# networkMaryland<sup>TM</sup> Advisory Group Meeting

September 16, 2008 Annapolis, MD







# **Meeting Agenda**

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





### Welcome

- Introductions
- Gregory Urban Director, networkMaryland<sup>TM</sup>
- Elliot Schlanger Chief of Information Technology
- Guests/Visitors





### **New Business**

- Announcements
- Meeting Minutes Approval
  - July 2008
- Transition to PTG
  - Completed
- State Budget
  - Continue fiscal responsibility and look for additional ways to reduce costs to the State
- New ISP Contract
  - Award recommendation completed





### **New Business**

- Ethernet Everywhere Update
  - Problems with POP hardware (Turin TPE-1200)
    - Issues with stability and management of equipment threatened delivery of robust service
    - Equipment was returned to the vendor (full refund) with complete support from reseller and vendor
    - Re-evaluating equipment for near-term/long term solution
    - Turning up 8 Baltimore LATA orders
    - Expecting hardware specification for Hagerstown and Easton by the end of the month





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## **Operational Subscribers**

- 77 Operational Subscribers (+1)
- Circuit Breakdown
  - 84 ISP Circuits (+1)
  - 89 SwGI Circuits (+1)
  - 1384 Layer 2 Circuits (-9)
  - 10 VPN Subscriber Connections (+0)





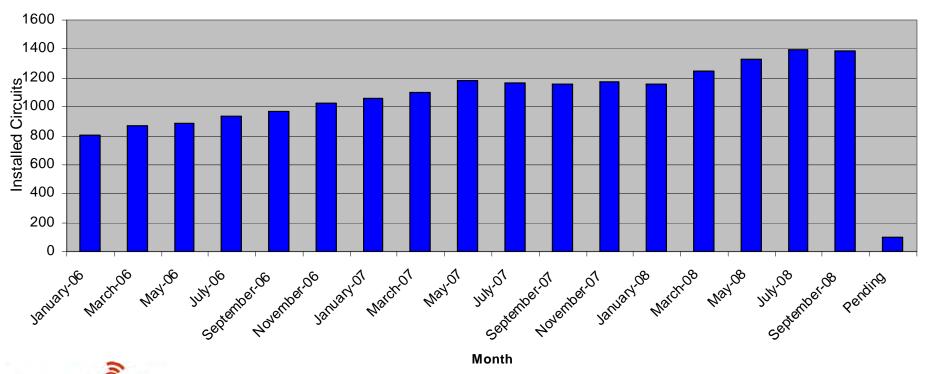
## **Subscriber Provisioning**

- 95 circuits are currently in the subscriber's testing/implementation phase
- 35 new circuits have been provisioned since the last meeting
- 18 circuits have been accepted by the subscriber since the last meeting





### **Installed Circuits**

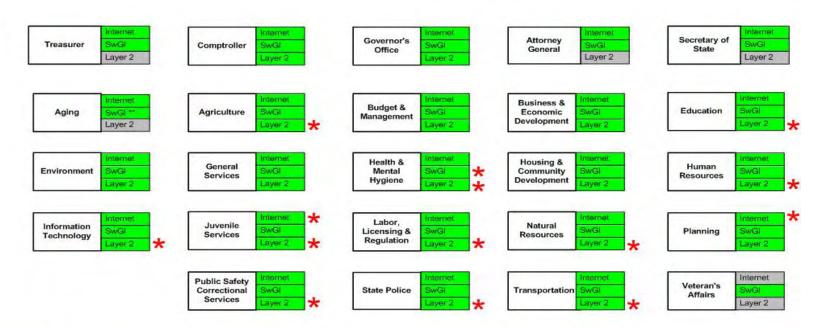






### **Executive Branch**

#### Executive Branch networkMaryland Subscribers as of September 12, 2008



#### Legend:

Agency is Not Receiving network/Maryland Service - A Cost Savings exists if network/Maryland 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

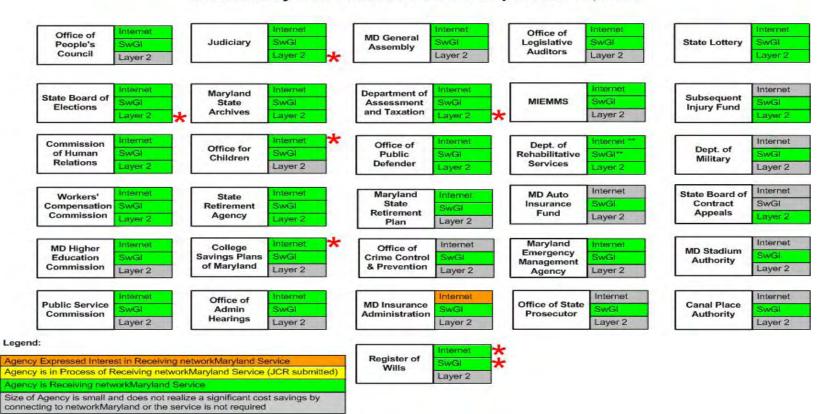
- \* networkMaryland Provisioning has been completed, Department is is process of migrating to service
- \*\* Agency is receiving networkMaryland service through parent, primary agency
- denotes a change in service since the last Advisory Group Meeting

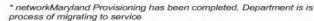




### **Non-Executive Branch**

#### Non-Executive Branch networkMaryland Subscribers as of September 12, 2008





<sup>\*\*</sup> Agency is receiving networkMaryland service through parent, primary agency

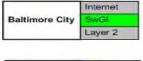
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### **Non-State Customers**

#### Non-State entities\Counties\Municipalities networkMaryland Subscribers as of September 12, 2008



Charles County Government Layer 2

Frederick County SwGI Government Layer 2



ntemet Carroll County Gov't Layer 2

Internet Maryland School for the SWG Deaf Layer 2

SwGI

ayer 2

University

System of

Maryland





Internet Caroline Swe County Gov't Layer 2

Alleghany	Internet
County Board of Education	SwGl
	Layer 2

Internet
SwGl
Layer 2

Baltimore	Internet
County	SwGl
Government	Layer 2

The second	Internet
Ocean City Gov't	SwGI
0011	Layer 2

Anne Arundel	Internet
County	SwGI
Government	Layer 2

Howard	Internet
County	SwGI
Government	Layer 2

	Internet
MD Public TV (MPT)	SwGI
(1411 1)	Layer 2

Garrett	Internet	*
County Public	SwGI	
Schools	Layer 2	

27.52	Internet
St. Mary's County Gov't	SwGI
county corr	Layer 2

	Internet
CAPWIN	SwGl
	Layer 2

#### Legend:

Agency Expressed Interest in Receiving networkMaryland Service Agency is in Process of Receiving networkMaryland Service (JCR submitted) Agency is Receiving network/Maryland Service

Size of Agency is small and does not realize a significant cost savings by connecting to networkMaryland or the service is not required

Internet City of Laurel wG Gov't Layer 2

Maryland

Environmental

Service



Internet

Layer 2

* networkMaryland Provisioning has been completed, Depa process of migrating to service	ırtment is is

<sup>\*\*</sup> Agency is receiving networkMaryland service through parent, primary agency

Internet College of SwGI Southern MD

Internet

Layer 2

SWG

denotes a change in service since the last Advisory Group Meeting

Women, Internet Children & SwGI Infants Program(WIC) Layer 2

Washington

County Public

Network

(WCPN)



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# **New Provisioning Activity**

- Ethernet Everywhere: Requests continues to pour in!
  - DHMH & MSDE: Services activated in Baltimore
  - Other Baltimore Sites (MSP, DPSCS) scheduled to be turned up by end of September
  - DHR: Plans to connect their data center @ 1100 Eastern Blvd.
  - 70 orders received or projected by agencies for FY2009
- Register of Wills
  - First-time SwGI subscriber for connection to JIS
- DPSCS:

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Established a colocation router for the Baltimore LATA at 6 St.
 Paul



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# **New Provisioning Activity**

#### Denton MSC

- Provisioning of on-net circuits completed & CAFs distributed
- All provisioned circuits will be Operational at end of month.

#### Salisbury MSC

- Provisioning of on-net circuits completed & CAFs distributed
- All provisioned circuits will be Operational at end of month.

### Frederick County

- Diverse ISP path for county
  - Waiting on FiberGate agreement to be signed.



### **Operations**

- Operational Improvements
  - Implemented resource graphing tool (CACTI) to present bandwidth utilization reports to subscribers
  - Implemented Speedtest as an internal bandwidth testing tool
  - Implement disk mirroring and a more robust backup strategy for key network management system databases





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# **Project Status**

- Migration from ATM to Native IP
  - Phase V: MultiService Centers
    - Updating design evaluating MPLS aware equipment at each MSC
    - Exploring hardware options
    - Schedule will be updated
  - Phase VI: Last Mile (FRASI Replacement)
    - Ethernet Everywhere is expected to have a major role
    - Circuit aggregation equipment will support Ethernet Everywhere
      & clear channel circuits to customer owned CPE
  - MPLS Provisioning Software
    - Dorado Redcell Creating operational procedures.





### **Project Status**

### BMAN Upgrade

- Phase III: Redesign of core t.b.d.
  - Reduce dependency on 6 St. Paul
  - Increase presence at 301 W. Preston for connectivity to core
  - Add SONET node at Preston St.
  - Redesign SONET ring for Annapolis/Baltimore/College Park
  - Adding routing presence at Preston St
  - New schedule being created





### **Project Status**

#### CHART Video

- Working with CHART to distribute video feeds to non-MDOT subscribers
- Assist with the development and lab testing of CHART video services and distribution
- Assist deploying equipment at subscriber locations
- Deployment of multi-cast capabilities on SWGI





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## **Project Status**

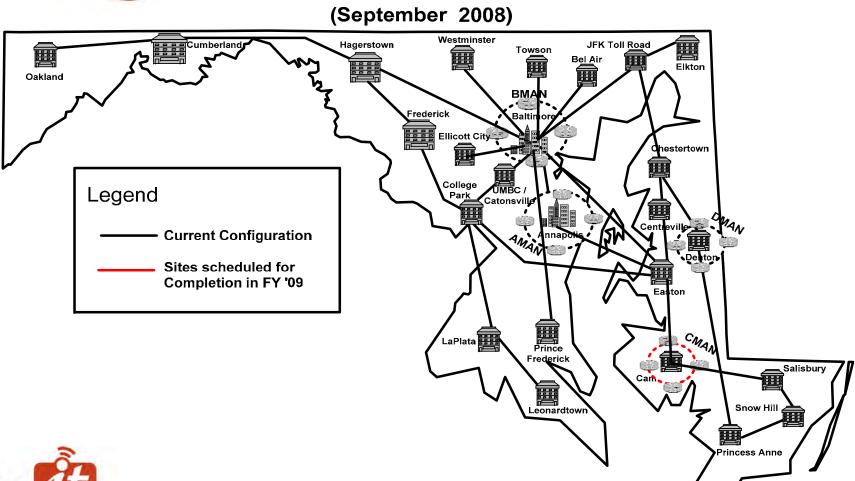
- World Trade Center (No status change)
  - New PoP established initially to support DBED
  - Building redundant fiber connection to building
  - Need to market to other tenants in the building
- Cambridge MAN (No status change)
  - Equipment has been received
  - Fiber installation in progress by Bay Country Communications
- Frederick MAN (No status change)
  - Pending FiberGate resource sharing agreement
  - Build a diverse fiber path to the city.
  - Dual connect Frederick to UMCP/Hagerstown





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### **Network Overview**





# **Fiber Projects**

### St. Mary's County

- Receive one pair of fiber from Leonardtown MSC to US301 connecting to La Plata via Level3 fiber.
- Construction connecting State & Metrocast fiber on hold pending a new work order under the Cable and Wiring Master Contract.

#### Pikesville

- Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Road in the Pikesville Area
  - Still in planning / feasibility analysis





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### **Other Business**

- networkMaryland<sup>TM</sup> Engineering Committee meeting
  - October 13th, 2008, 1:30 PM @ UMBC Technology Center
  - Merged with UMATS engineering meeting
- Closing Questions or Comments





# **Meeting Adjourned**



