JCOTS ~ Secretary of Technology Annual Report

The Honorable Aneesh P. Chopra
Secretary of Technology

12/12/06

Agenda for Discussion

Building on Legacy Policy Momentum

Technology Goals For Kaine Administration

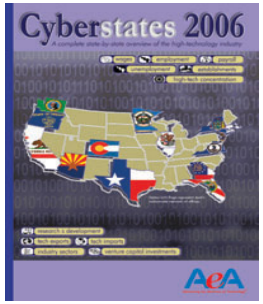
Proceeding in Partnership

Building on Legacy Policy Momentum

Virginia Technology Leads Nation, Other State Industry Sectors

VA Atop the Nation's States

- AeA ranks Virginia **#1** in Tech Job Creation (2006)



- Entrepreneur.com named Virginia the 2nd best state for Entrepreneurs (2006)

Entrepreneur.com

Fueled by Entrepreneurs, Tech Giants

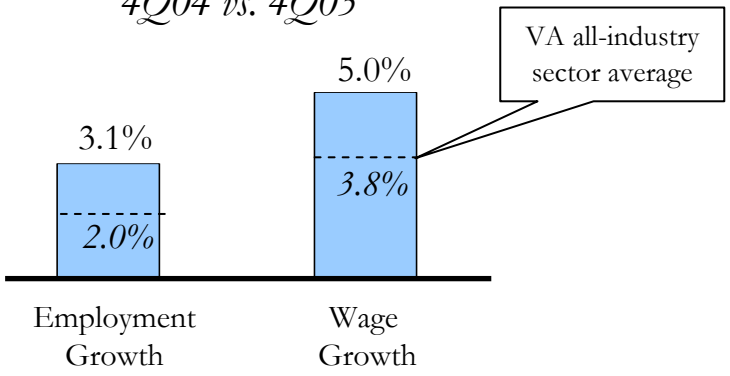
- **34%** of employment growth in firms employing less than **100 FTEs** (**18k** tech jobs added by year ending **March 2006**)
- By year ending **March 2006**, Virginia added **4.8% net new technology firms**
- Venture capital investment jumped **70%** in 2005 (**$450M** year ending December)

A Technology Boom

"Tech jobs, wages, and exports are all on the rise…if these trends continue, next year Virginia will become the state with the highest concentration of tech workers in the nation." *Greg Poersch, AeA*

VA Technology Economy

4Q04 vs. 4Q05



Source: Virginia Economic Trends 3Q2006, Chmura and Virginia Employment commission; AeA Cyberstates 2006 Report; PWC Moneytree Survey

VITA Transforming IT Infrastructure

Employee Buy-In Exceeds Expectations as we Transform IT Operations

Transition Planning

Due Diligence:
NG and VITA partner with agencies to mutually agree on IT needs through transformation

IT Investment:
NG invests **$270 million** to modernize infrastructure by 2009; desktop refresh, as an example, set to launch by November, 2007

Transition Phase

Transformation Phase

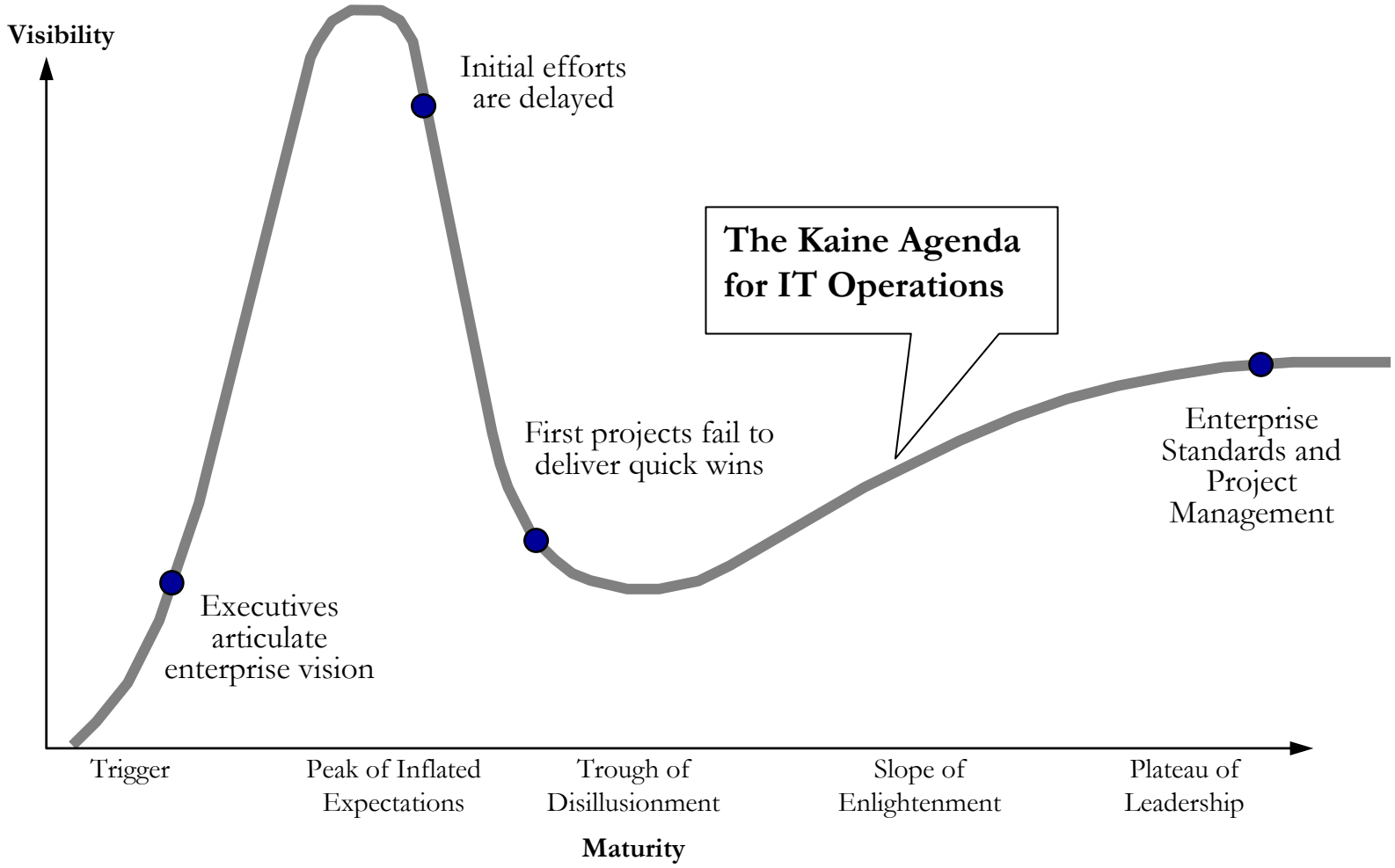
Operational Phase

Employee Transition:
Primary focus on NG employment offers: **65%** of CoVA staff accepted

December 2006

2009

A Maturing Approach to Fulfilling an "Enterprise" Vision



Source: Gartner

Technology Goals For Kaine Administration

Secretariat Goals Through 2010

I

Simplify Government Operations

#VITA Governance: Establish a benchmark to achieve greater customer satisfaction with centralized IT infrastructure services
Lead: Deputy Napier

#Enterprise Solutions Group: Decrease constituent transaction time in selected government operations
Lead: Director TBD

II

Advance the Governor's Agenda

#Healthcare: Increase physician EMR adoption rate 20%
Lead: Assistant Gates

#Transportation: Enroll 20% of eligible state workforce in telework
Lead: Director Jackson

#Education: Develop aptitude screen, low-cost training model for technology workforce
Lead: Assistant Gates

#Energy: Develop a university consortium to pursue energy R&D
Lead: Assistant Kundra

III

Promote the Technology Economy

#Universal Broadband: Ensure access for every Virginia business
Lead: Asst. Kundra/Dir. Jackson

#Seed-Stage Capital Access: Double the number of innovative companies funded at the seed stage
Lead: Assistant Kundra

#Industry-Sponsored R&D: Achieve $1.2BN in public university R&D
Lead: Assistant Kundra

Office of the Secretary of Technology Team

Assembling the Commonwealth's Technology Leaders

Organizational Structure

Secretary Chopra

Deputy Napier
VITA

Assistant Gates
Health, Education

Assistant Kundra*
Broadband, R&D, Seed Capital

Director TBD
Enterprise Solutions

Director Jackson
Telework, Broadband

*Joint Appointment with Secretary of Commerce & Trade

Advisory/Supervisory Boards

Guiding the Technology Agenda

***IT Investment Board*:** 10-member supervisory board includes private sector technology executives to elevate the quality of $800M+ state IT project portfolio

Enterprise Solutions Council: 15-member advisory group includes private sector executives to assist with approach to simplify government

Health IT Council: 18-member public-private team to ensure leveraged return on public sector investments to advance health IT

CTRF Grant Allocation Committee: 9-member scientific and technical advisor team to manage industry-sponsored R&D investments

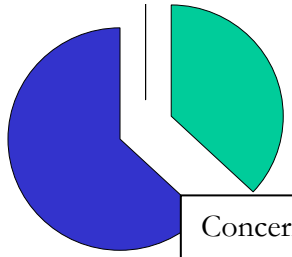
CIT Investment Advisory Board: 9-member venture capital team to ensure fair return on seed capital investment

Goal : VITA Customer Satisfaction

Enfranchising Executive Branch in IT Transformation

August Agency Head Meeting

"I believe the VITA Model is Right for Virginia"



Concerns include project management, procurement and agency strategy alignment

Strategic Plan for IT 2007-2011

#1: Increase Accessibility to Government

#2: Facilitate IT Collaboration and Partnerships

#3: Ensure a Trusted and Reliable Technical Environment

#4: Create a Reputation of Performance for Technology

#5: Increase Workforce Productivity through the use of IT

IT Investment Board

Chair, Customer Advisory Council

SoTech's Role

Responsible for providing real time input of the needs of VITA customers and evaluating customer satisfaction with IT infrastructure services through VITA; goal to directly link agencies, higher education, and local governments to ITIB

"Goal Champion" Teams

A "Business" Responsibility

SoTech's Role

Responsible for nominating chairs from within agency/ cabinet and vice-chairs from local government; goal to ensure all proposed IT projects properly align with agency/IT strategic plans, and encourage the sharing of best practices

Source: VCU Agency Head "Real-Time Polling" 8/06; UVA Weldon Cooper Center VITA Satisfaction Survey, 2005

Goal : Simplify Government

"Seed" Fund to Spur Government Productivity Growth

Productivity Lagging the Private Sector

Private sector productivity has grown recently at roughly **3 percent** per year.

…*government* productivity is harder to measure, best estimates place its recent growth at less than **1 percent**.
Lenny Mendonca, McKinsey Global Institute (2004)

Increasing productivity is a major issue for all governments

Enterprise Solutions Group

Mission
- Simplify Government

Staff
- 2-3 Professionals
- 20-50 high-performing agency "Fellows" dedicating **15-20%** to ESG initiatives

Goals
- Reduce constituent transaction time
- Lower government operating costs
- Advance Governor's key agency performance objectives

COVF Funding in Brief

In FY 2007-8, Governor and GA directed **$4.25M** towards three priorities – **enterprise re-engineering, agency re-engineering,** and **results teams**; goal to surface cost savings projects and begin to shift operating culture towards continuous performance improvement

Source: "Improve Productivity First" San Jose Mercury News on March 8, 2004

Goal : Promote Health IT Adoption

A Multi-Pronged Strategy to Deliver Public-Private EMR Adoption

I

Organizing Procurement

#Health IT Budget Transparency: Replicate federal study to identify all state Health IT spending; goal to surface standardization and savings opportunities

#Enterprise-Wide EMR: Establish a statewide contract for EMR services/software for public sector physicians; goal to identify portfolio of "preferred" vendors

II

Extending the Enterprise

#Medicaid Transformation Grants: Proposing to fund web-based PHR populated by claims data and an all-payer electronic billing system for smaller providers

#Electronic Master Patient Index: Seed capital (**$250k**) available for developing a statewide Electronic Master Patient Index in current biennial Budget

III

Seeding Innovation

#Office of Health Information Technology: Virtual Office combining staff from both the Health and Technology Secretariats; serves as support staff for the Health IT Council in its mission to review proposals for funding from **$1.55 Million** appropriation

Goals: Promote Telework Adoption, Universal Broadband Access for Business

Leading By Example ~ Investing in Broadband, Encouraging Telework

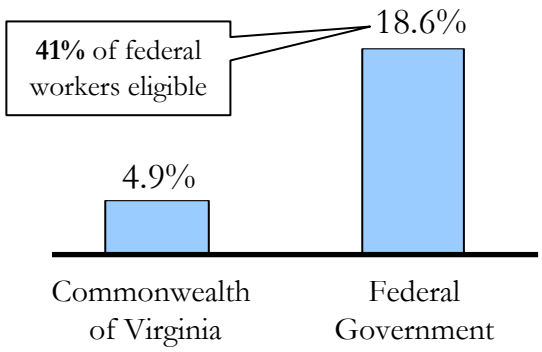
A Lofty (Telework) Goal

- Governor Kaine calls for **20%** of eligible Virginian state workers to telework by **2009**

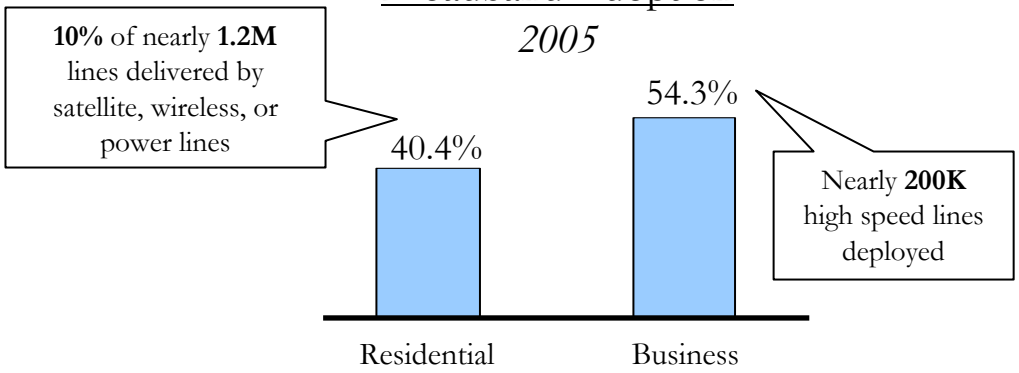
Broadband Access a Requirement

- Governor Kaine calls for **access** to broadband services to all businesses by **2010**

Telework Adoption
2005



Broadband Adoption
2005



Governor Kaine on Telework

Telework is a family-friendly, business-friendly public policy that helps us recruit and retain a high-quality workforce in a competitive job market. It also protects environmental quality and promotes energy conservation by reducing traffic congestion and vehicle emissions. Telework also allows a better balance between work and family. For all of these reasons, it is important for state government to support public and private sector efforts to promote widespread adoption of telework.

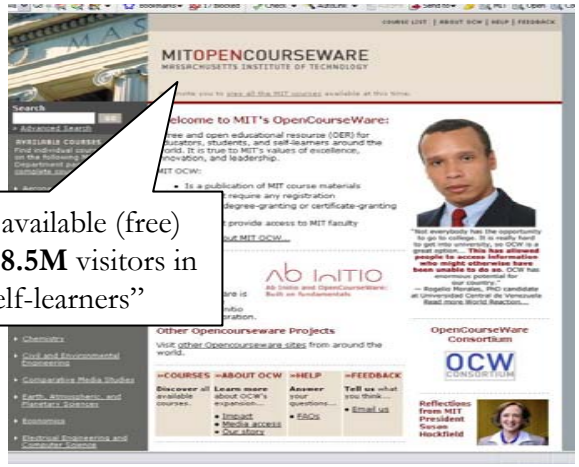
Source: "The Status of Telework in the Federal Government (2005)"; Office of Personnel Management; FCC; Virginia State Corporation Commission; DHRM

Goal : Low-Cost Workforce Training Distribution

Ensuring Access to High Quality Workforce Requires New Approach

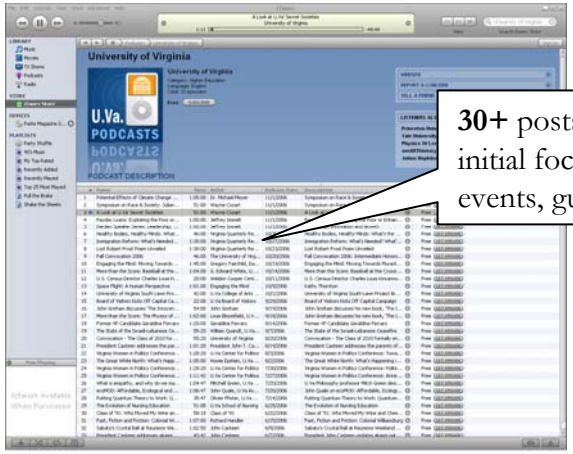
A National Movement

60 courses (with each individual lecture) available (free); lectures **ranked** on "popularity", allow for listener **"reviews"** and include "**listeners also subscribe to**" feature

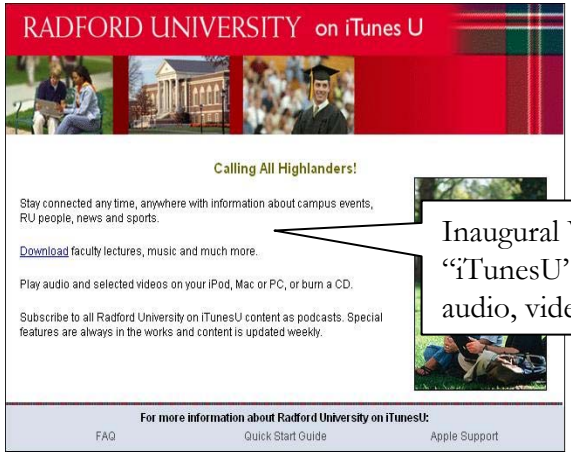


1,400 courses available (free) online; nearly **8.5M** visitors in 2006; **49%** "self-learners"

A Good Start in Virginia



30+ posts available (free); initial focus on campus events, guest lectures



Inaugural Virginia "iTunesU" site includes audio, video content

Goals: Growing Energy, Industry-Sponsored R&D

Establishing an R&D Growth Plan For Virginia's Public Universities

I

Selecting Target-Rich Research Ideas

#Business-Driven Grant Reviews: Through VRTAC, ensure the business community has an opportunity to provide guidance to researchers on project topic selection; goal to fix the "front-end" to increase economic returns on university R&D

II

Investing in Guided Innovation

#Multi-University Research Consortiums: Pursue state funding for research in areas that meet a public need and are served by multiple universities; initial portfolio – renewable energy, life sciences, and semiconductors

#CTRF Grant Allocation Committee: Leverage $2M fund to attract top-tier private research organizations with an eye towards product development in Virginia

III

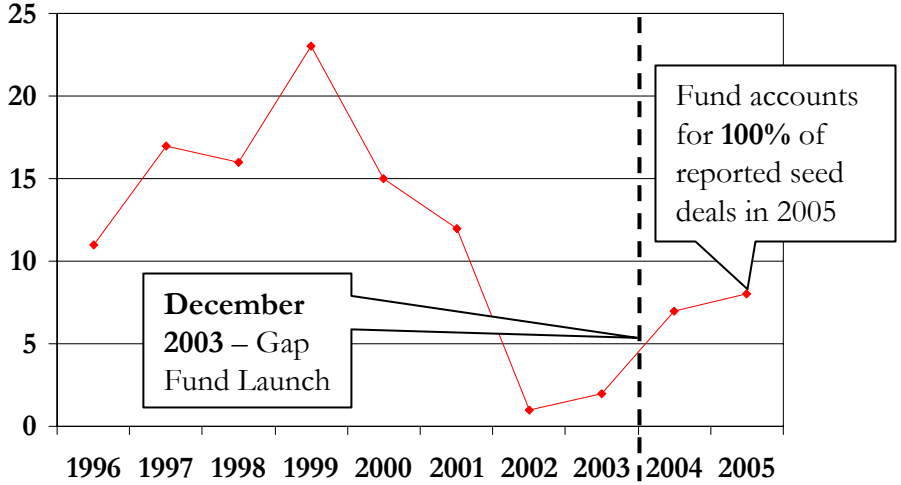
Hardwiring University Accountability

#Intellectual Property "Scorecard": Through VRTAC, establish an independent annual measure for the effectiveness of university IP commercialization and assignment efforts; goal to encourage business-university partnerships

Goal: Seed-Stage Capital Access

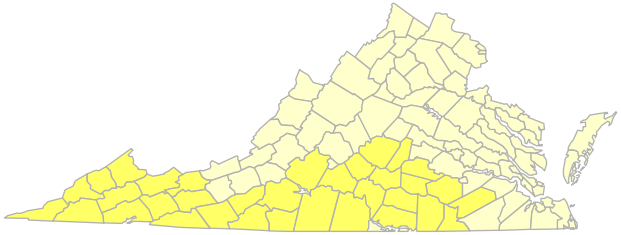
CIT "Gap" Fund On Pace to Double State's Seed Investments

Seed Stage/Early Stage Financing
Number of Virginia Transactions



VA South Technology Acceleration Fund
CIT Pilot Program

- November 9, 2006 kickoff
- **14** Applicants to date
- Goal to invest in the formation of 10 new technology companies annually



CIT Funds In Brief

Gap Fund: Launched in **December, 2003**, CIT began seed-stage investments up to $100K in convertible debt; a seasoned "Investment Advisory Board" guides decisions; 365 applicants to date, **15** investments totaling **$1.7M**

Virginia South Technology Acceleration Pilot Fund: Launched in **2006**, this pilot aims to stimulate the growth of technology-based business as our economy makes needed structural change in rural markets

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree(tm) Report

Proceeding in Partnership

Aligning General Assembly, Secretariat Agenda

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Simplify Government Operations

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GA: JCOTS

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GA: JCOTS

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#Healthcare: Increase physician EMR adoption rate 20%
JCOTS: Electronic Medical Records

#Transportation: Enroll 20% of eligible state workforce in telework
JCOTS: Telework and Telecommuting, HJR 144

#Education: Develop aptitude screen, low-cost training model for technology workforce
GA: HJR 25

#Energy: Develop a university consortium to pursue energy R&D

III

Promote the Technology Economy

#Universal Broadband: Ensure access for every Virginia business
JCOTS: Telework and Telecommuting

#Seed-Stage Capital Access: Double the number of innovative companies funded at the seed stage

#Industry-Sponsored R&D: Achieve $1.2BN in public university R&D
JCOTS: Nanotechnology R&D; Modeling and Simulation