# Communication Technologies Advisory Group

Agenda

# October 1, 2015

# **Welcome**

## CATV -

**MDFs**

* CMDF - designing add’l HVAC redundancy, relocated power panels
* NMDF - Makeover design in progress
* WMDF – final room upgrades in progress

**Infrastructure Records**

* Outside plant fiber inventory in planning
* Wireless maps development in progress (123/182 buildings loaded) – public interface in planning
* 252 buildings (42,300 outlets) in PLA ground.

**Building Infrastructure Projects**

* Research 4 under construction
* CFL, DH Hill, Cox, MRC in design

**UPS -** Developing list for FY2015/16, replacements will start in Fall.

**Campus Backbone**

* Cisco ACE Load balancer: Cisco recently provided a security update that was applied on September 19th during the data center maintenance window.
  + New Patch Management Standard - <https://docs.google.com/document/d/1zaV-JBYDQU2mgLAhQuO0q75EgpE8caGOSYNUFS91p6Q/edit>
* All 5 MDF network management vlans moved to MPLS L3VPN. All ComTech data center network management VLANs moved to MPLS L3VPN. We may not need to place backbone router control plane functionality behind MPLS L3VPN.
* Backbone IOS upgrade required again due to critical security fixes (CVE high).
* Planning backbone fiber circuit migration away from the legacy Cox cross connect due to the need for additional BDF space within that room. Most of this will be transparent. This must happen before further progress is made in moving other equipment to new circuits.
* IPS/IDS equipment will be placed in-line with PCI CDE traffic after OIT S&C provides an informational session to stakeholders.
* Continuing to finalize a significant portion of the centralized services infrastructure at SMDF and CMDF
* ResNet: 5Gb/s bandwidth holding; only 8.5GB dropped by rate-limiter since mid-August.
* Looking into future WAN connectivity options to NCREN (Nx10G vs 100G) - both Internet gateways will be “active” until we implement additional WAN connectivity.
* Centrex Replacement NMDF and SMDF Zones - in design
* Fiber rework at Cox X-connect

**Data Center**

* Access layer switch software upgrades completed on 8/9/2015 in DC1 and DC2.
* Core/Distribution and firewall upgrades completed on 8/19/2015 in DC1/DC2
* Service chassis upgrades required - time to be announced - should not be service impacting.
* Extended maintenance 11/7/2015 - 11/8/2015

**Access Layer**

* Building upgrades “CALA Lite” - FY14/15 projects - all designs complete except for Venture II, Nelson
* FY15/16 projects - Student Health started
* IOS upgrades this Fall/Winter within the access layer - starting with 4500X upgrades to “grant” buildings within the next week or so.

**Bluelights -** Working on comprehensive long-term plan. Currently have a resource devoting 20 hours/week to Bluelight maintenance.

* Have received a cellular stanchion to be installed at McKimmon
* Have ordered two solar powered stanchions for other locations

**Cellular/mobile** – Verizon/Spidercloud pilot - Williams, Scott, Riddick

**IT Strategic Planning** - Cyberinfrastructure Masterplan thoughts

**Budget**

* Have moved to FTE-based model for 15/16 and converted to auxiliary (redistributing state funds to units in same ratio impacted to be net 0)
* Finance & Administration “bought down” phone rate one more year ($7 vs. $8)
* [FY16 Projects Review](https://docs.google.com/spreadsheets/d/1UGnRgHOGyztuUkkjjdKf9bvzx3k5RIOSfk6J-fUBBXM/edit#gid=0)

**Unified Communications**

* UNCG and App State Updates
* Centrex Replacement (NMDF & SMDF)
* MySoft Replacement
* Multiples & Extensions (CAT6a upgrade)

## Wireless

* Design – Talley phase 2
* Test bed in Hillsborough Bldg.
* Residence Hall full wireless – summers of 2016 and 2017
* EDUROAM (secure SSID )
  + Goal is to eventually transition as many stakeholders as possible to use this SSID
* Proactive monitoring of over saturated 11n AP’s.
* Request for full design for Partners III

### Parking Lot Items

* Routing licenses at the BDF level – when and how much should occupants pay? Interim solution is 50/50 when “desired”, ComTech funds when required
* “virtual data center” – what is it and who pays
* Funding for server rooms, higher capacity (10Gbs ports), etc.

## Upcoming Meeting Dates

* Next CTAG Meeting – November 5, 2015 - **AFTC 203**