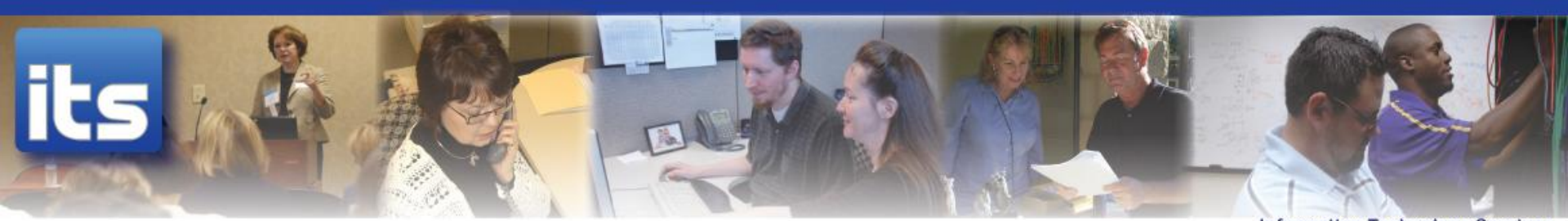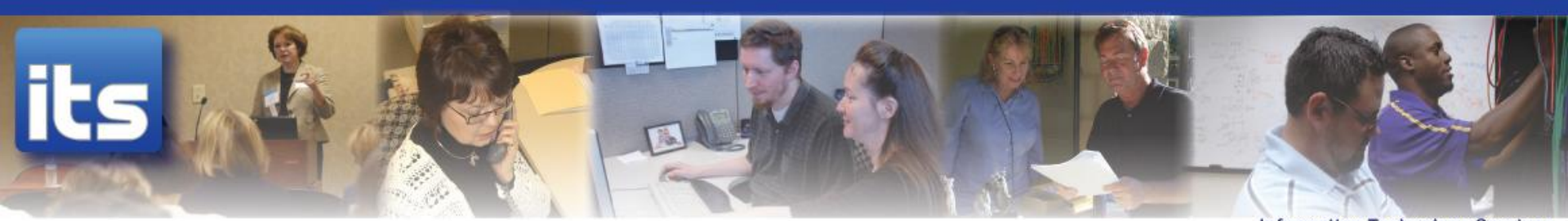# GA Digital Government Summit 2012

Every-changing Cyber Threat Landscape

- The trends/threats Forecasted in 2011
  - Big Data
  - Cloud Computing
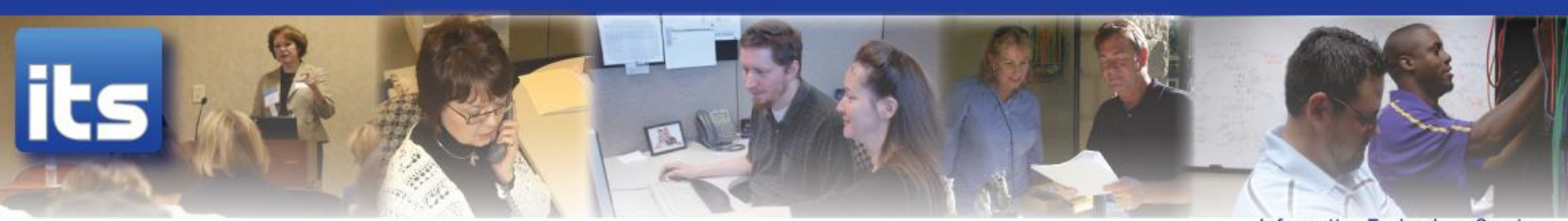 - Mobile Society
  - Social Networking
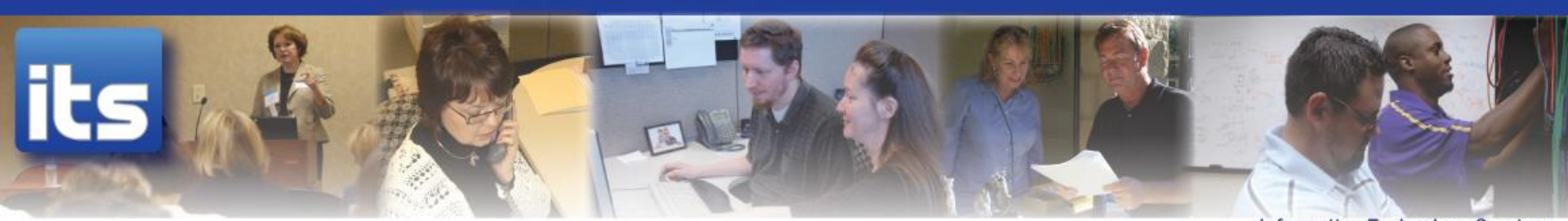
So this is what we are see…

By the numbers

Online Living…

- 24/hrs - Hours spent online per week(average)

- 46% - Mobile/cell phone owners who access the Internet via their mobile device (%)

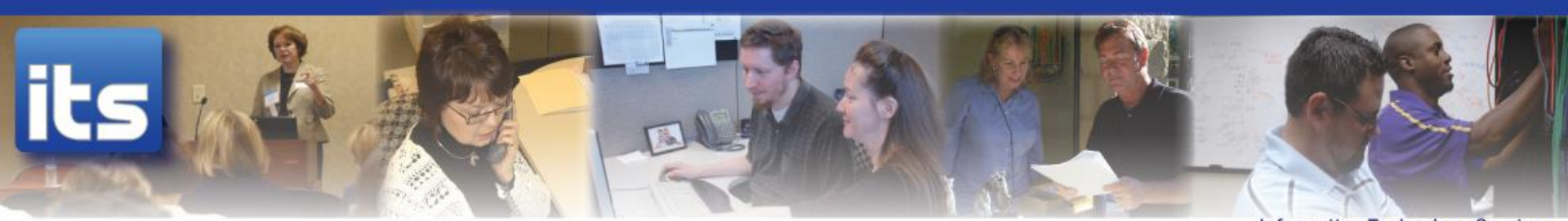# Online Living…

- 33% - Adults (%) who "can't live without the Internet"

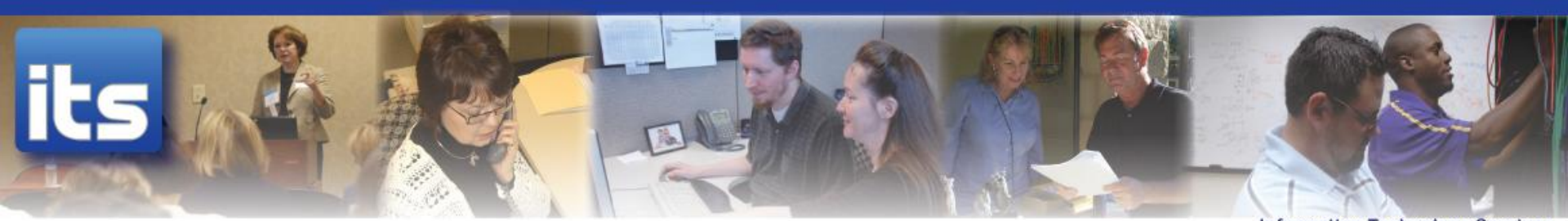- 40% - Adults (%) who say 'I would lose contact with friends without my social networks'
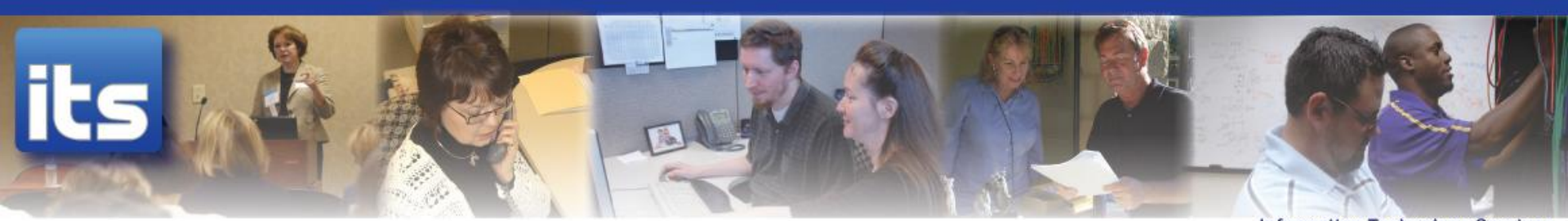
Lost time...

10 days - Days taken to resolve cybercrime in the past year (average)

$388 Billion – The total bill for cybercrime footed by online adults in 24 countries…

- $114bn – Direct cash costs of cybercrime
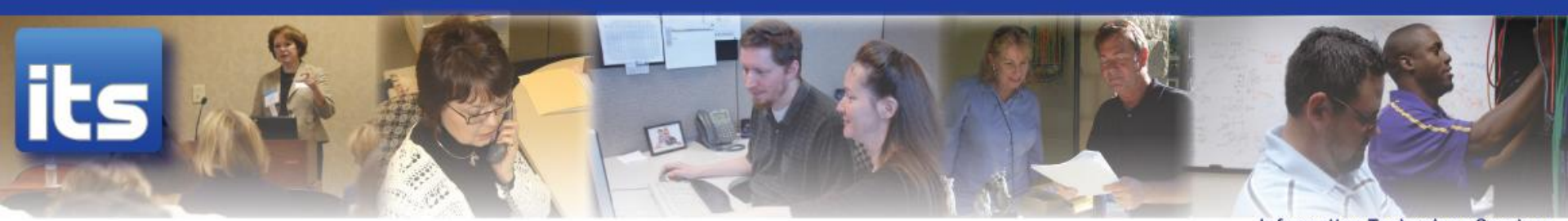- $274bn – Victims valued the time lost to cybercrime

Cybercrime is bigger than…

The global black market in marijuana, cocaine, and heroin combined ($288bn) and approaching the value of all global drug trafficking ($411bn)
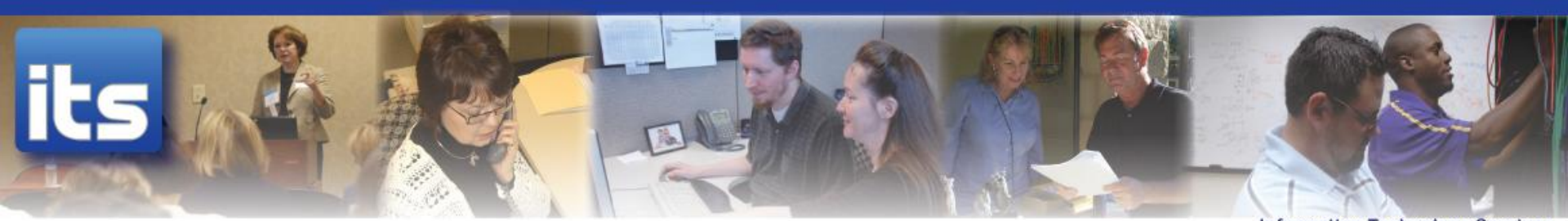
Cybercrime is bigger than…

At $388bn, cybercrime is more than 100 times the annual expenditures of UNICEF ($365bn)

Over the past year in 24 countries…

- 431m/yr – Adults experienced cybercrime

- 1m+/day – More than a million become victims every day

- 14/sec – 14 adults suffered from cybercrime every second
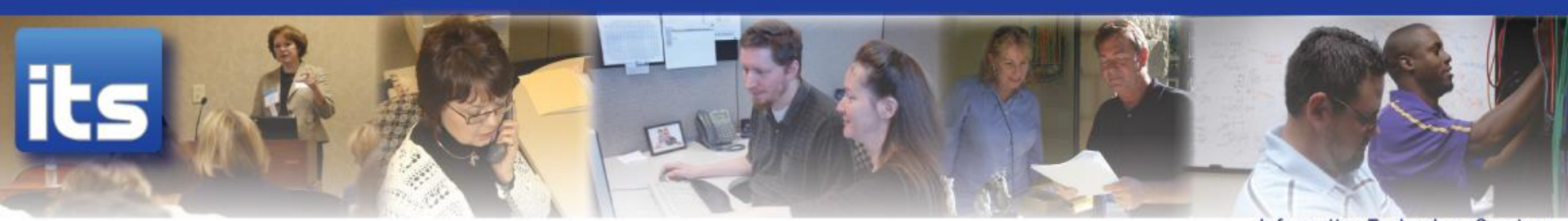
Most at risk…
Cybercrimes most common victims

- 69% of adults have experience cybercrime (65% in the past 12 months)
- 72% of males online have been victims compared to 65% female adults

Computer viruses and attacks…

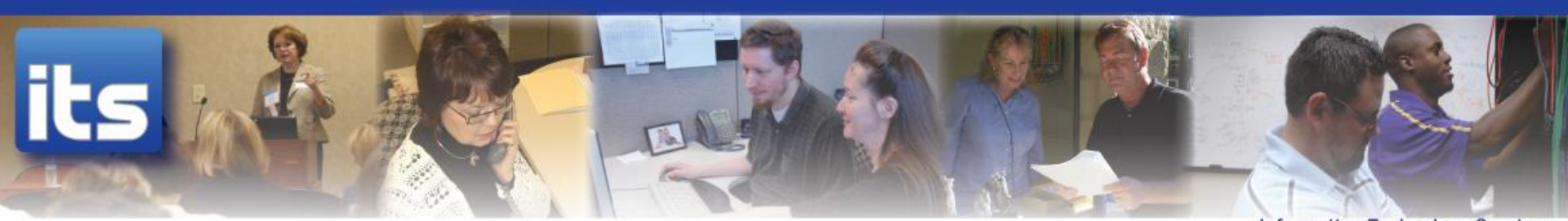- 41% - 4 in 10 adults surveyed do not have an up to date security SW suite to protect their personal information online
- 54% - of online adults have experienced viruses or malware on their computers

Underestimating the real threat of cybercrime is far more rampant than people seem to realize…

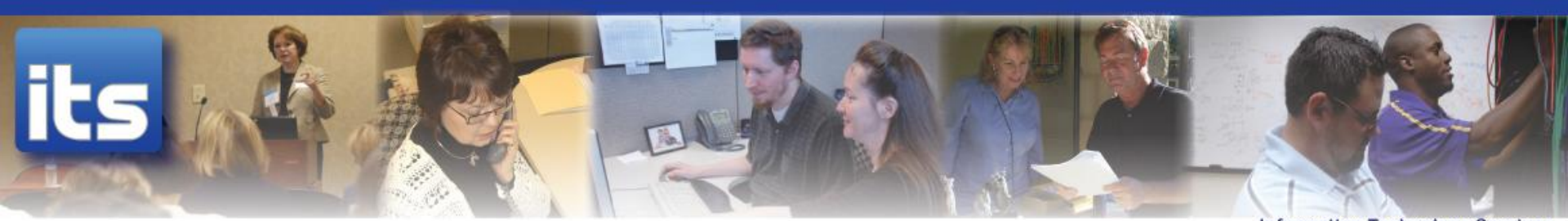Three times more adults surveyed suffered cybercrime than offline crime

Drill-down: Higher Education

Target-Rich Environment
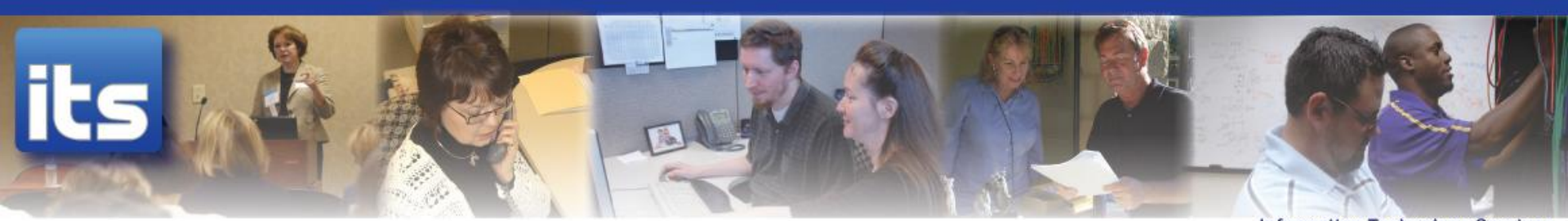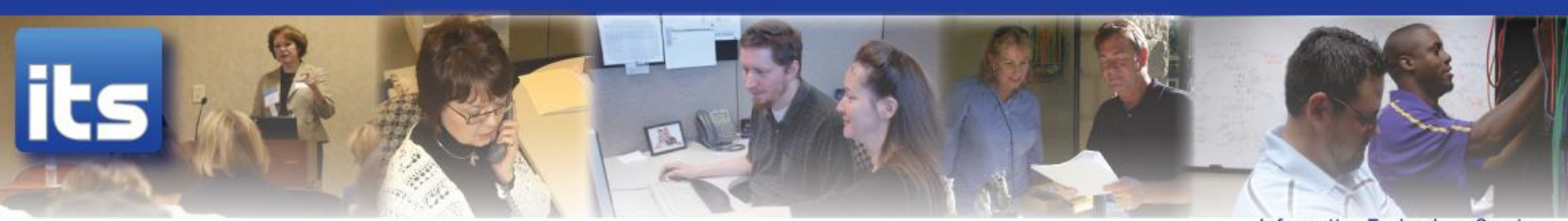
- Of the ~~35~~ **31** USG institutions served by PeachNet®, 30 are connected directly to the PeachNet® fiber backbone consisting of more than **2,700** miles of fiber optic cable in and around Georgia.

- There are currently more than 24,300 users from 33 USG institutions used the consolidated GeorgiaFIRST Financials database to enter and report on transactions ranging from more than 46,300 purchase orders, 396,500 accounts payable payments , and 122,100 general ledger journals during Fiscal Year 2011.

- From January 1, 2010, through December 31, 2010, ITS received and processed 23,575 Helpdesk support requests and notifications.

- Georgia OnMyLine provides a centralized website for Georgia citizens to search for online education opportunities offered by USG institutions. In fall 2011, the Georgia ONmyLINE website included more than 200 online programs and 3,600 online courses.

- 34 USG institutions running Banner asynchronously and delivering self service functionality to a combined 260,000 students.

- **~315,000** Students Enrolled for this Fall.

- 2 of the 4 Largest USG Institutions process around 3-4 million pieces of email DAILY. 70% +/- is spam/malware.
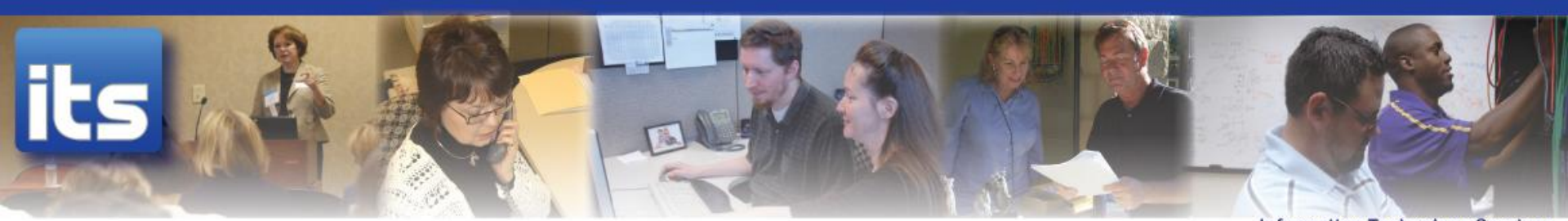
Information Technology Services

So, how do we protect and secure our people, systems and data?

- Defense-in-Depth
  - Policies, Standards and Secure Processes
  - Technology (endpoint security and endpoint security management, encryption, monitoring…)
  - Awareness and People
- Layered Architecture (Trusted Computing Base – TCB)
  - Trusted Networks
  - Trusted Hosts
  - Trusted Apps
  - Trusted Users

A more formal definition of the TCB of a computer system, as *the totality of protection mechanisms within it, including hardware, firmware, and software, the combination of which is responsible for enforcing a computer security policy.*