

# Statewide High Speed Network

networkMaryland Advisory  
Group Meeting

March 20, 2007

Annapolis, Maryland





# MEETING AGENDA



- Welcome & Introductions
- State of the Network
- Status of Project
- Other Business



# Welcome



- Introductions
- Gregory Urban – Director
- Ellis Kitchen – State CIT
- Meeting Minutes Approval



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# Operational Customers

- 67 Subscribers today
- Circuit Breakdown
  - 75 ISP Circuits
  - 80 SwGI Circuits
  - 1102 Layer 2 Circuits
  - 10 VPN Connections

## Executive Branch networkMaryland Subscribers as of March 16, 2007

Treasurer	Internet SwGI Layer 2	Comptroller	Internet SwGI Layer 2	Governor's Office	Internet SwGI Layer 2	Attorney General	Internet SwGI Layer 2	Secretary of State	Internet SwGI Layer 2
Aging *	Internet SwGI ** Layer 2	Agriculture	Internet SwGI Layer 2	Budget & Management	Internet SwGI Layer 2	Business & Economic Development	Internet SwGI Layer 2	Education	Internet SwGI Layer 2
Environment	Internet SwGI Layer 2	General Services	Internet SwGI Layer 2	Health & Mental Hygiene	Internet SwGI Layer 2	Housing & Community Development	Internet SwGI Layer 2	Human Resources	Internet SwGI * Layer 2
Juvenile Services	Internet SwGI Layer 2	Labor, Licensing & Regulation	Internet SwGI Layer 2	Natural Resources	Internet SwGI Layer 2	Planning *	Internet SwGI Layer 2	Public Safety	Internet** SwGI Layer 2
		State Police	Internet SwGI ** Layer 2	Transportation	Internet SwGI Layer 2	Veteran's Affairs	Internet SwGI Layer 2		

**Legend:**

Agency is Not Receiving networkMaryland Service - A Cost Savings exists if networkMaryland provides service
Agency Expressed Interest in Receiving networkMaryland Service
Agency is in Process of Receiving networkMaryland Service (JCR submitted)
Agency is Receiving networkMaryland Service
Size of Agency is small and does not realize a significant cost savings by connecting to networkMaryland or the service is not required

\* networkMaryland Provisioning has been completed, Department is in process of migrating to service

\*\* Agency is receiving networkMaryland service through parent, primary agency

## Non-Executive Branch networkMaryland Subscribers as of March 16, 2007


Office of People's Council	Internet SwGI Layer 2	Judiciary	Internet SwGI Layer 2	MD General Assembly	Internet SwGI Layer 2	Office of Legislative Auditors	Internet SwGI Layer 2	State Lottery	Internet SwGI Layer 2
State Board of Elections	Internet SwGI Layer 2	Maryland State Archives	Internet SwGI Layer 2	Department of Assessment and Taxation	Internet SwGI Layer 2	MIEMMS	Internet SwGI Layer 2	Subsequent Injury Fund	Internet SwGI Layer 2
Commission of Human Relations	Internet SwGI Layer 2	Office for Children	Internet SwGI Layer 2	Office of Public Defender	Internet SwGI Layer 2	Dept. of Rehabilitative Services	Internet** SwGI** Layer 2	Dept. of Military	Internet SwGI Layer 2
Workers' Compensation Commission	Internet SwGI Layer 2	State Retirement Agency	Internet SwGI Layer 2	Maryland State Retirement Plan	Internet SwGI Layer 2	MD Auto Insurance Fund	Internet SwGI Layer 2	State Board of Contract Appeals	Internet SwGI Layer 2
MD Higher Education Commission	Internet SwGI Layer 2	College Savings Plans of Maryland	Internet SwGI Layer 2	Office of Crime Control & Prevention	Internet SwGI Layer 2	Maryland Emergency Management Agency	Internet* SwGI Layer 2	MD Stadium Authority	Internet SwGI Layer 2
Public Service Commission	Internet SwGI Layer 2	Office of Admin Hearings	Internet SwGI Layer 2	MD Insurance Administration	Internet SwGI Layer 2	Office of State Prosecutor	Internet SwGI Layer 2		

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 - denotes a change since the last Advisory Group Meeting

## Non-State entities\Counties\Municipalities networkMaryland Subscribers as of March 16, 2007

Baltimore City	Internet
	SwGl
	Layer 2

Charles County Government	Internet
	SwGl
	Layer 2

University System of Maryland	Internet
	SwGl
	Layer 2

Frederick County Government	Internet
	SwGl
	Layer 2

Baltimore City State's Attorney Office	Internet
	SwGl
	Layer 2

Carroll County Gov't	Internet
	SwGl
	Layer 2

Maryland School for the Deaf	Internet
	SwGl
	Layer 2

Montgomery County Government	Internet
	SwGl
	Layer 2

Baltimore City Community College	Internet
	SwGl
	Layer 2

Caroline County Gov't	Internet
	SwGl
	Layer 2

Alleghany County Board of Education	Internet
	SwGl
	Layer 2

Prince Georges County Government	Internet
	SwGl
	Layer 2

College of Southern MD	Internet
	SwGl
	Layer 2

Ocean City Gov't	Internet
	SwGl
	Layer 2

Anne Arundel County Government	Internet
	SwGl *
	Layer 2

Howard County Government	Internet
	SwGl
	Layer 2

MD Public TV (MPT)	Internet
	SwGl
	Layer 2

Garrett County Gov't	Internet
	SwGl
	Layer 2

St. Mary's County Gov't	Internet
	SwGl
	Layer 2

CAPWIN	Internet
	SwGl
	Layer 2

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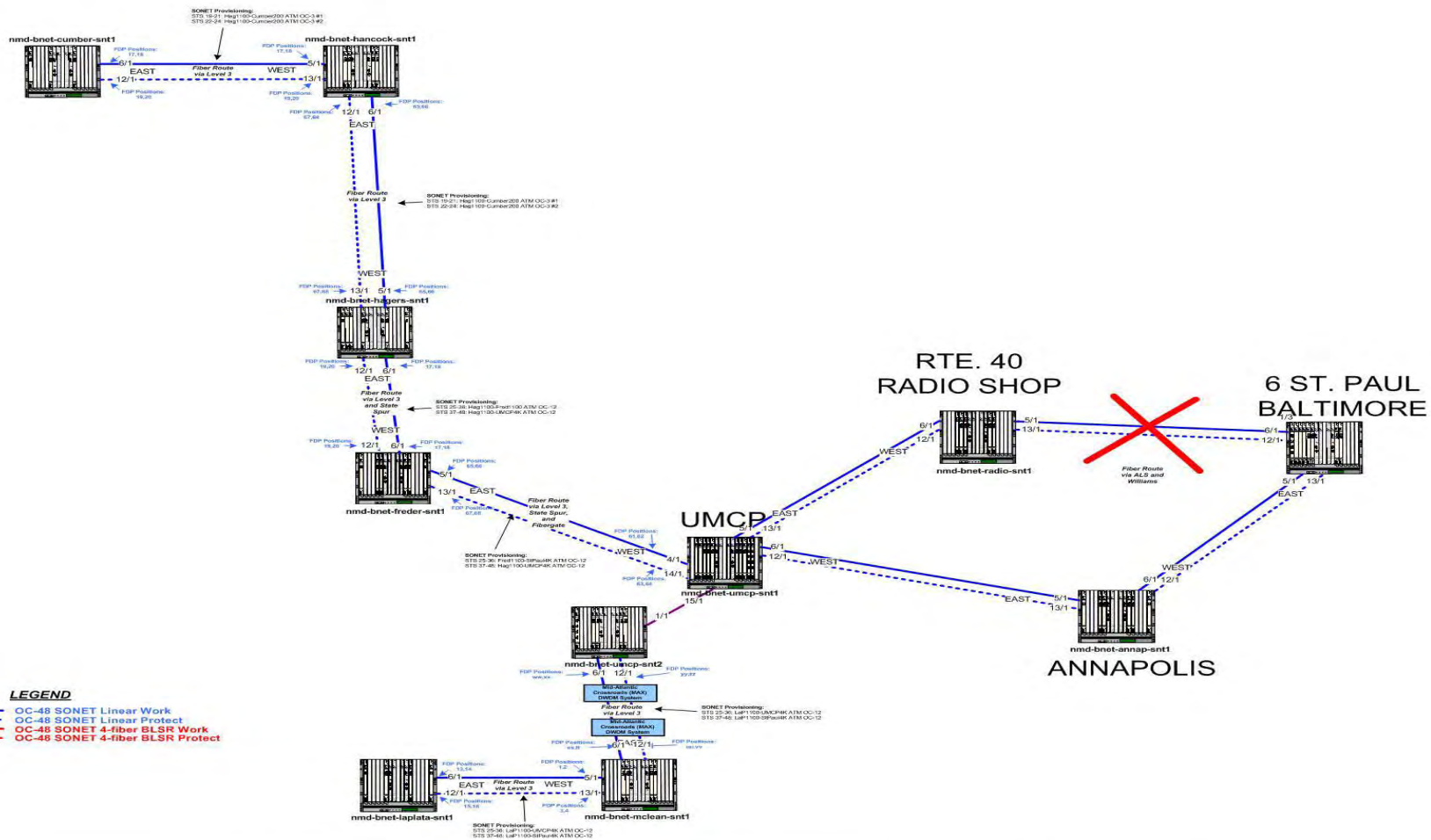
# Operations

## Milestones\New Business

- Working with Archives to establish a 100 Mbps circuit between Hall of Records & UMBC
- Assist MDoT in establishing connectivity to Shaw House
- Performed upgrades\configuration changes to address new DST rules on all nwMD equipment
- Engaged State Board of Elections with Consulting Services Offering
- DNS for SwGI
  - Reserved “swgi.networkmaryland.gov” domain name
  - Initial tests of DNS service successful so far
- Load Bank Test on UMCP Generator performed
- Feb. 20 damaged fiber found in Baltimore City
  - Services were not affected!
  - Resiliency within the network



# February 20, 2007





# 6 St. Paul fiber exposed



02.20.2007



# 6 St. Paul fiber exposed





# Upcoming Tasks



- Customers on the Horizon
  - Archives – UMBC – Catonsville MSC turn-up
  - Ocean City Gov't – ISP services – Snow Hill
  - SAILOR Ethernet hand-off @ Elkton (pending PoP completion)
  - Judiciary\JIS – identified LaPlata as DR site
  - WCC (Ready to transition from leased line to direct fiber connection – Summer 2007)
  - Caroline County – ISP & SwGI (Denton MAN in early stages)
  - Dorchester County – (pending MOU)
  - VoIP with MSP
    - VoIP trial was successful!
    - More Eastern Shore sites are going to use VoIP



# Circuit Provisioning and Acceptance

- 153 circuits are currently in the customer's testing/implementation phase
- 40 new circuits have been provisioned since the last meeting
- 85 circuits have been accepted by the customer since the last meeting



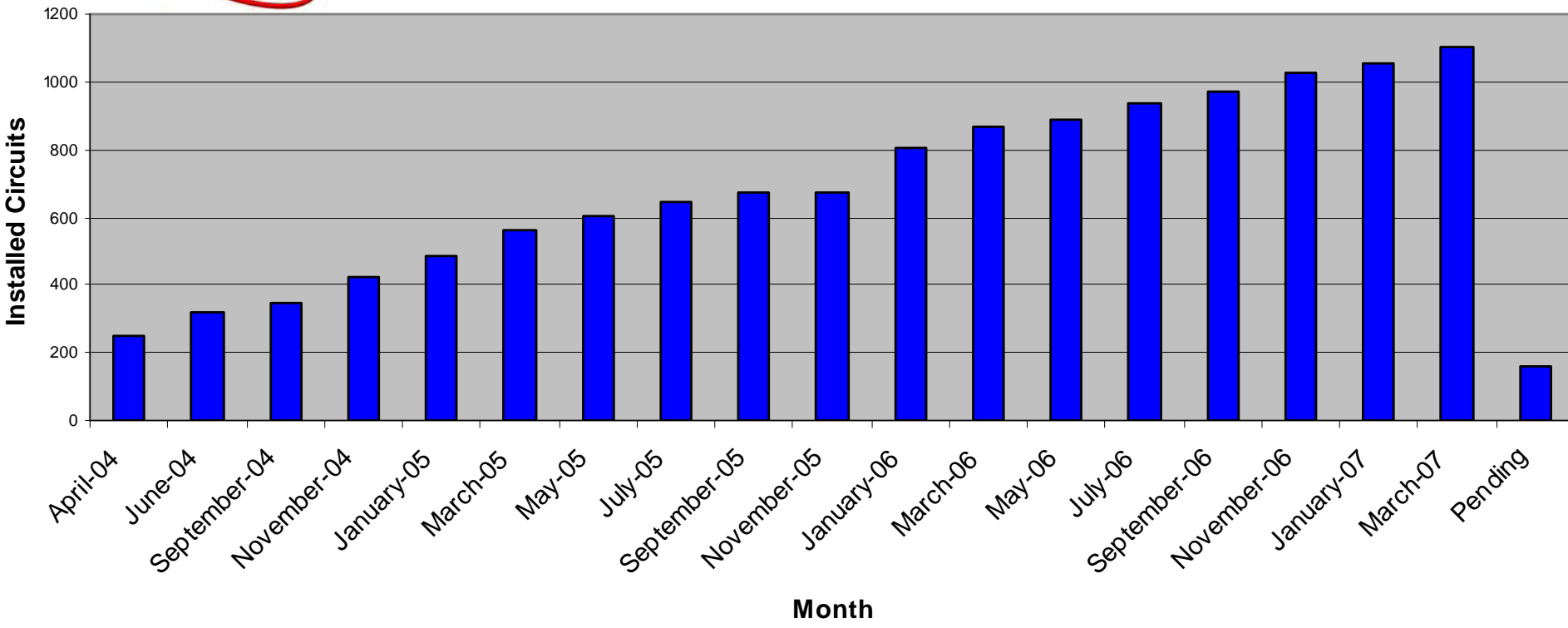
# Network Operational Status



- Growth Chart



# networkMaryland Installed Circuit Chart







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# Project Status



- DWDM Ring (Partnership with USM, MDOT)
  - Provisioned two fully redundant OC-48 circuits between UMCP and 6 St. Paul
  - Requested additional light color from UMATs for future needs
- Legacy Ciena DWDM ring
  - MAX migrated off in late January
  - Set to decommission in March (process started)



# Project Status



- Elkton SONET PoP
  - Partnership with Sailor located at Elkton Library
  - Shelter is on site and assembled
  - Awaiting utilities and fiber connection to the backbone
- Towson POP
  - Baltimore County is building a fiber route to County Data Center
  - Installation has started on the northern portion (I-83)
  - Permit applications have been submitted for the southern portion (Bosley Ave)



# Project Status



- Denton MAN
  - Connection to County Data Center Established
  - Engineering design and overall layout completed
  - We have fiber access to 5 buildings housing state Agencies
  - Product specification underway
- Elkton MAN
  - Fiber build from SONET node to MSC
  - Path determination in progress
  - Investigating options for redundant wireless link



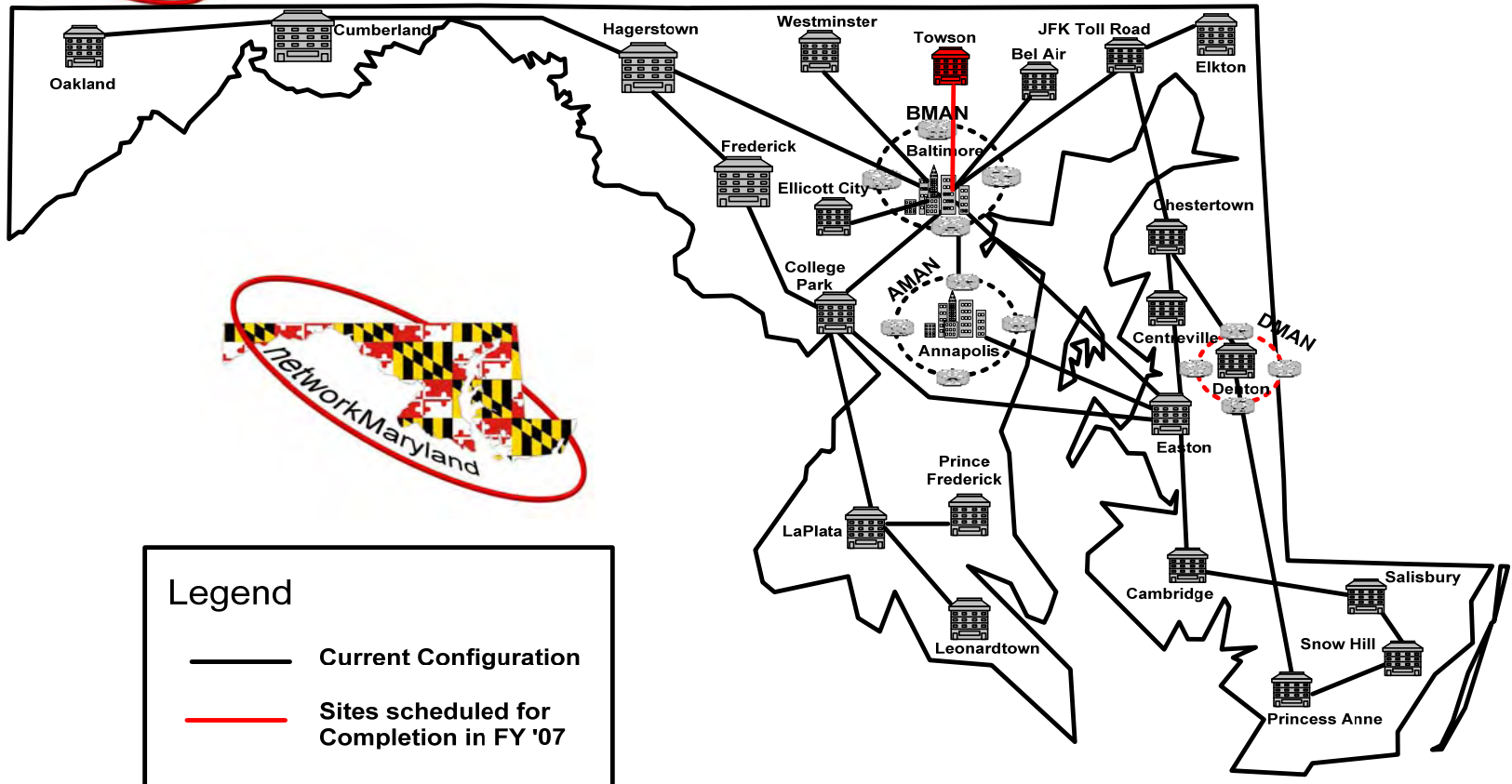
# Project Status



- UMBC PoP
  - Service State Archives connectivity between Annapolis and their backup datacenter located at UMBC
  - Ability to service Catonsville MSC with a small fiber build
    - DGS
    - District Court
    - Juvenile Services
    - Parole and Probation
    - Public Defender
  - Investigating partnership with UMATS and Sailor for a microwave path to Hagerstown from UMBC



# networkMaryland Overview (January 2007)





# Potential Projects



- Western Maryland Microwave
  - Partnership with UMATS and Sailor
  - Uses path of University of Maryland distance learning service no longer in use
  - High Speed microwave (either OC-3 or 200 Mbps) from UMBC to Hagerstown
  - Provide redundant path out of Hagerstown (does not rely on SHA Hagerstown facility)
  - Leverages fiber installed by networkMaryland and UMATS
  - Allows the decommissioning of 3 Inter-LATA DS-3 circuits



# Potential Projects



- Fiber Projects

- Frederick MAN: Add an additional PoP in Frederick and build a diverse fiber path to the city. Partnership with Frederick County Government
- Oakland MSC: Resource Share agreement to bring fiber from Oakland to Cumberland. Agreement is under review by the State





# Project Status



- Other Initiatives

- Working with Maryland Broadband Cooperative (MDBC) for Statewide resource share agreement
- Working with agencies that are changing their WAN architecture
  - MSP
  - DPSCS
  - MDOT
- Updating budgeting and planning process
- Meeting setup with Carroll County to discuss joint opportunities



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# Other Business



- nwMD Engineering Committee meeting
  - April 9th, 2007, 1:30 PM @ UMBC Technology Center
  - Merged with UMATS engineering meeting
- Items for discussion from the Group
- Closing Questions or Comments



# Thank You



- Meeting Adjourned