Technology-Enabled Government:

Overview of the Center for Public Technology
The Value of Technology

What percentage of your organization’s budget goes towards technology?

What percentage of work does technology support?
Technology is…
the vehicle from which accurate, reliable, and timely information is produced for:
strategizing, identifying objectives, improving productivity, and facilitating service delivery
Why have IT Investments Failed Us?
Failure 1: Drinking the Kool-Aid
Failure 2: Believing We Can Have It All!

Pick 2!
Failure 3: Forgetting the People Part
The challenge…

How can we use information technology…

- to create public value
- through a better division of labor
- where innovation is essential
- and implementation is often difficult?
How do we add value?

- To citizens?
- To businesses?
- To visitors?
- To employees?
Better Division of Labor…

- remote, asynchronous hand-offs: access
- simplified workflow, reduced hand-offs: productivity
- negotiated coordination, new authority: governance
Failed Predictions

“Everything that can be invented has been invented.“
Charles Duell, the Commissioner of the U.S. Office of Patents in 1899

“I think there is a world market for about five computers.“
Attributed to Thomas Watson in 1943, then Chairman of the board of International Business Machines (now IBM)

“There is no reason for any individual to have a computer in their home.“
Ken Olsen, President of Digital Equipment Corp. in 1977

“640k ought to be enough for anybody.“
Attributed to Bill Gates in 1981
Reaching a new generation on YouTube
“Go Out and Play an Hour a Day”
CDC in Second Life: Hygeia Philo
Message: Take precautions against STDs
The Largest Challenges Governments Face
What Does Change Look Like?

The expectation...
What Does Change Look Like?

The reality...

Performance

Current State

Transition State

Future State

Time
Strategic Investments in Technology
Three Primary Objectives of CPT

• **Education/teaching.** Includes training, assessment and evaluation, and best practices for engaging in technology-enabled government, along with a host of other services

• **Advising/Technical Assistance.** Includes addressing issues, opportunities, and challenges in information technology management that are specific to North Carolina local governments

• **Research and Writing.** Includes technology-related research and publications on a variety of topics
Certified Government Chief Information Officer Program

• Ten-month program
  – Two consecutive days per month
  – 240 total contact hours, including readings and homework
  – 5 hours of graduate credit available

• Modular, iterative approach to learning
  – Tailored content for each cohort
  – Exercises, case studies, class discussions are essential

• Offerings include Local, State, K-12 & National CGCIO programs
The Emerging Role of the CIO

Few senior managers are skilled in leading all the major changes necessary to capture value from major IT-intensive initiatives.

This is where the effective CIO comes in.

The CIO can and should shape the vision with the senior executives, marshalling all the resources necessary to get the job done, including training, business process redesign, and new hires if needed.
## Roadmap and Planning Series

<table>
<thead>
<tr>
<th>Module 1</th>
<th>Understanding the Enterprise</th>
<th>Goal Alignment</th>
<th>IT Roles</th>
<th>Value Add of IT</th>
<th>Building a Business case</th>
<th>Measuring &amp; Communicating Success</th>
<th>Organizational Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 2</td>
<td>Strategic Technology Planning and Management</td>
<td>Capital / Infrastructure Planning</td>
<td>Unifying Potential</td>
<td>SDLC</td>
<td>IS Scorecard/Metrics</td>
<td>Project Charters</td>
<td>Stakeholder Identification</td>
</tr>
<tr>
<td>Module 3</td>
<td>Communication: Creating a Shared Understanding</td>
<td>Elected Officials</td>
<td>Management</td>
<td>Users</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Development Series

| Module 4 | Project Management | • Developing requirements  
|          |                    | • Work breakdown structure  
|          |                    | • Estimating techniques  
|          |                    | • Schedule and cost plans  
|          |                    | • Managing Change Requests  
|          |                    | • Project Organization & Reporting  |

| Module 5 | Emerging Issues and Technologies  
|          | Best Practices | • Integrating Strategic Technology Planning into the Organization  
|          |                | • Being the Champion for Departmental IT Requests  
|          |                | • E-commerce  
|          |                | • E-business  
|          |                | • Cross-boundary  |
## Development Series

<table>
<thead>
<tr>
<th>Module 6</th>
<th>Risk Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Tools for risk management plan</td>
</tr>
<tr>
<td></td>
<td>- Risk identification (financial, technical, budgetary)</td>
</tr>
<tr>
<td></td>
<td>- Risk/opportunity costs</td>
</tr>
<tr>
<td></td>
<td>- Portfolio management</td>
</tr>
<tr>
<td></td>
<td>- Risk mitigation techniques</td>
</tr>
<tr>
<td></td>
<td>- Knowledge transfer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module 7</th>
<th>Legal and Regulatory Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Purchasing Rules/Regulations</td>
</tr>
<tr>
<td></td>
<td>- Public records law</td>
</tr>
<tr>
<td></td>
<td>- Open meetings law</td>
</tr>
<tr>
<td></td>
<td>- E-discovery</td>
</tr>
<tr>
<td></td>
<td>- PCI Compliance</td>
</tr>
<tr>
<td></td>
<td>- Identity theft protection acts</td>
</tr>
</tbody>
</table>
## Implementation Series

<table>
<thead>
<tr>
<th>Module 8</th>
<th>Change Management</th>
<th>Leadership in a Change Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▪ Enterprise approaches to IT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Change resistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Leading change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Opportunity identification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Knowledge management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Outsourcing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Managed competition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Roles of CIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Decision-making</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Conflict negotiation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Team building skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Motivation techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Marketing</td>
<td></td>
</tr>
</tbody>
</table>
## Operations and Maintenance Series

### Module 9

**Securing the Enterprise: Policies and Procedures**
- Disaster recovery
- Business continuity
- Security Awareness & Management
- Privacy & HIPAA
- IT’s Role in a Disaster

### Module 10

**Financing Technology Initiatives**
- Budgeting
- Cost Accounting
- Grants (writing, availability)
- TCO, ROI
- State Contract Purchasing
- Other Legal Issues
Impacts of CPT CIO Certification

- Improved critical non-technical skills
- Enhanced relationships
- Elevated positions within organization
- Salary increases
- International recognition for professional certification
Major Advising/TA Competencies

- Strategic Technology Planning
- Wireless
- Convergence
- Aggregation
- Web Services
- RFP/RFI Development
- Technology Evaluations

Sample Client List:

Alexander County; Cabarrus County; City of Burlington; City of Greensboro; City of Greenville; City of Jacksonville; City of Kannapolis; City of Newton; Town of Chapel Hill; Town of Cary; Greene County; Haywood County; Nash County; Wayne County; NC Dept of Environmental and Natural Resources; NC Dept of Agriculture; and, NC Office of State Treasurer
Final Thought…

Somebody has to do something, and it's just incredibly pathetic that it has to be us.
Questions?

Contact Information:
Shannon Tufts
919.962.5438
tufts@sog.unc.edu