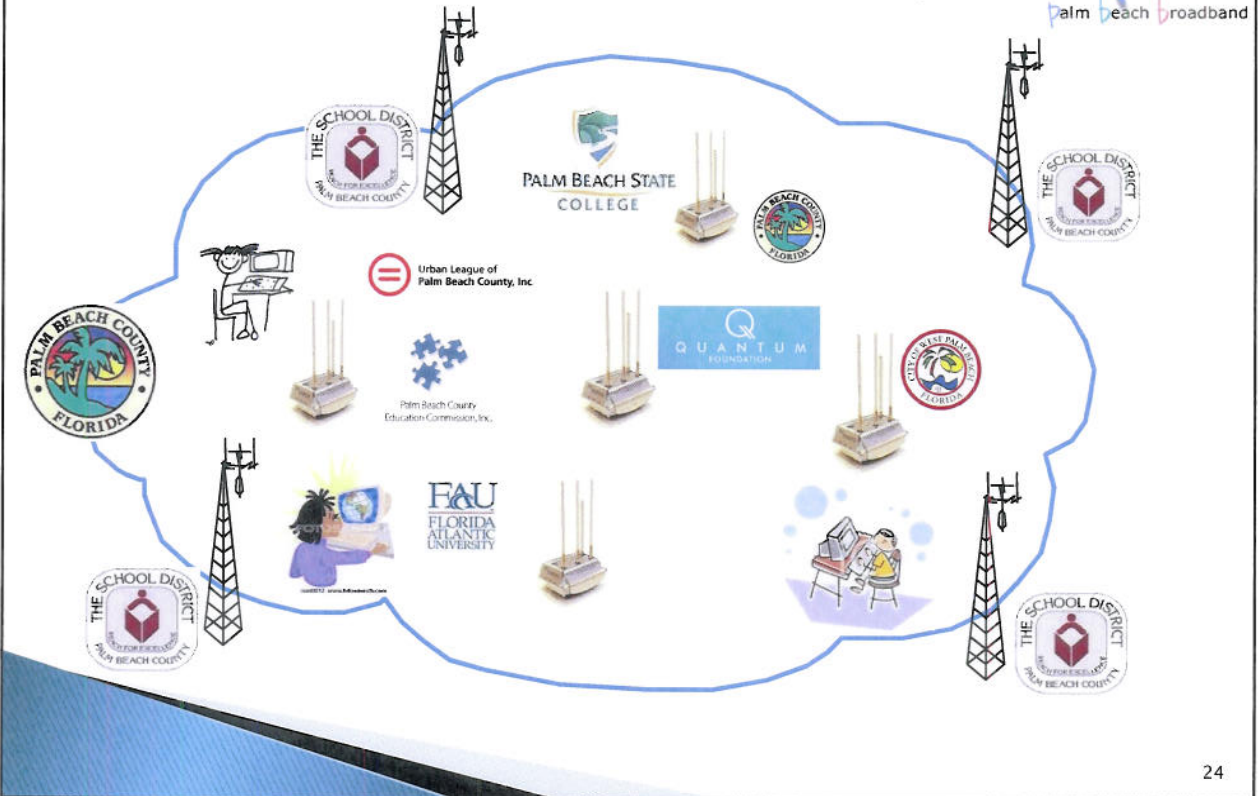


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FAMILY TRAINING



Collaborative Digital Divide Project



West Palm Beach Housing Authority

- ▶ Expands Pleasant City Collaboration
- ▶ Investment by WPB Housing Authority
- ▶ 120 Families Supported



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Knight Foundation Grants



Riviera Beach Community
Redevelopment Agency

Riviera Beach... *Ready to Rise*

26



Supporting Economic Development FAU Jupiter Campus Connection

MAX-PLANCK-GESELLSCHAFT

THE SCRIPPS RESEARCH INSTITUTE

INTERNET²

FAU
FLORIDA ATLANTIC UNIVERSITY

FLR
Florida LambdaRail
Florida's Research and Education Network

Donald Ross Rd

28

This diagram features a central horizontal red line labeled 'Donald Ross Rd'. Above the line, from left to right, are the logos for 'MAX-PLANCK-GESELLSCHAFT', 'FAU FLORIDA ATLANTIC UNIVERSITY', 'THE SCRIPPS RESEARCH INSTITUTE', and 'INTERNET²'. Below the line, from left to right, are the logos for 'PALM BEACH COUNTY FLORIDA' (on both sides) and 'FLR Florida LambdaRail Florida's Research and Education Network'. The number '28' is in the bottom right corner.

Community Open Access Network



Pricing Structure for ISS Bandwidth Services

- ▶ Transition from Fixed Fee Pricing Structure to Usage-Based Rate Plan
- ▶ Responds to Internal Audit Recommendation
- ▶ Analysis Conducted by Staff
- ▶ Tiered Pricing Model Proposed
- ▶ Recommendations to BCC Forthcoming in September 2011

Board of County Commissioners' Questions and Comments

**Palm Beach County Information Systems Services
Currently Active Outside Agency Agreements**

Agreement Specifics

<u>Organization</u>	<u>Type</u>	<u>Type</u>	<u>Number</u>	<u>Date</u>
Boynton Beach, City of	Municipality	Wire Network	R-2010-0110	01/12/10
Center for Family Services	Non-Profit	Wire Network	R-2010-1447	09/14/10
Center for Family Services	Non-Profit	Wire Network	R-2010-1447	09/14/10
Center for Family Services	Non-Profit	Wire Network	R-2010-1447	09/14/10
Children's Services Council	Taxing Authority	Wire Network	R-2010-0280	02/23/10
Children's Services Council	Taxing Authority	Server Host / DR	R-2010-1931	11/16/10
Delray Beach, City of	Municipality	Wire Network	R-2010-1446	09/14/10
Families First of PBC	Non-Profit	Wire Network	R-2011-0072	01/11/11
Health Care District	Taxing Authority	Wire Network	R-2010-0279	02/23/10
Jewish Fed of the Palm Beaches	Non-Profit	Wire Network	R-2011-1085	07/19/11
Juno Beach, Town of	Municipality	Wire Network	Agenda 8/16/2011	
Jupiter, Town of	Municipality	Wire Network	R-2008-1938	10/21/08
Kravis Center	Non-Profit	Wire Network	R-2010-0278	02/23/10
Kravis Center	Non-Profit	Server/Data Hosting	R-2011-0546	04/05/11
Kravis Center	Non-Profit	Wireless Network	R-2010-1313	08/17/10
Lake Worth, City of	Municipality	Wire Network	R-2011-0774	05/17/11
Learning Excellence (Imagine) School	Education	Wire Network	R-2010-1448	09/14/10
Loxahatchee River Environ District	Taxing Authority	WiMax	Agenda 8/16/2011	
Martin County	County	Interconnect	R-2010-1725	10/19/10
Nonprofits First	Non-Profit	Wire Network	R-2010-1312	08/17/10
Oxbridge Academy	Non-Profit	Wire Network	R-2011-1084	07/19/11
Palm Beach Gardens, City of	Municipality	Wire Network	R-2008-1937	10/21/08
Palm Beach State College - Central	College	Wire Network	R-2010-0650	04/20/10
Palm Beach State College - North	College	Wire Network	R-2010-0650	04/20/10
Palm Beach State College - South	College	Wire Network	R-2010-0650	04/20/10
Palm Beach State College - West	College	Wire Network	R-2010-0650	04/20/10
PBSC - Institute of Excellence, CSC	College	Wire Network	R-2010-1724	10/19/10
PBSC - Institute of Excellence, Dryfoos	College	Wire Network	R-2010-1724	10/19/10
School Board Palm Beach County	Education	Wire Network	R-2007-0352	02/27/07
Seacoast Utility Authority	Taxing Authority	Wire Network	R-2010-0929	06/08/10
South Florida Fair	Non-Profit	Wire Network	R-2011-0301	03/01/11
Wellington, Village of	Municipality	Wire Network	R-2009-0247	02/03/09
West Palm Beach, City of	Municipality	Digital Divide	R-2009-1438	09/01/09
West Palm Beach, City of	Municipality	Wire Network	R-2010-1146	07/20/10
West Palm Beach, City of	Municipality	Pole Attachment	R-2010-2116	12/21/10
		Active Agree'mts -	27	

Attachment # 2