

Commonwealth Research Commercialization Fund

and

Research & Technology Strategic Roadmap

House Appropriations Committee

October 17, 2011
Peter Jobse, CIT CEO

§ 2.2-2221.2. Commonwealth Research and Technology Strategic Roadmap

Develop the Roadmap...to use to identify research areas worthy of institutional focus and Commonwealth investment in order to promote commercialization and economic development efforts in the Commonwealth

§ 2.2-2233.1. Commonwealth Research Commercialization Fund

Awards from the Fund shall only be made to applications that further the goals set forth in the Commonwealth Research and Technology Strategic Roadmap

CRCF Appropriation



- Commonwealth Research Commercialization Fund
- \$10M appropriated for FY2012
 - \$4M for CIT GAP Fund
 - \$2M for SBIR Phase I NIH matching program
 - \$4M for other programs
 - Matching Funds
 - Facilities Enhancement Loan
 - Commercialization
 - Eminent Researcher Recruitment

R&T Roadmap

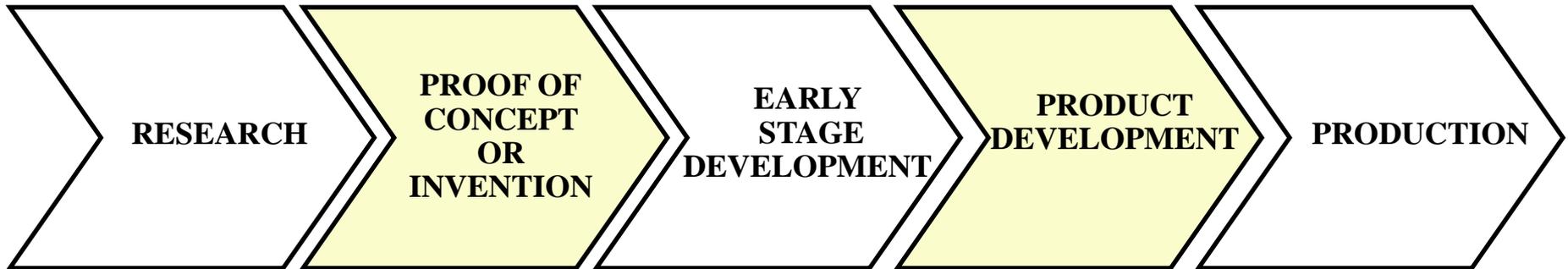


- Identify key industry sectors for potential investment
- Identify basic and applied research opportunities with commercial promise in these sectors
- Encourage commercialization and economic development in these sectors
- Help ensure that investments in research are made prudently in focused areas with significant potential for commercialization and economic growth

Technology Life Cycle



Technology Innovation Continuum



*Source: "Between Invention and Innovation,"
U.S. Dept. of Commerce. Nov. 2002*

Life Cycle Acceleration



Technology Innovation Continuum



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\$10M appropriated to accelerate innovation and company formation

- \$4M for CIT GAP Fund
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CRCF acceleration



Research and Technology Roadmap

Eminent Researchers Fund

Research Match

SBIR Match

RESEARCH

PROOF OF
CONCEPT
OR
INVENTION

EARLY
STAGE
DEVELOPMENT

PRODUCT
DEVELOPMENT

PRODUCTION

GAP Fund

Commercialization Fund

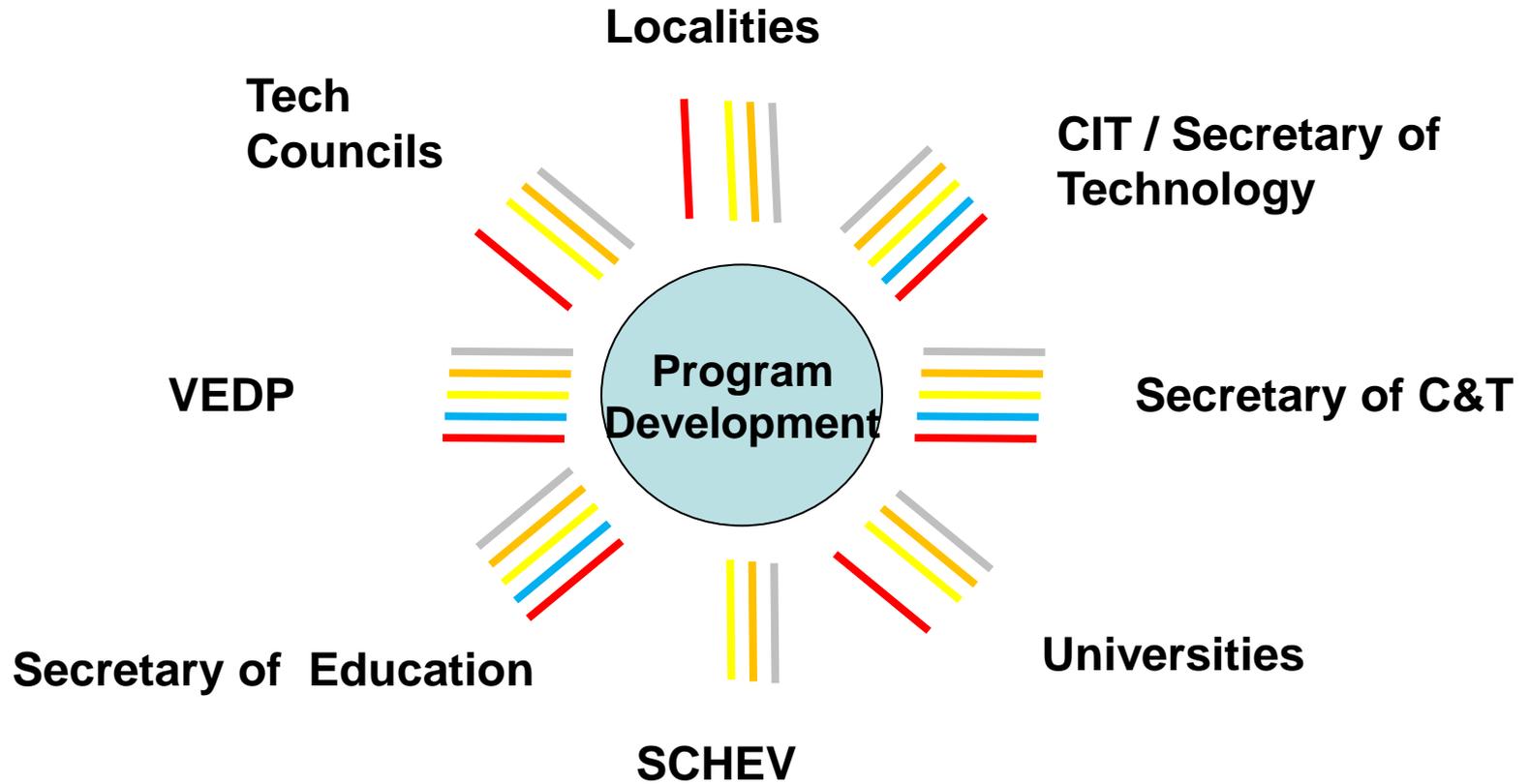
Facility Enhancement Fund

CRCF Timeline



- Request for Information – mid-Summer 2011
- Appoint RTIAC – August 2011
- Preview Roadmap / findings – September 2011
- Submit Roadmap – October 2011 (accelerated)
- Issue CRCF solicitation – October 2011
- Announce initial awards – December 2011
- Issue 2nd solicitation – February 2012
- Announce awards – May 2012

CRCF Development



RTIAC 

Schedule 

CRCF Structure 

Roadmap 

RFI 

CRCF Demand Survey



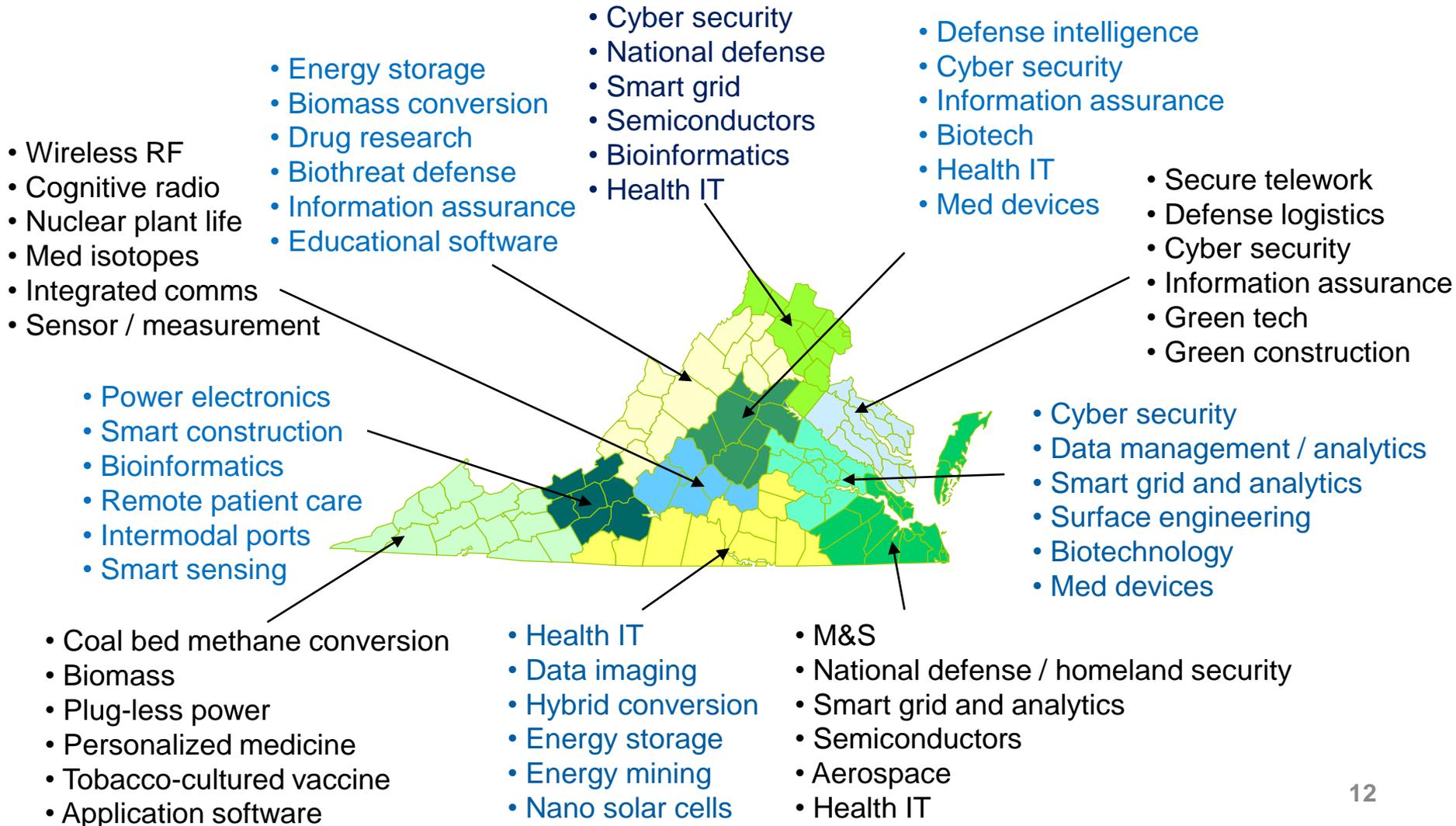
- 305 projects / 218 individuals / 144 entities
- \$120M requested; request range \$8K - \$10M
- **Technology sectors:** (in order of popularity; some projects listed multiple sectors)
 - Life sciences
 - Information technology
 - Energy
 - Advanced manufacturing
 - National security
 - Environment
 - Aerospace / aviation
 - Transportation
 - Communications
 - Other (e.g., tech transfer)
- **Responding entities**
 - For-profit companies; academia; other research institutes; federal labs; political subdivision
- **Primary program interests** (in order of popularity)
 - Commercialization Program for Virginia-based Organizations
 - Matching Funds Program for Academia / Other Research Institutes
 - SBIR / STTR Matching Program (non-NIH awards)
 - SBIR / STTR Matching Program (NIH awards)
 - Eminent Researcher Recruitment Program
 - Facilities Enhancement Loan Program for Academia and Political Subdivisions

RTIAC Members



Designated in Legislation			Citizen Members		
Research University	Tom Skalak	UVA	Venture Capital	Bobby Ocampo	Grotech Ventures
Research University	Dennis Manos	CWM	Venture Capital	Robert Patzig	Third Security
Research University	Mohammad Karim	ODU	Engineering Firm	Dan Gonzalez	Avison Young
Research University	John Noftsinger	JMU	Research Facility	Bob Kahn	Corporation for National Research Initiatives (CNRI)
VEDP	Jeff Anderson	VEDP, President & CEO	Technology Company	Tom Kirchmaier	General Dynamics IT (GDIT)

Preliminary Findings



Roadmap / CRCF Intersection



- Industry Opportunities / Eligible Sectors
 - Advanced Manufacturing
 - Aerospace
 - Communications
 - Energy
 - Environment
 - Information Technology
 - Life Sciences
 - Modeling and Simulation
 - Nuclear Physics
 - Transportation
- www.cit.org/programs/cit-rd/roadmap

Key Milestones



	<u>Status</u>
• Appoint Secretary of C&T and Secretary of Educ to IEIA board	complete
• Appoint RTIAC	complete
• RTIAC Roadmap approval	complete
• Roadmap submission to GA and Gov	complete
• Develop CRCF guidelines	complete
• CRCF Solicitation period opens	complete
• CRCF Solicitation period closes	10/31/11
• Roadmap – community refresh	11/1/11
• First round CRCF awards	12/20/11

GA Participation



- Roadmap and CRCF guidance provided
 - Roadmap structure and usage
 - CRCF request for information
 - RTIAC candidates
 - Intended usage
- Roadmap review discussion
 - Recommendations for CRCF funding
- Opportunity to incorporate changes
 - November 1 Roadmap refresh
- Monitoring progress
 - Proposal volume and compliance
 - Mandated reports

CIT GAP Funds – Overview



- **CIT GAP Fund**

- Seed-stage leverage fund – designed to stimulate private investment
- Three operating funds
 - GAP Tech Fund
 - BioLife Fund
 - Innovation Fund
- Investment decisions made by Investment Advisory Board
- *Average projected 5 year job growth is 10X from point of investment*

- **FY2011 summary**

- 565 applications
- 44 review meetings held
- 15 presented to the Investment Advisory Board
- 6 new company investments placed

- **FY2012 projections**

- 131 applications to date – projecting 500+
- 21 new company investments
- 18 validation investments
- 6 energy fund investments

Venture Funds

- Credit Suisse
- Edison Ventures
- Harbert Ventures
- HIG Ventures
- In-Q-Tel
- Intersouth Partners
- New Enterprise Associates
- SJF Ventures
- Tall Oaks Capital
- Valhalla Venture Partners

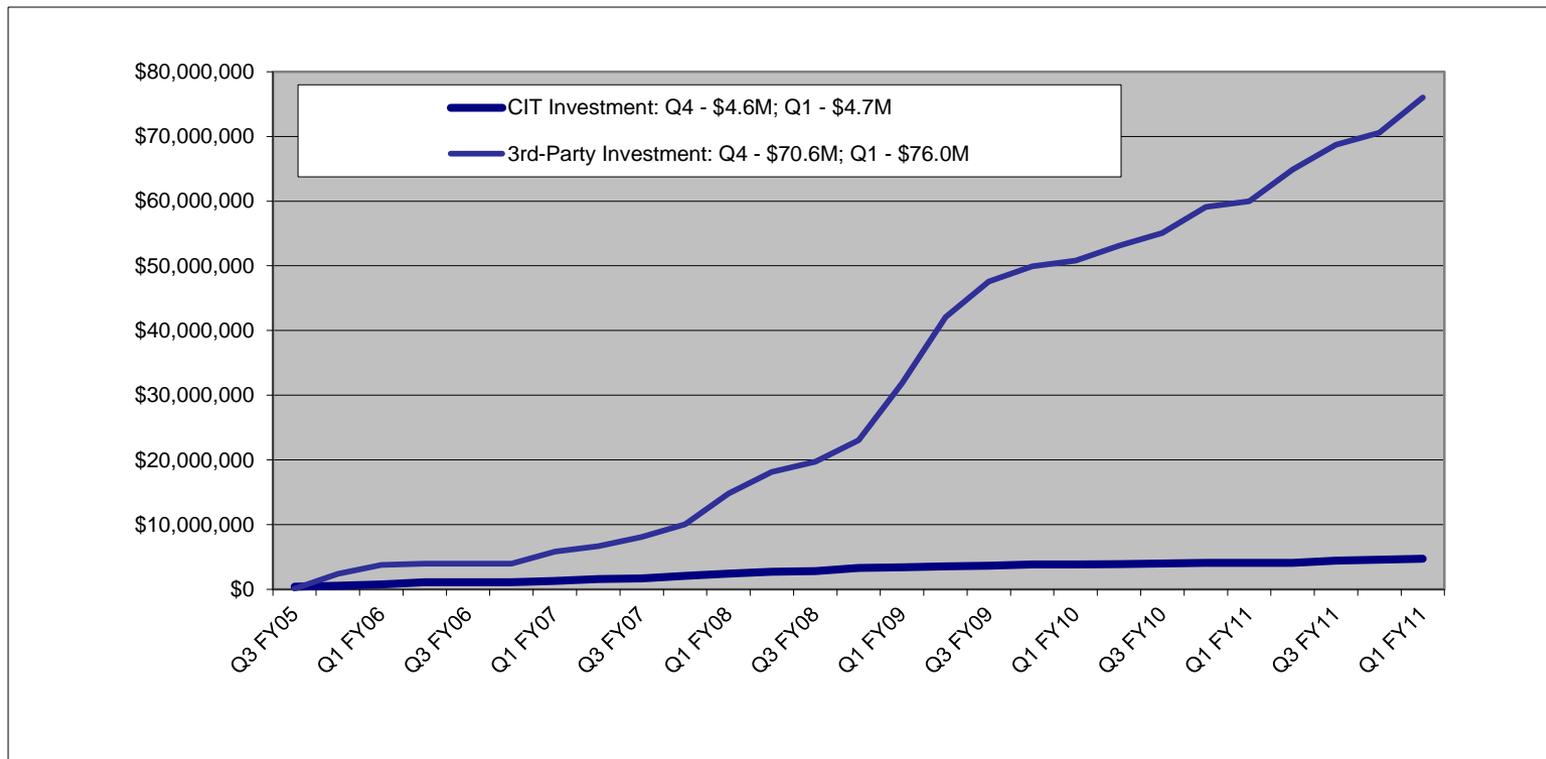
Corporations/Organizations

- Alpha Natural Resources
- GE Energy
- Johnson & Johnson
- Carillion
- National Institute of Health

Angel Investment Groups

- Active Angels
- Blu Venture Investors

Private Sector Leverage



16:1 Private sector leverage - \$16 for every \$1 CIT invests

One example

- Northern VA software startup
 - Proprietary workforce management software
 - Used to mobilize and compensate remote workforce
- GAP Funds invested \$100,000
- Private investors placed another \$2.2M investment
- 12 new positions were formed and hired

Portfolio online at www.citgapfunds.org