

REPORT OF

**THE JOINT COMMISSION ON
TECHNOLOGY AND SCIENCE**

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA



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Senator Stephen D. Newman, Vice Chair
Senator William T. Bolling
Delegate Mary T. Christian
Senator Janet D. Howell
Delegate Daniel W. Marshall, III
Delegate Sam A. Nixon, Jr.
Delegate Jay K. O'Brien, Jr. (Resigned upon election to Senate in 2002)
Delegate Kenneth R. Plum
Delegate Harry R. Purkey
Senator Patricia S. Ticer
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Executive Summary

Created by the 1997 General Assembly through House Bill 2138, JCOTS is a permanent legislative commission charged to study all aspects of technology and science, to promote the development of technology and science in the Commonwealth of Virginia through sound public policies, and to report its findings annually to the Governor and the General Assembly (*See* Chapter 11 of Title 30 of the Code of Virginia, § 30-85 et seq.). JCOTS, which consists of twelve legislators (seven Delegates and five Senators), submits its sixth report today.

JCOTS' 2002-2003 work plan identified four issues for study through the establishment and work of advisory committees, co-chaired by JCOTS members: Center for Innovative Technology; Integrated Government; Privacy; and Intellectual Property and Entrepreneurial Development. The work plan also identified new issues to be introduced at Commission meetings through testimony and presentations -- cybercrimes, biotechnology, nanotechnology, and homeland security -- as well as other issues to be monitored throughout the year -- privacy of personal information in court documents, broadband, and identity theft.

JCOTS adopted the findings and recommendations of its advisory committees and submits for consideration. Its complete report will be submitted after the 2003 Session.

Center for Innovative Technology Advisory Committee

The Center for Innovative Technology Advisory Committee was charged with exploring the past, present and future mission of Virginia's Center for Innovative Technology (CIT), whether CIT is fulfilling its current mission and how it can better fulfill its mission in the future. The Committee held discussions and hearings in Herndon, Charlottesville and Richmond to meet its charge and worked closely with Secretary of Technology George Newstrom.

The General Assembly created CIT in 1984 as a nonprofit organization designed to enhance the research and development capability of the Commonwealth's major research universities. In its first decade, CIT implemented that original legislative intent by bringing Virginia businesses and institutions of higher education into relationships that promote a climate of cooperation and technological innovation. In 1994, CIT adopted a new mission, one that measured CIT's success in terms of jobs created/retained, companies created/retained/converted and competitiveness created for Virginia's businesses. Recently, CIT's ongoing value to the Commonwealth was questioned and the Commission agreed to review the performance and potential of CIT.

The Committee agreed that despite concern over its operations and mission, CIT should continue. Its regional operations and field force provide a valuable asset to the entire Commonwealth. It serves companies large and small, technology-based and non-technology based, urban and rural. The Committee agreed with the Secretary's plan -- to increase federal research and development (R&D) dollars for the colleges and universities, to increase commercialization and transfer of intellectual property from the labs and institutions, and to promote technology-based economic development

(improving government-industry programs that encourage economic growth through the application of science and technology) -- but included some explanations and additions as well and added the role of a technology extension service.

The Committee recommended consolidating the A. L. Philpott Manufacturing Extension Partnership (PMEP) into CIT so that together they could assist Virginia's businesses in the areas of quality control, lean manufacturing techniques, critical manufacturing processes, computer security, and business planning and preparation issues, to name a few, much like the agricultural extension service helps Virginia's farmers and other citizens with a host of agricultural issues. CIT should also assist localities in the deployment of high-speed connectivity and act as an intermediary between the public and private sectors. These extension services would link business, industry, and government with technological best practices from throughout the world and connect technological process improvements at university research centers to business, industry, and government.

Despite CIT's somewhat tortured history (see Senate Document 16 (1993)), the Committee agreed that CIT still performs a valuable service to the Commonwealth. However, its mission needs to be more focused, its governance and administration more stable, and its accountability more defined. Furthermore, its efforts must be an integral part of an overall economic development plan for the Commonwealth.

Integrated Government Advisory Committee

The Integrated Government Advisory Committee was charged with exploring the issues raised by government's transformation from a paper-based system to the information age, a mission of the Commission that began in its early days and continues. The Committee focused on the present state of information technology (IT) procurement in the Commonwealth and the history and present state of the electronic communications pilot project.

The Committee received briefings on IT procurement from several vendors as well as the current administration. It conducted a detailed examination of the IT procurement process and discussed the current state of procurement, its future course and possible alternatives. The Committee also received briefings on the history and present state of the electronic communications pilot project (an exemption to the Virginia Freedom of Information Act that applies to meetings held via videoconference), the Virginia Community College System's videoconferencing capabilities and the role and future of the pilot project.

As the result of its discussions, a number of legislative and administrative recommendations arose. The Committee limited debate to a few of them and made a number of recommendations. The Committee recommended:

- A bill that amends the Public-Private Education Facilities and Infrastructure Act of 2002 to include IT projects.
- A bill that amends provisions related to information technology procurement to reflect the Department of Information Technology's role in IT procurement.

- Several administrative changes to existing procurement regulations.
- Establishing two regularly scheduled times every month to make videoconferencing available to public bodies in the legislative branch.

Privacy Advisory Committee

The Privacy Advisory Committee was charged with establishing privacy principles that should serve as a guideline for legislative proposals and balance the interests involved.

As part of its study of privacy issues, the Committee discussed bills referred to the Commission by the House Committee on Science and Technology during the 2002 Session and continued until the 2003 Session. The Committee discussed House Bill No. 1363 (Patron – Nutter) and Senate Bill No. 612 (Patron – Trumbo) on unsolicited electronic mail transmissions, House Bill No. 533 (Patron – Devolites) and Senate Bill No. 567 (Patron – Byrne) on unsolicited electronic mail transmissions and House Bill No. 28 (Patron – Callahan) on privacy expectations in higher education. All of the bills raised the question of unintended consequences. Concerned that these bills would treat the problems that they were trying to solve differently in cyberspace than physical space and would treat various groups differently for no apparent reason, the Committee decided not to recommend any of them. Committee members understood that issues exist but could not agree on a legislative solution or even on whether a legislative solution was needed.

The Committee turned its focus to an issue that it attempted last year, workplace privacy. It discussed model bills that required employers to give notice to their employees about their monitoring practices before they could engage in electronic monitoring. After much discussion trying to refine terms and balance the interests of the employer (e.g., protecting its legal rights and those of its employees) with those of the employee (e.g., an understanding of what expectation of privacy is reasonable), the Committee voted to recommend a bill that requires notice before electronic monitoring can take place and provides guidance to employers and employees regarding what they can expect.

Several members of the Commission were concerned that such a requirement might impose liability upon a third party who knew or could have known of wrongdoings through electronic monitoring, but did not or could not act upon that knowledge. The Commission voted unanimously to adopt the Privacy Advisory Committee's report, but voted four (May, Plum, Ticer and Christian) to three (Newman, Marshall and Nixon) with five not voting (Bolling, Howell, Purkey and Wampler were not present to vote and O'Brien resigned his seat upon election to the Senate) on the recommended bill.

Intellectual Property and Entrepreneurial Development Advisory Committee

The Intellectual Property and Entrepreneurial Development Advisory Committee was charged with examining the issues related to the intellectual property commercialization and capital funding of entrepreneurial development by the Commonwealth. It also was charged with monitoring the progress being made by --and where appropriate, work with-- other parties studying these issues, such as the Secretary of Technology, Center for Innovative Technology and Virginia Research and Technology

Advisory Commission (VRTAC). The Committee received briefings in Richmond and Norfolk to complete its charge.

The Committee received briefings on the present state of intellectual property commercialization by Virginia colleges and universities, including an overview of the commercialization process, case studies by entrepreneurs who have commercialized intellectual property created by Virginia universities, and steps taken by a Virginia university to facilitate commercialization with greater ease. The Committee also received briefings on legislation from the 2002 Session addressing intellectual property and entrepreneurial development issues, including House Joint Resolution No. 88 (Patron - Devolites), requesting the Secretary of Technology to recommend incentives necessary to encourage the commercialization of university research and development; House Bill No. 530 (Patron – Devolites), requiring VRTAC to develop a statewide policy and uniform standard for commercialization of intellectual property developed through university research; and House Joint Resolution No. 206 (Patron- Nixon), establishing a technology-based business development task force.

In addition, the Committee received briefings highlighting the Hampton Roads region's science and technology successes, identifying the factors that brought the region to its present state and those that need to receive continued emphasis, and identifying obstacles to continued success that the Commission and the General Assembly can help remove and on Virginia's participation in the federal Small Business Innovation Research program.

The Committee reached no consensus except to continue to review, analyze and monitor these and related issues.

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**REPORT OF THE JOINT COMMISSION ON
TECHNOLOGY AND SCIENCE**

to

**The Governor and
The General Assembly of Virginia
Richmond, Virginia
May 2003**

I. THE JOINT COMMISSION ON TECHNOLOGY AND SCIENCE (JCOTS)

To continue the work begun by the Task Force on Science and Technology established under House Joint Resolution 390 (1993), the 1996 General Assembly adopted House Joint Resolution 195, which created a joint legislative subcommittee to study science and technology. The subcommittee reported to the Governor and the 1997 General Assembly in House Document No. 81 (1997). The creation of the Joint Commission on Technology and Science ("JCOTS" or "Commission") was included among the recommendations of the subcommittee. Created by the 1997 General Assembly through House Bill 2138, JCOTS is a permanent legislative commission charged to study all aspects of technology and science, to promote the development of technology and science in the Commonwealth of Virginia through sound public policies, and to report its findings annually to the Governor and the General Assembly. (*See* Chapter 11 of Title 30 of the Code of Virginia, § 30-85 et seq.) JCOTS, which consists of twelve legislators (seven Delegates and five Senators), submitted its first report to the Governor and the 1998 General Assembly in House Document No. 89 (1998) and submits its sixth report today. JCOTS maintains a website at <http://jcots.state.va.us/>.

At its meeting on June 18, 2002, JCOTS adopted its 2002-2003 work plan (*see* Appendix 1). The work plan identified four issues for study through the establishment and work of advisory committees, co-chaired by JCOTS members: Center for Innovative Technology (Delegate May, Delegate Plum and Senator Wampler, co-chairs); Integrated Government (Senator Newman, Delegate Nixon and Delegate D. Marshall, co-chairs); Intellectual Property and Entrepreneurial Development (Delegate Purkey, Senator Howell and Delegate Christian, co-chairs); and Privacy (Delegate May, Senator Ticer and Senator Bolling, co-chairs).

JCOTS' work plan also identified new issues to be introduced at Commission meetings through testimony and presentations, possible field trips, and other issues to be monitored throughout the year. To accomplish these objectives and establish its legislative agenda, JCOTS met as a full commission three times from June 2002 to December 2003. During the period from August to December 2002, advisory committees held 13 meetings (*see* Appendix 2). Approximately 60 people participated in JCOTS' work through membership on advisory committees (*see* Appendix 3). JCOTS received and adopted advisory committee reports and finalized its legislative recommendations for the 2003 Session its meeting on December 10, 2002.

II. COMMISSION MEETINGS AND ACTIVITIES

A. ORGANIZATIONAL MEETING

The Joint Commission on Technology and Science (the “Commission”) held its first meeting of the 2002-2003 interim on June 18. Delegate Joe May started the meeting by remarking that this will be the Commission’s fifth year in existence, adding that he believes Virginia is the only state that has a permanent technology policy-making body in the legislative branch. Mitchell Goldstein, Commission Director, presented the 2002-2003 Work Plan. The work plan identified four topics for advisory committees to study: the Center for Innovative Technology, Integrated Government, Intellectual Property and Entrepreneurial Development and Privacy. The Commission unanimously adopted the work plan. Delegate Joe May, Commission Chairman, announced the co-chairs of the advisory committees. Delegate May, Delegate Plum, Senator Wampler served as co-chairs of the Center for Innovative Technology Advisory Committee. Senator Newman, Delegate Nixon and Delegate D. Marshall served as co-chairs of the Integrated Government Advisory Committee. Delegate Purkey, Senator Howell and Delegate Christian served as co-chairs of the Intellectual Property and Entrepreneurial Development Advisory Committee. Delegate May, Senator Ticer and Senator Bolling served as co-chairs of the Privacy Advisory Committee.

The Commission also voted unanimously to re-elect the Delegate May and Senator Newman, chairman and vice-chairman, respectively.

1. Office of the Secretary of Technology

Before opening his presentation, Eugene Huang, Deputy Secretary of Technology, introduced members of the Secretariat. Mr. Huang then provided a preview of the Governor's strategic plan to achieve growth of technology in Virginia's global economy and effectively use information technology (IT) in the Commonwealth's government. The strategic plan, due to be published by October, outlines three strategic imperatives developing Virginia as a major entity in the global economic marketplace; ensuring that all of Virginia shares in the growth and success of its participation in the global economic marketplace; and developing the Secretary of Technology’s role as the Chief Information Officer of Virginia’s technology resources to make them more effective and efficient and to meet the needs of the citizens of the Commonwealth.

To achieve the first two strategic imperatives, the Secretary will work to enhance federal research funding to Virginia’s research institutions, commercialize intellectual property from universities and laboratories and grow entrepreneurial companies, and promote technology-based economic development. These efforts will benefit from Virginia's well-established technology sector, which includes high-quality jobs with salaries double that of Virginia’s statewide average salary, and 12,303 technology firms, employing 327,273 individuals. Virginia is ranked sixth nationally in high-tech employment, and eleventh in venture capital investment, with \$100 million in investments for the region during the first quarter of 2002. As part of these imperatives, the Commonwealth needs to improve its

licensing and patenting efforts and improve its schools so that at least one of them ranks in the top 50 for research and development expenditures.

Next, Mr. Huang focused on information technology (IT) expenditures in the Commonwealth, estimated to be anywhere from \$902 million to \$1.2 billion in FY2001. He explained the initial conclusions that current practices in IT throughout the state government result in unnecessary duplication of effort, inefficient allocation of resources, millions of dollars unnecessarily spent on IT projects and resources and an inability to promote and adopt best practices. In this area, the strategic plan is focused on an enterprise-wide approach leading to business efficiencies and cost savings. Included within this focus are development of plans for statewide IT security, an overhaul of state administrative systems to improve tracking IT expenditures, a capital planning process for IT and an overhaul of IT procurement practices.

Lastly, he reported on a quick agency IT survey conducted by the Department of Technology Planning (DTP) in May 2002. DTP's review of agency strategic plans for 2002-2004 (excluding higher education) identified 13 different financial management systems, three different payroll systems, and three different human resource systems; 65% of servers (approximately 1300 of 2000) due for replacement in the next five years; approximately 1400 LANS administered by 54 different agencies; and nearly 60% of computers, peripherals, and network devices due for replacement in the next three years.

After reviewing these results, Governor Warner asked executive branch agencies to move to the next level of review. This level involves a thorough "due diligence" effort currently being coordinated by the Office of the Secretary of Technology. Each executive branch agency has been asked to complete a very comprehensive survey of its IT assets and expenditures.

2. Department of Technology Planning

Next, Jerry Simonoff, Director, [Department of Technology Planning](#) (DTP) briefed the Commission on the Commonwealth's technology management policy, project management, and an update of Project "Dashboard." Mr. Simonoff identified some "influencing factors" to keep in mind when contemplating technology spending in the Commonwealth. First, the Commonwealth's technology expenditures totaled more than \$902 million in FY2001. Second, estimated costs for major technology projects will exceed \$1.0 billion over the next biennium. Third, 74% of all IT projects fail, come in over budget or run past the original deadline and 28% fail totally. Fourth, public expectations and exposure of high dollar projects are increasing, as are budgetary pressures.

To address the technology challenges before the DTP in particular and Virginia government in general, Mr. Simonoff highlighted DTP's broad approach to technology management policy, including the ongoing development and improvement of (i) a methodology for selecting, controlling, and evaluating IT investments that best support the business needs of the Commonwealth, (ii) a framework for the migration from the current enterprise architecture to the desired future enterprise architecture, and (iii) a process to ensure that technology projects deliver business value on time and within budget. Regarding

IT project management, Mr. Simonoff shared DTP's progress in developing new project management guidelines, and some of the substance of the guidelines, which are scheduled for completion in November. What these guidelines envision are comprehensive guidance for project managers on project initiation, planning, execution, control and closure that is flexible and based on generally accepted project management best practices. The ultimate goal of project management processes should be centered on business-driven IT investments.

3. Department of Information Technology

Next, Cheryl Clark, Director, [Department of Information Technology](#) (DIT) focused on how DIT will work to implement its mission of providing the ultimate value in technology products and services to its enterprise customers across Virginia government. To achieve this mission, Ms. Clark said DIT would focus on core technology savings, enterprise system development and implementation, and IT security program implementation. Ms. Clark noted that one factor affecting nearly every aspect of DIT's mission is procurement. Therefore, DIT would devote significant time and resources to changing its procurement practices to help achieve the Department's vision.

4. Center for Innovative Technology

Next, Anne Armstrong, Director, [Center for Innovative Technology](#) (CIT), briefed the Commission on CIT's background, mission and contributions to Virginia's technology industry and overall economy. Ms. Armstrong told the Commission that CIT's job is to improve the economy in Virginia by growing technology companies and by helping traditional companies use technology to become more competitive (technology-based economic development). CIT works toward this goal by focusing on three main strategic areas: research, increasing the flow of dollars to fund creation of new ideas; commercialization and entrepreneurship, moving those new ideas into the marketplace; and economic development, helping build companies to capitalize on those ideas.

Because CIT receives more than three-quarters of its funding from a state budget appropriation, Ms. Armstrong highlighted CIT's "return on investment" to the Commonwealth. In the past year, CIT worked with more than 1,400 companies and delivered nearly \$400 million of increased economic impact. With appropriations of approximately \$79 million over the last five years, it has leveraged federal dollars and private investment for a total economic impact of more than \$2.55 billion. CIT's work plan for the current fiscal year includes increasing federal research and development dollars flowing to the Commonwealth, increasing technology transfer from the universities to the private sector and increasing technology-based economic development and broadband deployment. Included within these goals are study and assignments from the 2002 session of the General Assembly.

5. Task Force on Identity Theft

Richard Campbell, Deputy [Attorney General](#) for Technology, briefed the Commission on identity theft and provided some information about the Attorney General's Task Force on Identity Theft. Mr. Campbell first shared figures and trends on identity theft in Virginia during 2001 as reported to the

Federal Trade Commission. The number one use of victims' information is credit card fraud (approximately 52% in Virginia, compared to 42% nationwide). Approximately 23% of victims in Virginia and 20% nationwide are victims of more than one type of identity theft. Most victims are aged 30 to 39, though the number of victims in other age categories from 18 and older is almost as large. Forty-five percent of all victims discovered the identity theft within one month of the misuse of their information, though the theft could have occurred at any time.

Virginia had 1,935 reported identity theft victims, placing it thirteenth nationally (California was first with 15,115 victims), translating to 27.3 victims per 100,000 people, placing it fifteenth nationally (the District of Columbia was first with 76.7 victims per 100,000). According to the same data, no Virginia city ranked among the top 10 cities nationwide for the number of identity theft victims (New York City was first with 3,315 victims). The five Virginia cities with the most reported identity theft victims in 2001 were Alexandria (173), Richmond (114), Arlington (110), Virginia Beach (110) and Fairfax (66). These statistics illustrate the magnitude of the problem and the complications in detection.

Next, he gave an overview of federal Identity Theft and Assumption Deterrence Act (18 U.S.C. 1028 et seq.), which was passed in 1998, and Virginia's identity fraud law (Code of Virginia § 18.2-186.3), which was passed in 2000. The federal law prohibits someone from knowingly transferring or using someone else's means of identification without authority with the intent to commit a crime. Penalties include fines and up to 20 years in prison, 25 years if terrorism is involved. Virginia's law prohibits someone, with the intent to defraud, from misusing identifying information not generally available to the public, obtaining goods or services using someone else's identification or obtaining documents in someone else's name. The law also prohibits someone from using identification information to avoid criminal prosecution or impede a criminal investigation. Penalties in Virginia include fines and up to 5 years in prison (Class 6 Felony) if the financial loss is more than \$200, the offense is a second or subsequent offense or someone else is arrested or detained. Otherwise, a violator faces fines, up to 12 months in jail and restitution.

Concluding his briefing, Mr. Campbell spoke about the activities of the Attorney General's Task Force on Identity Theft, which will meet for the first time before the end of June and will convene town-hall style meetings across the Commonwealth to identify identity theft-related problems and develop practical and effective methods to prevent the crime.

B. CYBERCRIMES

On July 30, 2002, the Commission held a meeting to explore issues related to the increasing use of technology to commit fraud and other crimes, and the implications of this trend upon federal, state and local governments and their enforcement efforts.

1. [Internet Fraud - Federal Trade Commission](#)

Colleen Robbins, Attorney, Division of Marketing Practices, [Federal Trade Commission](#) (FTC), provided the Commission with an overview of the types of Internet fraud and abuse the FTC confronts

today. Due to the relatively low cost of computers and Internet access, as well as the anonymity available in the online world, many of the frauds committed on the Internet are simply recycled from the pre-Internet world. Longtime offers enticing recipients to become involved in pyramid schemes, travel scams, and work-at-home, health care, investment and franchise "opportunities" have made their way to the Internet through the use of promotional websites, spam and chain letters. In addition, the FTC has seen new "high-tech" fraud cases that involve new techniques, such as pagejacking,¹ mousetrapping² and modem hijacking.³ Internet fraud is attractive to its perpetrators for several reasons, including the geographic freedom the Internet permits, the ease of altering and moving illicit websites at the first sign of trouble and the perceived credibility the Internet offers.

The FTC and other enforcement officials have attempted to keep pace with the fraud by employing innovative techniques. Examples include allowing consumers to make fraud complaints via e-mail and their website, maintaining consumer fraud databases online and making them available to law enforcement officials nationwide, and conducting consumer and business education. The FTC also holds "surf days," where it coordinates large-scale Internet surfing to flush out fraud of a particular type, and the agency also uses an Internet lab to surf the Internet anonymously, thereby avoiding initial detection by parties committing fraud, and gaining valuable intelligence to help in enforcement actions. Using such techniques, the FTC has brought 236 Internet fraud cases against 739 defendants, leading to more than \$81 million in victim redress since 1994.

Ms. Robbins outlined the legal concerns related to much of the fraud being committed on the Internet. In most instances, there is deception in the use of the term "free," accompanied by insufficient disclosures regarding the actual cost the would-be fraud victim may incur. Also, unfair marketing is usually employed, such as the luring of minors with promises of adult entertainment that is either free or requires no credit card. Finally, one often finds deception in representations that lead to consumers being liable for unauthorized charges to the consumers' telephones.

2. Identity Theft - Secret Service

Special Agent Chris Clapper, [U.S. Secret Service](#) Liaison to the Federal Trade Commission's Identity Theft Program, briefed the Commission on the collaboration between the FTC and the Secret Service regarding identity theft. Although the FTC is the central federal repository for identity theft complaints, it has paired with the Secret Service to enforce identity theft crimes pursuant to 10 U.S.C. § 1028.

Special Agent Clapper said that one difficulty encountered by the federal government in attempting to enforce identity theft laws is how to collect relevant investigative information and coordinate the actions of several layers of government (federal, state, and local) that are necessary to effectively prosecute

¹ Pagejacking is unauthorized copying of the source code of other people's websites, posting them on a different server with a different address and redirecting people to another website.

² Mousetrapping is a practice that prevents consumers from leaving a website by launching new browser windows whenever the consumer attempts to close an active window and disables the "back" button.

³ Modem hijacking is a practice that disconnects the consumer from his ISP and dials an international number with ensuing costs.

identity theft perpetrators. In response to this challenge, the Secret Service has established approximately 25 Financial Crimes Task Forces across the country. In addition to facilitating the flow and collection of information necessary to enforce identity theft laws, these inter-governmental bodies also benefit all participating governments through the pooling of resources.

A recent identity theft case in Westchester, NY, illustrates how easily identity theft can be committed. Several employees of a national video chain store asked customers seeking to open an account for more personal information than was actually required, and then sold this information. Special Agent Clapper used this story to highlight two points regarding identity theft. First, the demand for increasing amounts of personal information frequently helps facilitate identity theft. Second, while it is a crime to fraudulently obtain personal information, the sale of personal information is not yet a crime.

3. Computer Forensics - Regional Computer Forensics Program

Mark Pollitt, Director, Regional Computer Forensics Laboratory National Program Office, provided the Commission with an examination of the effect an increasingly digital world is having upon computer forensics. Nearly everyone is spending more of their lives digitally, through the Internet and intranets, banking and credit cards, cellular telephones, digital pagers and personal digital assistants, and access cards (work, transit). All these digital interactions leave what Mr. Pollitt termed "digital trails." As a result, traditional crimes are producing digital evidence, cybercrimes are producing complex digital evidence, and law enforcement --at all levels-- is unprepared for this "data glut/ information famine." Paradoxically, although law enforcement has access to much more raw data, enforcement authorities frequently lack the ability to effectively extract the most useful information from among all available data. This data glut is illustrated by the significant rate at which digital evidence acquired as part of FBI case investigation is outstripping the underlying case load:

Case load:

FY '99 - 1900 cases
FY '00 - 3340 cases
FY '01 - 5550 cases

Data burden:

FY '99 - 13 terabytes
FY '00 - 34 terabytes
FY '01 - 175 terabytes

To understand the amount of evidence that a large case can generate, evidence from the September 11, 2001, bombing of the Pentagon and the Twin Towers of the World Trade Center alone yielded more than 125 terabytes or two and a half times the contents of the Library of Congress in 1980.

The relevance of digital evidence is further illustrated by the fact that the FBI went from administering one computer exam per every five agents to one per every two in less than five years. Mr. Pollitt stated that, in general, states and localities are less prepared to address this data glut than the federal government. Computer forensics, or the application of science and engineering to the problem of digital evidence, is of increasing relevance across governments. For instance, although Virginia has the Computer Evidence Recovery Unit within the Virginia State Police, according to the Office of the Attorney General, it presently has a three-month backlog in the processing and examination of computer evidence.

One solution to this situation is the establishment of regional computer forensic laboratories. Presently, there are two regional labs, with several more being established. These labs are jointly staffed by federal, state and local examiners, benefit from an economy of scale and a diversity of skills, are able to provide higher level of services, and provide for more efficient use of existing funds.

4. Federal Prosecution - Department of Justice

Patricia "Trish" McGarry, Trial Attorney, [Computer Crime and Intellectual Property Section](#) of the Criminal Division of the U.S. Department of Justice, reviewed the present state of computer crimes from the federal perspective. Ms. McGarry, who prosecutes computer crimes, first examined the computer as an instrumentality of crime, listing several computer crimes that are on the rise: child pornography, trade secret theft and other forms of economic espionage. Although these crimes existed prior to the advent of the computer, they have become easier to commit as computers have become more powerful and their use more prevalent.

Ms. McGarry next examined the computer as an "evidence container." Echoing much of what Mr. Pollitt said, Ms. McGarry highlighted the crucial role that computer forensic analysts play extracting useful evidence from the data glut. Some cases are not going to court because prosecutors lack the digital evidence necessary to make a successful case.

Steganography and the use of wireless messaging technology, such as Blackberry, are two technologies increasingly used to boost the level of traditional crimes. Steganography is the practice of embedding secret messages in other messages -- in a way that prevents an observer from learning that anything unusual is taking place. (Encryption, by contrast, relies on ciphers or codes to scramble a message.)

Ms. McGarry advised the Commission to encourage private companies to embrace security, and to help facilitate collaboration among levels of government as a way to more effectively address the increased demands placed upon their digital evidence resources. She also noted that as computers continue to get faster, the statistics relating to the dearth of digital evidence will get worse.

5. [State Prosecution - Office of the Attorney General](#)

Lisa Hicks-Thomas, Assistant Attorney General, [Office of the Attorney General](#), examined the present state of computer crime prosecution by the Commonwealth. Ms. Hicks-Thomas told the Commission that Attorney General Kilgore will seek to increase the penalty for the possession of child pornography from a misdemeanor to a felony.

Commenting on the U.S. Supreme Court's April 2002 decision to overturn a federal law outlawing "virtual" child pornography,⁴ Ms. Hicks-Thomas said that this decision likely will make the prosecution of child pornography more difficult. "Virtual" child pornography appears to depict minors in

⁴ Ashcroft vs. Free Speech Coalition, 535 U.S. ___, No. 00-795 (U.S. April 16, 2002).

pornographic images without using any real children, and is made possible with robust image processing software. The Supreme Court reasoned that because an actual child is not hurt in the creation of the images, no crime has occurred. This may lead to a situation in which defendants accused of possessing child pornography assert that the images in question do not contain real children. This assertion will be difficult to disprove, since many child pornography images are old, or were created in foreign jurisdictions such as Eastern Europe and the Philippines.

Ms. Hicks-Thomas told the Commission that while the Attorney General is successfully prosecuting computer-related crimes, the Office of the Attorney General, as well as Commonwealth's Attorneys and law enforcement authorities across Virginia, lack the resources to address the increasing volume of computer-related crimes. In particular, the Office of the Attorney General needs more prosecutors.

6. Local Prosecution - Loudoun County

Robert Anderson, [Commonwealth's Attorney for Loudoun County](#), provided a local prosecutor's perspective on computer-related crimes and digital evidence. Mr. Anderson's situation is different from that of other local prosecutors, because the world's largest Internet service provider, America Online (AOL), is headquartered in Loudoun County. So far this year his office has been involved in 367 search warrant requests made to AOL from foreign jurisdictions. These requests typically ask AOL to make particular data on their servers available, such as subscriber information, e-mail or instant messages.

The first issue that Mr. Anderson brought to the Commission's attention is the situation created by the classification of nearly all computer crimes in the Virginia Code as misdemeanors. Because Commonwealth's Attorneys are only statutorily obligated to prosecute felonies, which usually carry more severe punishment than misdemeanors, many computer crimes committed in Virginia go unprosecuted. Mr. Anderson suggested to the Commission that the General Assembly should reclassify more computer-related crimes as felonies. Mr. Anderson also endorsed the idea of establishing a Regional Computer Forensics Program in Virginia.

Mr. Anderson asked David Canham, who investigates child-related crimes for the [Loudoun County Sheriff's Office](#), to speak to the Commission about child pornography. Mr. Canham endorsed Attorney General Kilgore's desire to make the first-time possession of child pornography punishable as a felony in the Commonwealth. He assured the Commission that the likelihood of a person inadvertently or unintentionally possessing one item of child pornography on his computer being convicted under a more stringent statute is extremely unlikely. As someone who frequently investigates people suspected of possessing child pornography, Mr. Canham told the Commission that he has never seen a child pornography offender possess only one or two illegal images, and that the profile of such offenders usually includes addiction to these images, leading them to possess many illegal images.

C. SCIENCE AND TECHNOLOGY AROUND THE COMMONWEALTH

On December 10, 2002, the Commission held a meeting to receive briefings on the technology legislative agendas of the Offices of the Secretary of Technology and Attorney General and to explore issues related to the sciences in the Commonwealth. For the sciences, the Commission received briefings on homeland security, biotechnology and nanotechnology and their implications for the Commonwealth.

1. The Secretary of Technology's Legislative Agenda

Secretary of Technology George Newstrom discussed the Commonwealth's legislative agenda for technology, the [strategic technology plan](#) and [executive summary](#), and the plan for the Center for Innovative Technology (CIT). The mission of the Secretary of Technology is to advise the Governor on the growth of technology in the global economy and the effective use of information technology (IT) in state government. To accomplish this, the Governor and the Secretary developed the strategic plan for technology. Three imperatives guided the planning process: to develop the Commonwealth as a major entity in the global economic marketplace, to ensure that everyone shares in the growth and success, and to develop the Secretary's role as the Commonwealth's Chief Information Office (CIO).

The strategic plan for technology includes four initiatives for technology development, which will be delegated to CIT: increase federal research and development (R&D) dollars for the colleges and universities, increase commercialization and transfer of intellectual property from the labs and institutions, promote technology-based economic development, and increase statewide broadband deployment. Investment in the colleges and universities and small businesses attracts federal R&D dollars. Commercialization of intellectual property results in licensing revenue, new company formation, and job creation. Technology-based economic development grows jobs and competitiveness. Secretary Newstrom expects the current \$7.8 million dollar budget for CIT will yield a \$266.8 million economic impact for the Commonwealth.

The plan also includes four initiatives in information technology to fulfill the Secretary's role as CIO: revolutionize service delivery, consolidate IT infrastructure and centralize services, develop a capital planning and funding process for IT expenditures, and manage IT procurement using best practices. Currently, the Commonwealth's 91 executive branch agencies spend approximately \$448 million on information technology every year. In addition, the Commonwealth spends more than \$192 million on 2,580 IT personnel across those same agencies. Furthermore, the Commonwealth has 3,000 servers, 200 of which do not meet basic industry standards, and incompatible e-mail systems are used throughout state government. State government also lacks a comprehensive IT security plan. The goal is to use consolidation and centralization to better manage the Commonwealth's IT infrastructure and spending while continuing to provide high-quality services to citizens.

To achieve this second set of initiatives, Secretary Newstrom also announced an ambitious legislative agenda to restructure IT in Virginia's state government. The reforms will consolidate state IT functions within a single new agency, the Virginia Information Technologies Agency (VITA), resulting in the

elimination of three existing agencies and two government oversight boards. This proposal would transfer all IT assets, including IT infrastructure and human resources, to VITA and consolidate the independent IT divisions in 91 executive branch agencies, excluding institutions of higher education, the legislative and judicial branches, and independent state agencies. The new organization will be business driven and consumer focused.

Through this reorganization, the Commonwealth can eliminate redundant activities and leverage its buying power for computer hardware and software purchases resulting in millions of dollars in savings. Consolidation will create greater accountability and oversight for the funding and implementation of technology projects through the creation of a Technology Investment Board that will be responsible for reviewing and prioritizing enterprise-wide technology investments across state government. The Board, which will be chaired by the Secretary of Technology, will oversee a Virginia Technology Fund, allowing for a portion of the savings generated by the consolidation efforts to fund enterprise-wide technology investments on an ongoing basis. The workforce consolidation will enable the Commonwealth to retain qualified IT professionals with promotion and training opportunities and other incentives.

2. Attorney General's Technology Legislative Agenda

Richard Campbell, Deputy Attorney General of Technology, presented the Attorney General's Legislative Agenda as it relates to technology and the work of the Identity Theft Task Force. The Attorney General's office plans to focus on a number of areas, including child protection, identity theft and computer crimes. To protect children, the Attorney General's office proposes to address a gap in the current law, create a registry to address a constitutional issue and promote a new webpage for [kids](#) and adopt the [AMBER](#) (America's Missing: Broadcast Emergency Response) Plan and [Code Adam](#).

Primary jurisdiction for prosecuting child pornography rests with the Attorney General (§ 2.2-511 of the Code of Virginia). Adding to the ever-increasing caseload, Mr. Campbell's office noted a gap in the current law regarding the prohibitions on using communications systems to facilitate certain offenses involving children (§ 18.2-374.3), mainly taking indecent liberties with children (§ 18.2-370). This combination of laws only covers children under the age of 14, but most communications are directed toward children 14 and over. His office plans to introduce legislation to address this issue.

In response to the recent decision by the U.S. Supreme Court in *Ashcroft v. Free Speech Coalition* (holding that the Child Pornography Prevention Act's prohibitions on images that "appear to be" or "convey the impression of" child pornography, but are not obscene and do not use real minors are constitutional), Mr. Campbell's office proposes establishing a child pornography registry that would include images proven to be child pornography using actual minors. Law enforcement officials would use this registry to compare images that they suspect to be child pornography and try to prove that real children were used. The current problem is how to prove that an image is child pornography using an actual minor and not totally computer-generated. This registry is one approach to dealing with this issue.

The AMBER Plan is a voluntary partnership between law-enforcement agencies and broadcasters to activate an urgent bulletin in the most serious child-abduction cases. Broadcasters use the Emergency Alert System (EAS), formerly called the Emergency Broadcast System, to air a description of the abducted child and suspected abductor. The goal of the AMBER Alert is to instantly galvanize the entire community to assist in the search for and safe return of the child.

The AMBER Plan was created in 1996 as a powerful legacy to nine-year-old Amber Hagerman, a bright little girl who was kidnapped and brutally murdered while riding her bicycle in Arlington, Texas. The tragedy shocked and outraged the entire community. Residents contacted radio stations in the Dallas area and suggested they broadcast special “alerts” over the airwaves so that they could help prevent such incidents in the future. In response to the community’s concern for the safety of local children, the Dallas/Fort Worth Association of Radio Managers teamed up with local law-enforcement agencies in northern Texas and developed this innovative early warning system to help find abducted children. Statistics show that, when abducted, a child’s greatest enemy is time. Seventy-eight modified versions have been adopted at local, regional, and statewide levels and 30 states have a statewide plan. To date the AMBER Plan has been credited with recovering 41 children.

Code Adam, one of the country's largest child-safety programs, was created and promoted by the Wal-Mart retail stores and named in memory of six-year-old Adam Walsh whose abduction from a Florida shopping mall and murder in 1981 brought the horror of child abduction to national attention. When a customer reports a missing child to a store employee, a "Code Adam" alert is announced over the public-address system. A brief description of the child is obtained and provided to all designated employees who immediately stop their normal work to search for the child, and monitor all exits to help prevent the child from leaving the store. If the child is not found within 10 minutes of initiating a storewide search, or if the child is seen accompanied by someone other than a parent or guardian, store personnel contact the local police department and request assistance. Since the Code Adam program began in 1994, it has been a powerful preventive tool against child abductions and lost children in more than 25,078 stores across the nation.

To address identity theft, the Attorney General’s office produced an [identity theft guide](#) and convened an [Identity Theft Task Force](#). Identity theft occurs when a criminal obtains personal identifying information from a citizen and uses it to assume a false identity and incur charges or debt under someone else’s name. Affecting approximately one in five Americans, identity theft is estimated to have cost financial institutions, utilities and merchants more than \$5 billion annually. Among the task force’s 27 recommendations included in its [final report](#) are increase the penalty from a misdemeanor to a felony to address the seriousness of the crime, create a Virginia Identity Theft "Passport" to shield citizens from arrest for crimes committed by an identity thief or to protect victims from credit problems, create a standardized form for use by law enforcement agencies when taking a report from a victim, remove Social Security numbers from state-issue identification cards and include a police report detailing identity theft on credit reports. Other issues include identity embezzlement, Wi-Fi (wireless fidelity) and other hackers who post the means of hacking into systems without doing anything else, and personal information on court records, especially those records posted on the Internet. For the last issue, Mr. Campbell’s office proposes to allow court clerks to decline or refuse to record documents containing

personal information that is not required and to review the use of registered voter lists for reasons other than their intended purpose.

The remainder of his briefing focused on strengthening the Virginia Computer Crimes Act (§ 18.2-152.1 et seq.). To strengthen the current laws regarding unsolicited and bulk electronic mail (commonly known as “spam”), his office proposes enhancing the penalties for sending obscene spam, adding a forfeiture provision for perpetrators, and moving the provisions to the fraud section of the Code of Virginia. In addition, other penalties for computer crimes (e.g., fraud and trespass) would be increased one level from Class 1, 2, 3 or 4 misdemeanors to Class 6 felonies or Class 1, 2 or 3 misdemeanors (attorneys for the Commonwealth are not required to prosecute misdemeanors). Other factors that the proposal will include are penalties in cases where the e-mail account is not lawfully registered to the sender, a cap on the volume of e-mail someone can send before being considered a spammer, and provisions protecting consumers from lawsuits involving service providers and spammers. The office also plans to clarify terms upon which so much of the Act relies to include violations of the service provider agreement (“without authority”) and to cover a person who causes the transmission, but does not do it himself (“use of computer or computer network”).

3. [Institute for Defense and Homeland Security](#)

The Virginia Institute for Defense and Homeland Security (the Institute) brings together the Commonwealth’s strongest assets in academia, industry, and government. The Institute addresses the nation’s challenges in defense and homeland security through research, technology transfer and commercialization, and education. With the United States returning to Cold War growth rates for research and development funding, the Commonwealth is poised to capitalize on this growth. Peter Jobse, CIT’s Executive Vice President and Chief Operating Officer familiarized the Commission with the Institute -- actions taken to date, the vision for it, and projected sources of funding.

The Institute is dedicated to delivering solutions that support the United States’ homeland security and defense objectives. The Institute is composed of a consortium of 10 of the Commonwealth’s colleges and universities. This consortium will accomplish the mission by conducting world-class research, education, and technology transfer in the fields of emergency preparedness, infrastructure management, weapons technology, workforce development, and public policy.

Virginia is host to a large number of federal agencies and an extensive defense and security industry. The geographic proximity of these agencies and companies as well as their integration with Virginia universities enables the Institute to accelerate technology innovation from concept to commercialization, enabling a more rapid deployment of high-quality end products for the nation.

The Institute offers the federal government faster and cheaper solutions of high quality by integrating research centers and educating the federal defense and security workforce. The Commonwealth’s universities benefit from recognition as world-class facilities by helping to increase their federal and commercial research grants, facilitate collaboration and link their R&D concentration areas with industry. Industry receives growth and profitability potential by reducing the time to production for

applied research, improving the availability of IP for commercialization and providing access to the facilities needed to meet their R&D requirements.

Mr. Jobse expects the Institute to be fully functioning by the first quarter of 2003. CIT is working to accelerate the process. He warned that the federal government currently has money earmarked for Texas A&M to be a research center for homeland security. With the Institute, Virginia can develop a research center and compete for earmarked money as well.

4. [The State of Biotechnology in the Commonwealth](#)

Jerry Coughter, CIT's Industry Director for Biotechnology and Medical Applications, presented an update on biotechnology in the Commonwealth and the work of the Virginia Biotechnology Initiative Advisory Board. Pursuant to Executive Order Number 14 (2002) by Governor Warner, establishing the Biotechnology Initiative, a Governor's Advisory Board was constituted to develop recommendations for a statewide comprehensive and coordinated strategy for biotechnology covering all areas of biotechnology endeavor in the Commonwealth, including university research, biotechnology start-ups, venture capitalists, community colleges, state and local economic development agencies, and other community and industry leaders from both within and outside of Virginia. The Board formulated a vision for the Commonwealth to become a globally recognized center for the growth and formation of the biotechnology industry, consistent with the strengths and competitive advantages of the Commonwealth's research universities, laboratories, healthcare institutions and industries.

The Board set a goal of having Virginia ranked among the top 10 biotechnology states in the United States by 2010. The Commonwealth is already on the road to making this goal a reality. Virginia is part of the third largest biotechnology region in the United States that stretches from Baltimore to Richmond. Virginia firms and universities have received more than \$70 million and \$270 million, respectively, in federal life science research and development in 2000. Virginia ranks fourth among states in Phase I small business innovative research (SBIR) grants in the life sciences for 2001 and third overall. The Howard Hughes Medical Institute's investment in northern Virginia, recent Nobel Prize for chemistry won by a state university professor (John B. Fenn of Virginia Commonwealth University) and state government involvement have validated the technology and the industry, which in turn has led to long-term development and investment.

The Board made 17 [recommendations](#), covering four primary "foundational" areas: money, people, space, and technology. The amount of capital available at the seed and early stages of biotechnology companies correlates directly with the size of the biotechnology industry in a given state or region. In addition to finances, Virginia's research universities need to attract and retain the brightest academic stars whose research activities will fuel the creation of new companies. Also, community colleges can train and state-supported programs can assist a biotechnology workforce. In addition to developing financial and human capital, the Commonwealth can assist in creating the specialized research facilities needed at its colleges and universities, develop incubators and "step-up" space in selected research parks, and attract service and support companies that are vital to growth of biotechnology in the state. Bringing all of these resources together to move intellectual property created at Virginia's research

universities and laboratories into the marketplace, more financial resources must be expended in the evaluation and licensing of technologies and barriers to commercialization that exist within the Commonwealth must be removed.

If implemented, the Board believes that its recommendations will set Virginia firmly on the road to becoming a full economic participant in the biotechnology revolution. However, the significant amount of material and testimony received in the short time available did not allow sufficient time to fully identify Virginia's comparative advantages and how the Commonwealth can differentiate itself as a "biotechnology state." Also, the strategies do not address the fundamental investments that the Commonwealth will have to make in its "engines" of economic growth, the major research universities, if the state is serious about becoming a recognized center for the biotechnology industry. To develop a fully comprehensive and coordinated long-term statewide strategy for biotechnology, the work and commitment must continue.

5. The State of Nanotechnology in the Commonwealth

Nanoscience and nanoengineering are leading scientists to unprecedented understanding and control over the fundamental building blocks of all physical things. Nancy Vorona, CIT's Vice President for Research Investment introduced the Commission to nanotechnology and its promise for the Commonwealth. The National Institutes of Health defines nanotechnology as the creation of functional materials, devices, and systems through control of matter at the scale of 1 to 100 nanometers and the exploitation of novel properties and phenomena at the same scale.

Over the next 10 to 20 years, nanotechnology is expected to fundamentally transform science, technology, and society. From microscopic computer chips to cancer-fighting vaccines, nanotechnology holds tremendous potential for Virginia and the nation. Already universities, industry, and federal laboratories in Virginia are engaged in this important area. The Initiative for Nanotechnology in Virginia, seed-funded by CIT 2 and one-half years ago, drives and coordinates nanotechnology research, technology transfer and commercialization, and education in Virginia.

According to the National Science Foundation, the promise of nanotechnology will lead to a \$1 trillion market in 10 to 15 years and a worldwide workforce of 2 million people. Applications include manufacturing, electronics, health care, pharmaceuticals, chemical plants, and transportation. Although Virginia is well positioned to secure federal research funding and technology leadership, it is important that the Commonwealth take steps to ensure our nanotechnology community remains competitive.

D. YEAR IN REVIEW: FINAL MEETING

The Joint Commission on Technology and Science met on December 10, 2002, in Richmond to receive the final reports of all advisory committees and vote on its legislative agenda for the 2003 Session of the General Assembly. Before receiving the advisory committees' final reports, the Commission unanimously approved a proposal to redesign its website and transfer the mailing list to the General

Assembly's website. This change will reduce administrative responsibilities, eliminate duplication and enable citizens to track the Commission's work along with other legislative work from one place.

Center for Innovative Technology Advisory Committee

The Center for Innovative Technology Advisory Committee, which was co-chaired by Delegate May, Delegate Plum and Senator Wampler and composed of 14 citizen members, was charged with exploring the past, present and future mission of Virginia's Center for Innovative Technology (CIT), whether CIT is fulfilling its current mission and how it can better fulfill its mission in the future. The Committee held discussions and hearings in Herndon, Charlottesville and Richmond to meet its charge and worked closely with Secretary of Technology George Newstrom.

The General Assembly created CIT in 1984 as a nonprofit organization designed to enhance the research and development capability of the Commonwealth's major research universities. In its first decade, CIT implemented that original legislative intent by bringing Virginia businesses and institutions of higher education into relationships that promote a climate of cooperation and technological innovation. In 1994, CIT adopted a new mission, one that measured CIT's success in terms of jobs created/retained, companies created/retained/converted and competitiveness created for Virginia's businesses. However, during the 2002 Session, some in Virginia openly questioned CIT's ongoing value to the Commonwealth and the Commission agreed to review the performance and potential of CIT.

The Secretary, who also serves as interim President of CIT, presented his plan for CIT to the Committee. It includes three initiatives: increase federal research and development (R&D) dollars for the colleges and universities, increase commercialization and transfer of intellectual property from the labs and institutions, and promote technology-based economic development (improving government-industry programs that encourage economic growth through the application of science and technology). Through these initiatives, he expects CIT's FY2003 budget of \$9.2 million (down from \$12.5 million) to have an economic impact of almost \$347 million (or nearly \$37.7 for every \$1 spent).

The Committee agreed that despite concern over its operations and mission, CIT should continue. Its regional operations and field force provide a valuable asset to the entire Commonwealth. It serves companies large and small, technology-based and non-technology based, urban and rural. The Committee adopted the Secretary's plan, but included some explanations and additions as well.

First, CIT should identify sources of federal money and connect various sectors with that money, as well as help Virginia's colleges and universities connect with money and grants from the public and private sectors. Second, it should focus on helping the owners of intellectual property (IP) to commercialize that IP as opposed to licensing it directly or getting involved in the ownership issues (i.e., it should serve as a facilitator and not an investor). CIT should work with the Virginia Research and Technology Advisory Commission (VRTAC) and the State Council of Higher Education for Virginia (SCHEV) to facilitate the commercialization of IP and not to improve the IP productivity (e.g., CIT should not push institutions to generate more or specific ideas that qualify for IP protection). Third, it should work with

the Virginia Economic Development Partnership for its economic development efforts to help the Commonwealth speak with one voice, and not assume the role of a competing economic development agency.

Finally, the Committee believes that CIT should have one more role, that of a technology extension service. The Committee recommended consolidating the A. L. Philpott Manufacturing Extension Partnership (PMEP) into CIT so that together they could assist Virginia's businesses in the areas of quality control, lean manufacturing techniques, critical manufacturing processes, computer security, and business planning and preparation issues, to name a few, much like the agricultural extension service helps Virginia's farmers and other citizens with a host of agricultural issues. CIT should also assist localities in the deployment of high-speed connectivity (see House Joint Resolution No. 163 (Patron - Saxman)) and act as an intermediary between the public and private sectors. These extension services would link business, industry, and government with technological best practices from throughout the world and connect technological process improvements at university research centers to business, industry, and government.

Mitchell Goldstein, Commission Director, noted that the Committee discussed and rejected recommendations involving closing CIT or moving its headquarters to Richmond because they would send the wrong message. The Commonwealth is committed to technology development and CIT is a symbol of that commitment, as illustrated by the inverted pyramid in Herndon and field offices throughout the Commonwealth. Secretary Newstrom noted that it is "Virginia's" CIT not "Northern Virginia's" CIT with more than 90 percent of its investments taking place across the Commonwealth and less than 10 percent in northern Virginia.

Despite CIT's somewhat tortured history (see Senate Document 16 (1993)), the Committee agreed that CIT still performs a valuable service to the Commonwealth. However, its mission needs to be more focused, its governance and administration more stable, and its accountability more defined. Furthermore, its efforts must be an integral part of an overall economic development plan for the Commonwealth.

The Secretaries of Technology (Newstrom), Commerce & Trade (Schewel), and Education (Wheelan) have worked together to integrate technology and workforce development into the overall economic development plan for the Commonwealth and continue to do so. These three prongs -- technology development, economic development, and education -- are all part of one comprehensive approach to economic development in the Commonwealth. Secretary Newstrom has integrated CIT into that overall plan.

The Commission voted unanimously to adopt the Center for Innovative Technology Advisory Committee's report and recommendations and refer them to the General Assembly and the Governor.

Integrated Government Advisory Committee

The Integrated Government Advisory Committee, which was co-chaired by Senator Newman, Delegate Nixon and Delegate D. Marshall and composed of 19 citizen members, was charged with exploring the issues raised by government's transformation from a paper-based system to the information age, a mission of the Commission that began in its early days and continues. The Committee focused on the present state of information technology (IT) procurement in the Commonwealth and the history and present state of the electronic communications pilot project.

The Committee received briefings on IT procurement from several vendors as well as the current administration. It conducted a detailed examination of the IT procurement process and discussed the current state of procurement, its future course and possible alternatives. The Committee also received briefings on the history and present state of the electronic communications pilot project (an exemption to the Virginia Freedom of Information Act that applies to meetings held via videoconference), the Virginia Community College System's videoconferencing capabilities and the role and future of the pilot project.

As the result of its discussions, a number of legislative and administrative recommendations arose. The Committee limited debate to a few of them and made a number of recommendations. The Committee recommended:

- A bill that amends the Public-Private Education Facilities and Infrastructure Act of 2002 to include IT projects.
- A bill that amends provisions related to information technology procurement to reflect the Department of Information Technology's role in IT procurement.
- Several administrative changes to existing procurement regulations.
- Establishing two regularly scheduled times every month to make videoconferencing available to public bodies in the legislative branch.
- Continuing the Committee's work in 2003.

The Commission voted unanimously to adopt the Integrated Government Advisory Committee's report and recommendations and refer them to the General Assembly and the Governor.

Intellectual Property and Entrepreneurial Development Advisory Committee

The Intellectual Property and Entrepreneurial Development Advisory Committee, which was co-chaired by Senator Howell, Delegate Christian and Delegate Purkey and composed of 15 citizen members, was charged with examining the issues related to the intellectual property commercialization and capital funding of entrepreneurial development by the Commonwealth. It also was charged with monitoring the progress being made by --and where appropriate, work with-- other parties studying these issues, such as the Secretary of Technology, Center for Innovative Technology and Virginia Research and Technology Advisory Commission (VRTAC). The Committee received briefings in Richmond and Norfolk to complete its charge.

The Committee received briefings on the present state of intellectual property commercialization by Virginia colleges and universities, including an overview of the commercialization process, case studies by entrepreneurs who have commercialized intellectual property created by Virginia universities, and steps taken by a Virginia university to facilitate commercialization with greater ease. The Committee also received briefings on legislation from the 2002 Session addressing intellectual property and entrepreneurial development issues, including House Joint Resolution No. 88 (Patron - Devolites), requesting the Secretary of Technology to recommend incentives necessary to encourage the commercialization of university research and development; House Bill No. 530 (Patron – Devolites), requiring VRTAC to develop a statewide policy and uniform standard for commercialization of intellectual property developed through university research; and House Joint Resolution No. 206 (Patron- Nixon), establishing a technology-based business development task force.

In addition, the Committee received briefings highlighting the Hampton Roads region's science and technology successes, identifying the factors that brought the region to its present state and those that need to receive continued emphasis, and identifying obstacles to continued success that the Commission and the General Assembly can help remove and on Virginia's participation in the federal Small Business Innovation Research program.

The Committee reached no consensus except to continue to review, analyze and monitor these and related issues. The Commission voted unanimously to adopt the Intellectual Property and Entrepreneurial Development Advisory Committee's report and to refer it to the General Assembly and the Governor.

Privacy Advisory Committee

The Privacy Advisory Committee, which was co-chaired by Delegate May, Senator Ticer and Senator Bolling and composed of 14 citizens members, was charged with establishing privacy principles that should serve as a guideline for legislative proposals and balance the interests involved.

As part of its study of privacy issues, the Committee discussed bills referred to the Commission by the House Committee on Science and Technology during the 2002 Session and continued until the 2003 Session. The Committee discussed House Bill No. 1363 (Patron – Nutter) and Senate Bill No. 612 (Patron – Trumbo) on unsolicited electronic mail transmissions, House Bill No. 533 (Patron – Devolites) and Senate Bill No. 567 (Patron – Byrne) on unsolicited electronic mail transmissions and House Bill No. 28 (Patron – Callahan) on privacy expectations in higher education.

All of the bills raised the question of unintended consequences to the Committee. Concerned that these bills would treat the problems that they were trying to solve differently in cyberspace than physical space and would treat various groups differently for no apparent reason, the Committee decided not to recommend any of them. Committee members understood that an issue exists but could not agree on a legislative solution or even on whether a legislative solution was needed.

The Committee turned its focus to an issue that it attempted last year, workplace privacy. It discussed model bills that required employers to give notice to their employees about their monitoring practices before they could engage in electronic monitoring. After much discussion trying to refine terms and balance the interests of the employer (e.g., protecting its legal rights and those of its employees) with those of the employee (e.g., an understanding of what expectation of privacy is reasonable), the Committee voted to recommend a bill that requires notice before electronic monitoring can take place and provides guidance to employers and employees regarding what they can expect.

Several members of the Commission were concerned that such a requirement might impose liability upon a third party who knew or could have known of wrongdoings through electronic monitoring, but did not or could not act upon that knowledge. The Commission voted unanimously to adopt the Privacy Advisory Committee's report, but voted four (May, Plum, Ticer and Christian) to three (Newman, Marshall and Nixon) with five not voting (Bolling, Howell, Purkey and Wampler were not present to vote and O'Brien resigned his seat upon election to the Senate) on the recommended bill.

Discharge of the Advisory Committee Members

As the final order of business, Chairman May thanked and discharged the members of the advisory committees. He noted the overwhelming response to the call to serve on the committees and the difficulty of making selections from such a qualified group of applicants. He further noted that those selected dutifully served on the committees, many without compensation, because of their interest in the science and technology issues facing the Commonwealth.

III. ADVISORY COMMITTEE REPORTS

The work plan identified four issues for study through the establishment and work of advisory committees, co-chaired by JCOTS members: Center for Innovative Technology (Delegate May, Delegate Plum and Senator Wampler, co-chairs); Integrated Government (Senator Newman, Delegate Nixon and Delegate D. Marshall, co-chairs); Intellectual Property and Entrepreneurial Development (Delegate Purkey, Senator Howell and Delegate Christian, co-chairs); and Privacy (Delegate May, Senator Ticer and Senator Bolling, co-chairs).

A. CENTER FOR INNOVATIVE TECHNOLOGY

Delegate May, Delegate Plum and Senator Wampler, co-chairs

1. Charge

To explore the past, present and future mission of the Center for Innovative Technology (CIT), whether CIT is fulfilling its current mission and how it can better fulfill its mission in the future.

2. Summary

The Center for Innovative Technology Advisory Committee met three times during the 2002 interim: on August 1, September 18, and October 29. The Committee held meetings in Herndon, Charlottesville and Richmond. During those meetings, the Committee received a briefing from the Interim President of CIT on CIT's future mission and discussed its past, present and future.

CIT: Challenges and Opportunities

Secretary Newstrom cautioned that if Virginia is to be a leader in the global economic marketplace, CIT is the most visible sign. CIT's operating plan functions as part of the Governor's overall vision for the Commonwealth's economic development. He explained CIT's current operating climate, which includes a three-million-dollar (25%) budget, cut in FY 2003. With fewer dollars, CIT needs to focus on fewer, focused, metrics-driven goals and objectives. CIT plans to limit itself to three strategic goals.

Its first goal will be to increase federal research funding to Virginia's colleges and universities by 20%, for a \$57 million impact, and to small businesses and localities, for a \$14.8 million impact. To achieve this goal, CIT will educate researchers and funding agencies about various opportunities and work with others to develop research priorities. Secretary Newstrom explained that to achieve this objective, research universities need a common goal to approach the federal government. Any collaborative effort must include all of the colleges and universities with support from the institutions' presidents.

Second, it will focus on commercializing intellectual property from universities and laboratories and growing entrepreneurial companies for an expected impact of 330 new technology firms and \$25 million in technology wages. Finally, it will work with the Virginia Economic Development Partnership and the regional economic development authorities to promote technology-based economic development across the Commonwealth for an expected \$250 million impact. The total expected return on investment is more than 37 times.

Delegate May suggested the CIT might want to consider a fourth goal, a type of technology extension service. New developments around the world will affect Virginia's businesses at an increasing rate, and someone in Virginia needs to be watching out for those developments. As an example, Delegate May cited proposals in the European Union to ban lead from solder, which would have a devastating impact on Virginia's microchip manufacturing sector, among others, if there were not a readily available alternative. Other examples include current and potential prohibitions on the use of freon or trichloroethylene in cleaning solvents, and the use of arsenic in pressure-treated wood. CIT should consider assisting Virginia's businesses in the areas of quality control, lean manufacturing techniques, critical manufacturing processes, computer security, and business planning and preparation issues, to name a few, much like the agricultural extension service helps Virginia's farmers and other citizens with a host of agricultural issues.

Many committee members commented on the highly focused nature of the objectives detailed by Secretary Newstrom for CIT, cautioning that they hope CIT will retain its regional offices to ensure that

its economic development goals benefit all areas of the Commonwealth, leaving no region behind. When asked whether CIT should also focus more of its resources on growing Virginia's current businesses, as opposed to attracting new business, the Secretary replied that the growth of both are intertwined.

CIT: A New Direction?

The Committee and public submitted comments expressing their views of the Secretary's vision for CIT and were given an opportunity to respond.

- Dr. Henry A. McGee
Founding Dean Emeritus and Professor of Chemical Engineering
Virginia Commonwealth University's School of Engineering

Dr. McGee began the debate by arguing for the elimination of CIT because others already accomplish the goals and directions of the "new" CIT. For example, the regional technology councils provide regular and extensive networking opportunities for entrepreneurs, venture capitalists, attorneys and others. The counties pursue high-tech development through organizations such as the Henrico County Industrial Development Authority. The Greater Richmond Partnership pursues industrial development by providing information and introductions to local entrepreneurs. The deans of engineering, as a group, visit the members of the congressional delegation every year to present a unified picture of engineering education, research, and opportunities. The research universities have information/lobbying firms on retainer in Washington. The Office of the Secretary of Technology provides an annual conference to assist entrepreneurs with SBIR/STTR proposals. The Philpott Manufacturing Extension Partnership (Philpott MEP) organization does for manufacturing what the agricultural extension service does for farmers. Each university has a Tech Transfer Office to handle patents and licensing for technologies generated on campus. Professors have become entrepreneurs, always seeking research money and selling their ideas, and incentives for them are huge. In fact, the career of a professor depends rather completely upon his success at winning grants. These factors are only the tip of the iceberg of services, incentives, and opportunities for attracting more federal support and for creating and growing high-tech businesses in Virginia.

So what is the special niche for CIT? Redundancy is not necessarily bad, but a simple "me too" approach is a waste. The emphasis must be on creativity. It must be nurtured because it will not sustain itself. CIT should work toward enhanced management of the research enterprise at the universities to help them nurture and foster this creativity.

- Archie H. Hubbard
Treasurer
Goodpasture Motor Co., Inc.

Mr. Hubbard countered saying CIT needs to continue. It needs to be a clearinghouse for technology-related issues for public/private consumption, a "Technology Extension Service" provider. It needs to

know what all of the recipients are doing with its money and be in a position to disseminate money and services to prospective businesses looking to come into the State or wanting to expand into other areas of the Commonwealth.

CIT could easily become the “Single Voice” before Congress when the Commonwealth’s universities request federal money. CIT would be an advocate, not a decision maker, for the universities once they have decided what programs they wish to pursue. However, CIT could keep all interested parties informed about the current and planned projects, thereby helping the universities avoid unnecessary duplication of projects.

Another problem area seems to be proving its worth to the General Assembly, especially when considering its “Return On Investment.” Mr. Hubbard suggested combining CIT with another agency that is responsible for economic activity and job creation. CIT would be the technology section of the agency. All economic activities need to be brought under one roof. It appears that there are many different agencies working on economic development activities, resulting in conflicting claims for the same jobs created (and of course silence when jobs are lost). A combined agency could reduce administrative expenses and do the work that numerous agencies currently do.

Another advantage would be to eliminate unnecessary fighting and competition since only one agency would be responsible for economic development and job creation. That agency would be the one to prove its worth to the Commonwealth and the General Assembly. The ultimate result would be the elimination of double-counting the number of jobs created and more responsibility for economic development.

- Douglas Koelemay
Executive Vice President and Chief Policy Officer
Williams Mullen Strategies

Mr. Koelemay offered a different perspective, reminding the Committee of CIT’s past and its development and that its strategic plans and leadership have changed numerous times since its inception. The strategic plan for 1984 called for providing a climate of collaboration and technological innovation between Virginia businesses and state universities. Its goals also included enhancing the research and development capability of the state’s major research universities. The plan in 1998-2000 was a little more specific, pledging CIT to help Virginia achieve long-term vision as a technology leader by leading implementation of Blueprint (Building a commonwealth of technology: A blueprint for technology-based economic growth in Virginia) recommendations. The benchmarks for CIT’s success were to assist in the creation of 7,500 new jobs, 225 new companies and \$250 million in competitiveness and achieving a 4.3 on 5.0 scale in customer satisfaction. CIT was also expected to provide 20 percent of its programs and services electronically, dedicate 5 percent of its resources to knowledge-based culture within CIT, and expand programs by 10 percent by developing efficiencies and new revenue streams.

Just last year (2001), the plan for CIT included providing access to Virginia’s technology expertise, expanding the Commonwealth’s research and development (R&D) and technology infrastructure, and

creating collaborative environments that advance Virginia's technology future. The results of this plan, according to the annual report, reflect growth in the technology councils of 28 percent to 2,820 company members statewide, and a leveraging of the Commonwealth's \$12.5 million investment with \$25 million in federal R&D funding, \$84 million in private-sector matching funds and \$399 million in increased competitiveness (cost savings, private capital attraction, sales increases) for Virginia businesses. Workforce developments include 2,025 company-reported jobs added in technology-related small businesses and 140 tech interns funded with 100 percent company match. CIT also contracted with 7 vendors to provide access to advanced telecommunications to Virginia companies at a discount.

Today (2002), the plan includes three initiatives: enhancement of federal research funding to Virginia's colleges, universities and industry, commercialization of intellectual property from universities and laboratories and growth of entrepreneurial companies, and the promotion of technology-based economic development. It shares its mission with a number of other agencies, which leaves the question "Which part of the shared mission belongs to CIT?" Other questions Mr. Koelemay raised regarded what governance structure would best support the mission, sustained effort, and a longer-term focus; where in the executive branch ongoing program activity should be anchored; whether parts of CIT lend themselves to annual accounting in a tough budget situation; and whether the government should be directly involved if universities and the private sector are the drivers and state government is not committed to expanding resources.

Instead of directly answering the questions, Mr. Koelemay offered a number of facts to the Committee. The new realities facing CIT include (i) increased accountability to the General Assembly; (ii) annual reporting requirements; (iii) doubt about its relevance (Budget Madness); (iv) active evaluation by individual delegates and senators and JCOTS; (v) criticism of spending on meetings, travel and public relations; (vi) more than \$2 million in FY2003 cuts by the General Assembly that were not recommended by the governing board or the Governor; (vii) studies on the value of the building and property for potential sale; (viii) suggested new metrics that have annual timelines and reporting requirements; and (ix) questions about its independence, its abilities, and duplication from constituencies and partners.

He offered four options for CIT in the 2003 General Assembly Session. Option 1 is to operate with new goals and metrics and leave the current budget intact. Option 2 is to operate with new goals and metrics, reducing the budget and leaving some of its mission intact. Option 3 involves reorganizing CIT's goals, governance and operations. The last option is to completely cut its budget and disburse the building and other assets. Each of these options leaves a number of unanswered questions from the ability to measure CIT's success with annual measurements to whether its operations can be transferred elsewhere, from the impact of further budget cuts to whether the money would be better spent elsewhere.

The Committee and the Secretary agreed that while further budget cuts are almost a certainty, CIT still has an important role to play in the development of the Commonwealth's technology economy.

- Chris Lloyd
McGuireWoods Consulting

Mr. Lloyd pointed out that the Committee members seemed to agree that business outreach (or an “extension service for the technology community”) is an important service provided by CIT. This, in fact, has long been one of its core missions, beginning in 1987 when the organization supported a pilot program for this purpose at Virginia’s community colleges. Later, this function evolved into technology transfer, and eventually to the regional offices that exist today. The question here is the performance of the regional offices and whether they are valuable to the business community.

Continuing with the questions and issues that any analysis of CIT needs to consider, Mr. Lloyd asked if the Commonwealth has a contingency plan for continuing certain CIT services should the agency be abolished given the increasingly dire fiscal situation in the Commonwealth. Already, the Commonwealth supports a number of programs that reach out to the business community to enhance their competitiveness, including the existing industry call program at the Department of Business Assistance, the Small Business Development Centers, and the small business incubator program. He asked if the technology extension activities can be merged with the Department of Business Assistance, Virginia’s Philpott MEP, and/or the Department of Minority Business to create an agency that provides comprehensive (but also streamlined) outreach services. Furthermore, are there other funding sources (charging for services, the federal government, or the tobacco commission) that CIT should tap to preserve vital programs?

Mr. Lloyd then asked what would happen if CIT fails to meet the metrics established in the Secretary’s plan and if they are even realistic given the current economic situation. CIT was measured by metrics when Robert Templin was its president. What were the results (e.g., where did CIT excel or fall short)?

Finally, considering the relationship between CIT and the Virginia Economic Development Partnership, he wondered whether CIT could play an instrumental role in job creation without a marketing budget or provisions for confidentiality. He asked how CIT and the Virginia Liaison Office in Washington, D.C., would interact in the quest for more federal research dollars. Also, does CIT intend to play a role in mediating disputes between institutions (look no further than the Langley research center fiasco that has been unfolding over the past 9 months)?

- Randal E. Arno
Director, Southside Office
Weldon Cooper Center for Public Service at the University of Virginia

Mr. Arno suggested additional strategic goals in addition to those suggested by the Secretary. First, CIT should provide "technology extension services" to business, industry, government, and communities throughout the Commonwealth. These extension services would link business, industry, and government with technological best practices from throughout the world and connect technological process improvements at university research centers to business, industry, and government. In summary, what needs to be retained/expanded is the R&D business link from NASA, NSF, university laboratories, and

others to business, industry clusters, government, and communities. This might logically be included in the Secretary's goal of promoting technology-based economic development. However, the transfer/translation need is not specifically defined.

Although Philpott MEP provides manufacturing "technique" consulting services to small and medium-sized manufacturers, there appears to be a disconnect between business, industry, and government in the continuously improving field of technology "best practices"; one could call it R&D at the level of commercialization or sector-wide process improvement. Philpott MEP seldom, if ever, brings new "hard" technologies to its client; if it did, only small manufacturers would benefit since they are Philpott's primary clientele. Furthermore, Philpott MEP should be integrated more directly into the direct line of CIT's authority if it remains a state entity, or into the authority of the Secretary of Technology or the Secretary of Commerce and Trade.

CIT also needs to provide a public-private partnership to promote telecommunications connectivity throughout the Commonwealth but particularly in underserved rural Virginia. The public-private partnership could act as a clearinghouse for telecommunications services, the level of service and its demand, and most critically, in partnership with the private sector, decide how best to deploy/extend the necessary supported level of service. That function could be organized under the umbrella of CIT.

- Terry Riley
Executive Director
Hampton Roads Technology Council

Mr. Riley continued moving the focus from the universities to the businesses that CIT supports. While there is a lot of focus on the university aspects of CIT's role, it is important to remember that the main way CIT is known throughout Virginia is from its direct interaction with technology companies. Since its founding, the CIT field force has assisted emerging small- and medium-size, high-tech companies with data retrievals, patent searches, referral to university expertise, referral to business counseling, referral to other firms for manufacturing facilities, prototyping, joint venturing, suppliers and customers, referral to venture and seed capital sources, referral to potential management team members, small grants for technology development, referral to incubation facilities and programs, referral to educational and training opportunities, and even foreign market sales or joint venturing opportunities. In the past 12 years in which Mr. Riley has been exposed to CIT, it has assisted thousands of Virginia companies in these and many other ways.

Large firms like AOL or EDS can fend for themselves in the market and probably don't need that kind of assistance from CIT. Maybe that is why CIT and what it does is not as well known or understood by the largest high-tech firms in the Commonwealth. However, one need only ask the "little guys" to find out that they are well aware of CIT and value its assistance highly.

Has CIT done this in every part of Virginia? No. Right now the CIT field force is only about a dozen strong, down from a peak of about 18 before several years of budget cutting took support away from

this vital function. With thin resources, the CIT field force has spent most of its time where the greater concentrations of high-tech companies exist, but still have tried to reach all parts of Virginia.

In his view, considering the poor translation of university R&D dollars through to commercialization of university IP, greater emphasis and resources should be placed on CIT's direct interaction with small- and medium-size high-tech firms (i.e., beef up the field force), and less emphasis on its investment in R&D at state-assisted universities. That is not to say that CIT should in any way reduce its support of university-based centers that are at the applied engineering and technology end of the spectrum with the intent of driving commercialization of industry IP (e.g., entrepreneurial centers, incubation centers, e-commerce centers, etc.), or university-generated IP. Toward that end, instead of grants for university R&D, perhaps CIT should only make grants to companies that may or may not choose to work with a university. But, if they do, the company would manage the grant.

Whatever the concerns may be about how CIT has worked with universities in the past, he cautioned that the Commonwealth should not overlook CIT's greatest economic development impact, which stems from its direct interaction with small high-tech firms.

- Clayton Lewis
AOL

Mr. Lewis disagreed that large firms do not interact with CIT saying that CIT serves the needs of big technology players as well as small. CIT has been key in 7-digit AOL spending on research and research support for Virginia schools. Without their initiative and help, AOL might well have spent these funds in the larger "safe" schools like MIT, UC Berkeley or Stanford.

According to Mr. Lewis, AOL views CIT as broadly representative of Virginia technology and the research in its universities. CIT has been instrumental in getting behind the barriers that big companies must erect around themselves. Large companies tend to block access to the small players and at the same time, they do not have the detailed knowledge they would need to provision their technology needs out of Virginia schools without CIT. He wondered if, as Secretary Newstrom suggests, the same factors might play a role in the U.S. Government view of Virginia schools. Whether, like AOL, the federal government needs a higher-level broker than the schools themselves?

3. Recommendations

As proposed by the Office of the Secretary of Technology:

1. Enhance federal research funding to Virginia's colleges and universities and industry;
2. Commercialize intellectual property from universities and laboratories and grow entrepreneurial companies; and
3. Promote technology-based economic development.

As proposed by the Committee (with explanations):

Mission - CIT is a Commonwealth of Virginia, non-profit organization dedicated to improving government-industry programs that encourage economic growth through the application of science & technology (technology-based economic development).

1. Enhance federal research funding to Virginia's colleges and universities and industry.
 - a. CIT should identify sources of federal money and connect various sectors with that money, as well as help Virginia's colleges and universities connect with money and grants from the public and private sectors.
2. Commercialize intellectual property (IP) from universities and laboratories and grow entrepreneurial companies.
 - a. CIT should focus on helping the owners to commercialize IP as opposed to licensing it directly or getting involved in the ownership issues.
 - b. CIT's role should be as a facilitator and not an investor.
 - c. CIT's should work with the Virginia Research and Technology Advisory Commission (VRTAC) and the State Council of Higher Education for Virginia (SCHEV) to facilitate the commercialization of IP and not to improve the IP productivity.
3. Enhance economic development through the promotion of technology-based solutions to current and future business issues.
 - a. CIT currently serves a role with both technology and non-technology firms in the Commonwealth (e.g., e-commerce and broadband services).
 - b. CIT should work with the Virginia Economic Development Partnership for its economic development efforts to help the Commonwealth speak with one voice, and not assume the role of a competing economic development agency.
 - c. CIT should be involved with the incubation of technology companies working with organizations like the Virginia Business Incubation Association and incubators around the Commonwealth. CIT should not operate any incubators.
 - d. Technology Extension Service

- i. Consolidate the A. L. Philpott Manufacturing Extension Partnership (PMEP) into CIT. PMEP's mission is to foster economic growth by enhancing the competitiveness of Virginia's small and medium-sized manufacturers. The Commission realizes a need in manufacturing today to monitor developments around the world and establish best practices. For example, what would happen to the Commonwealth's computer manufacturing sector if the European Union bans using lead soldering? What if the use of freon or trichloroethylene is banned in cleaning solvents or arsenic is banned from pressure-treated wood? These changes, which are very real, could be devastating to the Commonwealth.
- ii. CIT, together with PMEP, should consider assisting Virginia's businesses in the areas of quality control, lean manufacturing techniques, critical manufacturing processes, computer security, and business planning and preparation issues, to name a few, much like the agricultural extension service helps Virginia's farmers and other citizens with a host of agricultural issues.
- iii. CIT should assist localities in the deployment of high-speed connectivity (see HJ163) and act as an intermediary between the public and private sectors.
- iv. These extension services would link business, industry, and government with technological best practices from throughout the world and connect technological process improvements at university research centers to business, industry, and government.

Metrics:

1. Outcomes should be reported using both direct and indirect measures of progress toward CIT's strategic goals. Direct measures of CIT activities (e.g., staff time, funding, special programs, industry interactions, and university interactions) gauge the magnitude of CIT's efforts relevant to its strategic goals and annual work objectives. Indirect measures (e.g., high tech jobs, high tech wages, university/industry intellectual property creation, and university/industry research and development funding) are a useful gauge of current and prospective improvement in the Commonwealth's high tech economy, which is attributable to many and varied economic factors including the significant efforts of CIT as reflected by the direct measures. Measurements should eliminate or at least minimize double counting and should include increases (or decreases) that can be attributed to CIT's activities and be compared to increases (or decreases) overall in the sectors being measured.

2. CIT should report metrics by legislative district quarterly and by the Commonwealth's geographic technology regions annually to alert the Members of the General Assembly of its activities.

B. INTEGRATED GOVERNMENT (I-GOV)

Senator Newman, Delegate Nixon and Delegate D. Marshall, co-chairs

1. Charge:

To explore the issues raised by government's transformation from a paper-based system to the information age.

2. Summary

The Integrated Government Advisory Committee met four times during the 2002 interim: on August 13, September 19, October 24, and November 20. During its meetings, the Committee received briefings on the present state of information technology (IT) procurement in the Commonwealth and the history and present state of the electronic communications pilot project.

Virginia Public Procurement Act: Introduction and Overview

John Westrick, Senior Assistant Attorney General, Office of the Attorney General, briefed the Committee on the Virginia Public Procurement Act (VPPA) (§ 2.2-4300 et seq. of the Code of Virginia). The purpose and scope of the VPPA is to "enunciate the public policies pertaining to governmental procurement from nongovernmental sources." The VPPA balances the interests of the procuring body, vendors and the public. Topics covered by the VPPA include competitive process requirements, required and prohibited contract provisions, administration of public contracts, prompt payment of invoices, access to procurement records versus protection of proprietary information, ethical rules, and socio-economic policies. The VPPA also provides for remedies and bid protests.

Pursuant the VPPA's contracting authority, if state treasury funds are to be used for the purchase of goods and nonprofessional services, the purchase must be made through the Department of General Services' Division of Purchases and Supply. However, telecommunications and information technology must be purchased through the Department of Information Technology (DIT). Statutory and administrative exceptions to central purchasing exist. For instance, DIT can delegate purchasing authority.

The VPPA uses four primary public procurement procedures: (1) noncompetitive execution of contract; (2) limited competition – abbreviated procedures promote competition to the extent practicable; (3) competitive sealed bidding (IFB) – results in award to lowest responsive and responsible bidder (here, the lowest bid prevails); and, (4) competitive negotiation (RFP) – results in award to offeror which, in agency's opinion, made the best proposal (the best proposal prevails in this

instance as price is not the sole criteria). Notably, DIT may award multiple vendor contracts pursuant to procedures three and four. The VPPA default procedures are competitive sealed bidding and competitive negotiation. However, ad hoc or abbreviated procedures are permitted for emergencies and small purchases. Additionally, noncompetitive purchase is permitted when only one source is practicably available (the so-called "sole source" contract) or when an existing contract is modified pursuant to a provision in the original contract.

The VPPA is supplemented by regulations and ordinances. Indeed, most of the specific rules for procurement derive not from the VPPA, but from procurement regulations. DIT is authorized to adopt alternative regulations for the procurement of information technology pursuant to the Administrative Procedure Act (APA).

The Virginia IT Procurement Process: An Insider's Perspective
[Government/Large Consultant](#)

R. Ron Jordan, Managing Director, LeClair Ryan Consulting, L.L.C., addressed IT procurement from an insider's perspective. Mr. Jordan served in multiple roles of Virginia state and local government for 29 years before recently moving to the private sector. Some of the projects with which he was heavily involved include: Integrated Correctional Information System, a \$48 million enterprise resource plan (ERP) with a four-year projected implementation; Statewide Agencies Radio System (STARS), a \$350 million system involving two years of planning and a projected six-year implementation; and Management of Inventory and Product/Point of Sale System for Virginia's Alcohol Beverage Control Board, a \$19 million ERP with a projected 18-month implementation. STARS is Virginia's largest technology implementation.

During his public service, Mr. Jordan identified several problems present in the Commonwealth's procurement of information technology. For example, agency technology staff capacity is limited, with agencies possessing little staff depth, leading to a situation where staff turnover can significantly delay or kill a procurement project. Agency reliance on procurement staff as contract negotiators is another challenge. Procurement staff are not trained in contract negotiation, and often lack a detailed understanding of the project or product being negotiated. Mr. Jordan also observed many instances where state agency staff showed distrust of the private sector, believing that vendors are only interested in the sale and are servants rather than partners.

Another difficulty that Mr. Jordan experienced during a particular IT project was too many "fingers" outside the agency in the RFP and contract approval process. During the project in question, all of the following entities had some role to play: Department of Technology Planning; Department of Information Technology; Department of General Services; Department of Planning and Budget; Department of the Treasury; Office of Attorney General; three Cabinet Secretaries; Auditor of Public Accounts; and General Assembly committees. The biggest problem presented by so many entities is the time added to a project. Mr. Jordan said it was almost impossible to get a representative of each of these organizations in the same room for a constructive meeting.

Mr. Jordan explained that the Commonwealth's focus has been on the procurement process rather than trying to address a business problem. This focus assumes that the state agency knows the best solution rather than the technology industry and does not take advantage of their expertise. He asserted that these and other problems increase the time, cost and complexity of procurements while adding little value to the product delivered to the agency. He not only pointed out the problems, but also offered some solutions to improving agency IT procurement, such as establishing a single review entity and review process, with an emphasis on front-end review. He suggested enacting a Public-Private Technology Partnership Act, similar to the Public-Private Transportation Act, which would allow unsolicited proposals, encourage vendor consortiums, and mitigate the Commonwealth's lack of general fund resources to successfully develop, implement and operate large ERP projects and systems.

Mr. Jordan also suggested revising the state procurement manual to allow educational communication between the vendor and agency, include the estimated budget for the procurement, standardize terms and conditions, and include evaluation weighting. He even recommended establishing a state technology trust fund similar to the Higher Education Trust Fund for Technology. Advantages of using such a trust include debt financing for major general fund projects and technology upgrades, the ability to buy-down the cost of agency borrowing through direct appropriations to the fund, the ability for agency repayment of loans through operating appropriations on a predetermined basis, and assurance of funding continuity for general fund multi-year projects without "getting caught" in the budget process each year.

Small Consultant

Craig Kennedy, President, Kennedy Consulting Services, also briefed the Committee on IT procurement from an insider's perspective. Mr. Kennedy has been involved in more than 100 procurements as a consultant, and actually helped draft the Commonwealth's first manual on IT procurement more than 20 years ago as a state employee.

Mr. Kennedy believes that what the VPPA does not say has a significant but unnoticed effect on procurement in Virginia. Although the VPPA requires "governmental procurement from nongovernmental sources," many bodies that people consider to be part of state government are actually nongovernmental entities, such as higher education foundations. Additionally, many procurement projects are internal, "interagency transfers" that frequently involve the exchange of consulting services, thereby eliminating the requirement to conduct an official procurement. The effect and influence that procurement transactions occurring beyond the scope of the VPPA have upon procurements within the VPPA is unknown, as is the dollar equivalent represented by each non-VPPA procurement. Mr. Kennedy also shared his observations on how procurements are conducted. He pointed out that although Article 1 of the VPPA uses terms and concepts --such as fairness, impartiality, maximum competition feasible, clear rules disclosed in advance and best value-- to describe how procurements are to be conducted, they are rarely conducted in such a manner. Mr. Kennedy provided several specific instances where he thinks the reality of how procurements are conducted are inconsistent with Article 1. For example, although the VPPA requires that procurements be conducted in an open manner with free exchange of information, he believes that few procurements meet this standard. He reasoned that from an agency perspective, openness involves risk, and greater potential

confrontation and protest. To illustrate this lack of openness, Mr. Kennedy pointed out that in the 13 years of the Body Shop contract, the agency only held one pre-proposal conference.

To change the present procurement environment, Mr. Kennedy recommended that agencies: hold a pre-proposal (or pre-bid) conference for all significant procurements; seek out vendor input; and encourage the exchange of ideas between buyer and seller. According to Mr. Kennedy, the recommendations would open the process and increase the dialog between vendors and agencies.

The Public-Private Transportation Act of 1995
Public-Private Education Facilities and Infrastructure Act of 2002

Chris Lloyd, Vice President of McGuireWoods Consulting, briefed the Committee on the Public-Private Transportation Act (PPTA) of 1995 (§56-556, et seq.) and the Public-Private Education Facilities and Infrastructure Act (PPEA) of 2002 (§ 56-575.1 et seq.). The PPTA changed the way the Commonwealth and the private sector work together on transportation projects with the hope of getting them completed faster and cheaper. The PPTA allows for both solicited and unsolicited proposals to develop transportation infrastructure. Qualified projects do not have to comply with the Virginia Procurement Act. Instead, the PPTA provides its own review and public comment requirements, is governed by guidelines as opposed to regulations and facilitates private sector equity contributions and innovation. Agencies are able to consider qualities other than price (e.g. track record and quality) and all affected jurisdictions have a voice (failure to respond in a timely manner is treated as opposition).

To qualify, projects must be approved by an appropriate agency and must serve a public purpose. The project serves a public purpose if (i) there is a public need for the transportation facility; (ii) the transportation facility and the proposed interconnections, and the operator's plans for operation of the facility, are reasonable and compatible with the state transportation plan and with the local comprehensive plan or plans; (iii) the estimated cost of the facility is reasonable in relation to similar facilities; and (iv) the private entity's plans will result in the timely acquisition or construction of or improvements to the facility or its more efficient operation. Public bodies can charge a reasonable fee for advisors to review the proposals.

Some examples of projects that used this process include widening Route 28 in Loudoun County, Route 288 extension in Richmond, Interstate 895 development in Richmond and an interstate maintenance contract. For the Route 28 project, citizens asked the General Assembly to create a special tax district for them with the increased taxes paying for the work. They agreed to extend the life of the tax district to pay for more work. With budget woes forcing the state to rethink commitments to the project, Loudoun and Fairfax Counties agreed to back bonds for the project. One result of this process was the contract for Route 288, which led to 17.5-mile road and bridge being built for \$236 million. The fixed price contract includes schedule guarantees and a 20-year warranty for less than what VDOT originally allotted for the project. Interstate 895 is being built almost entirely with private bonds and VMS has contracted to maintain 25 percent of the Commonwealth's interstate miles for a fixed price.

To build on the success of the PPTA and extend it to other projects, the General Assembly passed the PPEA. Projects qualifying for the PPEA include (i) any education facility; (ii) any building or facility for principal use by any public entity; (iii) any improvements, together with equipment, necessary to enhance public safety and security of buildings to be principally used by a public entity; (iv) utility and telecommunications and other communications infrastructure; or (v) a recreational facility. Projects under the PPEA serve a public purpose if (i) there is a public need for or benefit derived from the project; (ii) the estimated cost is reasonable in relation to similar facilities; and (iii) the private entity's plans will result in the project being conducted in a timely manner.

Under the PPEA, a private entity must submit a proposal to a public body. Then, the public body must make a written determination whether to develop the project using competitive bidding or competitive negotiation. The public body can use competitive negotiation if it determines that this method is likely to be advantageous because of the probable scope, complexity or urgency of the project or risk sharing, added value, an increase in funding or economic benefit from the project that would not otherwise be available. Once the public body enters into an agreement with the private entity, the public body retains oversight to ensure compliance with local standards, and the private operator files routine reports. Funding sources for these projects include, in addition to the traditional government sources, user fees, service contracts, private bonds, lease-purchase, sale-leaseback and leveraging other state and federal funds.

This approach may work for technology because technology advancements move faster than the current procurement process (products may become obsolete before they are even delivered). This approach also allows technology experts to solve the problem and be involved in the entire process, provides opportunities to encourage more innovation, and provides opportunities for lower cost products and services and private sector contributions. If the private sector has a solution to a unique problem, it can offer that solution without worrying that its ideas will become public and used by a competitor to win government business. The maximum size of projects that the Commonwealth could accomplish under this approach is limited only by its ability to handle the project.

This approach is not a panacea and has its potential pitfalls. Income generation through user fees can be limited. The operator may not outlast the contract and warranties or guarantees. Cost savings, while they do exist, may be hard to demonstrate at the outset. Finally, it is not a solution for all IT procurement.

As Delegate Nixon pointed out, the Department of Taxation's project with AMS required special legislation to authorize it. Doing this for every special project hurts the Commonwealth's objective, which is to reduce the likelihood that anyone will question the integrity of the process. Once committee member had questions about the public body's performance guarantees and assurances that they will comply. The success of the PPEA depends on the guidelines. Recently, the Governor, the Chairmen of the Senate and House Committees on General Laws and a committee of interested parties developed and released guidelines for public comment. Final guidelines will be released after they are adopted on September 30.

Vendor Perspectives on IT Procurement
Small Vendor

Ken Anderson, President, Anderson & Associates, addressed IT procurement from the small vendor's perspective. Mr. Anderson made two recommendations to the Committee. First, the Commonwealth should allow its agencies the option of using the professional procurement procedures for some specific types of IT services. Currently, the Code defines professional services as work performed by an independent contractor within the scope of the practice of accounting, actuarial services, architecture, land surveying, landscape architecture, law, dentistry, medicine, optometry, pharmacy or professional engineering (Code of Virginia § 2.2-4301). The process for procuring these services focuses on qualifications and record of past performance first. After the qualified firms have been ranked, the agency then negotiates price with the top ranked firm. If a contract satisfactory and advantageous to the agency can be negotiated at a price considered fair and reasonable, the award shall be made to that firm. If not, negotiations with that firm are terminated, and the agency begins negotiations with the next ranked firm, and so on.

According to Mr. Anderson, many states and the federal government use this procedure. It focuses on obtaining a reasonable price for the scope and quality of services desired, rather than the lowest price. A major concern arising from this procedure is the impact of considering price at different stages in negotiations. If price is considered at the outset, it will become a focus because, unlike qualifications, it is concrete. If price is not considered at the outset, the agency has no way of knowing what a fair and reasonable price should be. However, Mr. Anderson stated that if agencies do not know the right price, they are better off relying on qualifications and reputation.

His second recommendation was to allow term contracts (also known as indefinite delivery, open end or IDIQ - indefinite delivery, indefinite quantity) for IT services. Term contracts are allowed for some professional services and are used extensively by state agencies and local governments. Typically, selection of one or more firms is made following the professional procurement procedures. As projects arise, the firm negotiates lump sum or time and material contracts with the agency. Term contracts usually are not exclusive; agencies can procure services outside of the term contract, if warranted. Mr. Anderson stated that the benefit of these contracts is one procurement instead of individual procurements, which can be time-consuming and expensive.

In some cases, agencies have used the "body shop" contract to obtain the benefits of a term contract. Established firms in the field raise two main objections to this technique. First, the law requires consideration of price at the early stages of the selection process leading to emphasis on the lowest hourly rates for services, instead of the qualifications of those providing the services. Second, this type of contract envisions supplying a person directly to an agency without the benefit of the organizational and management support that competent firms in the field provide. A term contract, he argues, would allow firms to bring all of their expertise, experience and flexibility to accomplish specific tasks enabling agencies to hold them accountable for results.

Large Vendor

Christopher Law, Business Development Manager, KPMG Consulting, addressed the large vendor's perspective on IT procurement. The challenge is to improve efficiency and timeliness of the procurement process, provide agencies and vendors with a means to effectively use technology to address business needs, focus on procedures, promote a partner friendly environment for the Commonwealth and vendors and reduce time spent renegotiating terms and conditions. The current process needs to be driven by the business needs and operate more timely.

Agencies want to reduce their risk and increase chances for success. They fear the procurement process's perceived insensitivity to time and the inability to "get what they want." Mr. Law told the committee that vendor's would like to see open communication, standardized contracts and cooperation to address the issues at hand. They want to focus on bringing solutions to the table, work in a partner-like environment and be considered part of the solution, not the problem. Vendors also want to focus on negotiating the statement of work and deliverables and reasonable limitations of liability as a standard clause in all contracts, instead of negotiating everything for every project.

Mr. Law also addressed various approaches to IT procurement. The "body shop" was designed as a means of staff augmentation from low cost providers with limited accountability. It is task-oriented for short-term engagements in which the onus is on the agency. Agencies have shoehorned solutions into this approach placing some folks in charge of major systems. Some people hired under body shop contracts have more tenure than the state employees. The task order/mini-RFP (request for proposal) approach is a solution-oriented approach in which vendors are pre-qualified and the terms and conditions are pre-negotiated. It allows agencies to focus on the merits of a solution with an accelerated procurement process and open enrollment. Pre-qualified vendors will not have to sell themselves and their solutions. Vendors can also be added or removed as they change over time.

The RFP/IFB (invitation for bid) approach is a traditional way of procuring goods and services. It is time consuming, expensive and cumbersome for all parties with limited flexibility. The concern with using this process for IT is that changes occur between the time of bidding and what is available at the time a contract is signed. Using this process, the Commonwealth is not able to take advantage of changes in price or function without rebidding. Furthermore, it is driven strictly by price with minimal consideration for the solution.

Mr. Law explained other approaches to the Committee, like North Carolina's. North Carolina has developed separate contract vehicles, including the body shop, which is used for staff augmentation only and convenience/scope statement contract, which focuses on sixteen service categories with pre-qualified vendors. Agencies using the later contract vehicle can send out a short scope statement and receive a short response, similar to a mini-RFP. North Carolina also employs an Information Resource Management Committee (IRMC) that is composed of public and private sector individuals and reviews, approves and monitors all IT projects.

Agencies and vendors can partner together to develop solutions that can be sold to other states. For example, when Texas Online was developed, the vendor and state recouped their costs first. Additional monies and revenues were used to pay for smaller agencies projects, which would not have happened if resources had not been leveraged. Currently, as Bud Oakey, a committee member, pointed out, no mechanism exists for agencies in Virginia to leverage resources designed for one thing to help other agencies.

The Commonwealth and vendors need to work together to define a standard set of mutually acceptable terms and conditions, including limited liability provisions. If they share the risk, they can share the success and cost efficiencies. Most important, according to Mr. Law, the Commonwealth needs to help agencies manage projects, not contracts. Project management in agencies is big problem. He believes that the Commonwealth must consolidate its resources and leverage federal funding for its many projects.

Other Views

Christopher Long, President and CEO of Washington Resource Associates, told the Committee that it needed to add another form of review. The Commonwealth should consider whether government should be involved in the function before it seeks to procure goods or services to achieve it. That review should be based on merit and appropriateness of the function and requires openness and public comment.

Fred Norman, a committee member, raised a number of ideas for further consideration by the Committee. Vendors accepted through any competitive process should be pre-qualified for other contracts. If vendors are awarded and successfully complete a competitively award contract, they should have the ability to be added to a blanket contract every year. The Commonwealth needs to develop a uniform definition of “disadvantage firm,” and publish its standards for IT projects and allow public comment. Liability should be limited and such clauses should be added as standard language to IT contracts. Once the short list is chosen, it should be published and vendors notified so that they can commit resources to other projects instead of being left waiting for an answer. The Commonwealth needs to create a vendor manager position under the Secretary of Technology to act as a single point of contact for IT vendors to navigate the maze of the Commonwealth.

The Administration's IT Procurement Outlook

Diane Horvath, Director, Legal & Legislative Services Division, Department of Information Technology, reviewed the Administration's current IT initiatives. Ms. Horvath started by updating the Committee on DIT's Procurement Reform ([ProReform](#)) Project. Meaningful reform of procurement in Virginia encompasses three areas: improving the processes by which technology goods and services are procured; leveraging the Commonwealth's buying power; and developing better vendor and customer relationships.

To improve the processes by which technology goods and services are procured (the first area), DIT focused on streamlining the procurement process for telecommunications and IT goods and services. The agency has assembled a team of individuals with specialized skill sets in procurement, contracts, and technical expertise in a wide range of complex technologies to accomplish this goal. Their procurement process will be redesigned to be simple, fair, quick and flexible while focusing on the business goals, leveraging the Commonwealth's buying power and cultivating mutually beneficial industry partnerships. DIT has prepared a legislative package, which is currently under review, to implement these objectives.

To develop better vendor and customer relationships (the third area), DIT is devising ways for vendors to actively participate in the planning and developing stages and educating agencies, local governments, and institutions of higher education about the existence of statewide technology contracts and the benefits thereof. DIT is also gathering data from its customers about their assets, their requirements and their future needs to ensure that the procurement process is designed and executed based on the business needs and priorities of the Commonwealth.

DIT created five teams to address these objectives and another team to address stakeholder communications. DIT expects that these teams should complete much of their work by the beginning of 2003. One of the most visible products of their work is the [ProReform website](#) that will include, among other things, all statewide contracts (100+) in a searchable format, user sign-up to receive more information and e-mails on ProReform, drafts of vendor and agency manuals as they become available, and notices of public hearings. This project will lead to the development of agency and vendor manuals. These manuals will reflect knowledge gained as a result of the project's development of an initial streamlined procurement process, test procurements conducted pursuant to the new streamlined procurement process, and the best practices developed following analysis of the test procurements.

The Governor's Commission on Efficiency and Effectiveness Perspective on IT Procurement

Dr. Robert Holsworth, Executive Director, Governor's Commission on Efficiency and Effectiveness (Governor's Commission), briefed the Committee on the Governor's Commission's work with regard to IT procurement. The overall goal of the Governor's Commission was to develop recommendations that would enable the Commonwealth to serve its citizens more effectively and to manage its resources more efficiently. Specifically, when Governor Warner established this body, he noted that its purpose was to identify redundant and ineffective services; streamline and consolidate state agencies and programs; better use technology to improve service delivery and reduce costs; and employ 21st Century management tools to make state services more efficient.

As part of its charge, the Governor's Commission examined the current process through which the Commonwealth procures and manages information technology. Following its analysis, the Governor's Commission concluded that information technology savings can be achieved, in part, by better procurement of information technology, eliminating the purchase of duplicative administrative information systems, utilizing technology to perform work tasks more efficiently, and providing better customer service through technology. It recommended negotiating statewide contracts for information technology

purchases that leverage purchase volume into substantial discounts; consolidating administrative information systems projects across agencies; combining data centers to increase effectiveness and cost savings; using technology to consolidate business processes such as payroll processing and accounts receivable; and using web-based technology to organize customer service activities such as licensing and permitting more efficiently and effectively in a one-stop shop.

Possible Short-Term Changes to the Commonwealth's IT Procurement Process

Prior to the second meeting, Committee members were asked to submit suggestions to be discussed during the meeting for short-term changes to the Commonwealth's IT procurement process. Allowing agencies to piggyback on beneficial contracts established by other entities, such as GSA, state and local, and/or higher education was the only suggestion submitted by more than one person. While Committee members generally expressed favor for this suggestion, several questioned whether current VPPA laws and regulations would permit agencies to be added to existing contracts. The provisions of those existing contracts also could be an impediment. However, the possibility of using existing contracts and related materials --such as the GSA schedule-- as a price benchmark received favorable reaction from Committee members.

Electronic Communication Meetings and the Freedom of Information Act

Created pursuant to Chapter 704 of the Acts of Assembly, 1999 Session (as amended), the JCOTS videoconferencing pilot project provides an exemption to certain requirements of the electronic communication meetings provisions (§ 2.2-3708) of the Freedom of Information Act (FOIA). The exemptions only apply to videoconference meetings of legislative branch public bodies and public bodies under the supervision, direction or control of the Secretary of Technology, Secretary of Commerce and Trade, or the State Board of Community Colleges. Lisa Wallmeyer, Assistant Director of Virginia's Freedom of Information Advisory Council, explained that under FOIA, only state governing bodies may hold electronic meetings. Political subdivisions and local governing bodies may not meet electronically under any circumstances. Furthermore, no public body may conduct a closed meeting electronically.

An electronic meeting is one transacted through telephonic or video means. A quorum of the public body must be physically assembled at one location, but the remainder of the members may participate from remote locations. The public body must provide notice at least 30 days in advance; include the date, time, place, and purpose of the meeting in that notice; and identify all locations for the meeting. The public body must make all locations available to the public and give everyone attending the meeting the same opportunities to address the public body, regardless of location. The public body must suspend the meeting if the audio or visual feed at any location is interrupted until access is restored.

The Pilot Project modifies FOIA's quorum and notice requirements. For the purpose of establishing a quorum, every location where a member of the public body is physically present to discuss or transact the public business through videoconference may be used, provided the location is in Virginia and open

and accessible to the public. In addition, the Pilot Project reduces the amount of time in advance that a public body must give notice to a minimum of seven days.

One objective of the Pilot Project was to allow JCOTS members to participate in videoconferenced meetings from locations within or near their home districts at public sites, thereby saving time and money. JCOTS has held at least three such meetings since the Pilot Project's enactment in 1998. While facing technical difficulties, the meetings were successful and not only enabled its members and the public to participate from various sites around the Commonwealth, but also enabled the Commission, the House Committee on Science and Technology and the Senate Committee on General Laws to conduct the first interview of a prospective cabinet official – the current Secretary of Technology George Newstrom.

To evaluate the exemptions, public bodies that use the Pilot Project must record the meetings and file reports. According to Jerry Simonoff, Director, Department of Technology Planning, no public bodies responsible to the Secretary of Technology have held meetings via videoconference. He suggested that the Commonwealth is not yet as proficient at arranging videoconferences as it is teleconferences, mainly because of the additional technical considerations. As these issues decrease, videoconferences should become more common. He encouraged the Committee to do whatever it can to encourage use of the FOIA exemptions created by the Pilot Project.

James Davis, Director, Advanced Technology Services, Virginia Community College System (VCCS), briefed the Committee on [VCCS's videoconferencing network and capabilities](#). Videoconferences held pursuant to the Pilot Project generally rely on Network Virginia and the VCCS' videoconferencing network. VCCS' network includes 40 locations situated on community college campuses throughout Virginia. Its network is used to conduct distance learning, instruction, counseling, and training and face-to-face meetings for small groups, as well as permit VCCS staff to interact with colleagues, inside and outside the VCCS, without the extra time and expenses associated with face-to-face meetings. A typical videoconference-enabled VCCS classroom includes capacity for 25-30 people; up-to-date interactive video equipment; connections to Network Virginia, the Internet and the campus LAN and /Internet connectivity; and telephone and fax hookups.

Responding to questions from the Committee, Mr. Davis explained that it is possible to regularly schedule videoconference time to be used by the General Assembly on the VCCS network. The VCCS presently lacks the appropriate technology to make videoconferences available for viewing on the Internet, but that such a service likely will become available in the future.

Forrest Landon, Executive Director, Virginia Coalition for Open Government, addressed the Committee regarding several issues related to the Pilot Project and FOIA. Mr. Landon sees no reason why the Pilot Project could not be expanded to include other entities, with the caveat that local governments should not be included because, unlike their state counterparts, they are not as challenged by physical distance. He also endorsed the concept of designating two regularly scheduled times every month to make the VCCS's videoconferencing facilities available to public bodies in the legislative branch.

3. Recommendations

The Committee discussed and voted on issues contained in the [I-Gov goals matrices](#) (see Appendix 4). The matrices, composed of short-term and long-term goals, are a compilation of many of the ideas brought before the Committee during presentations and discussions regarding information technology (IT). Additionally, the matrices include Department of Information Technology (DIT) procurement reform administrative proposals. The Committee recommended that the Commission support:

1. Revising the state procurement manual to include the estimated budget and evaluation weighting for each procurement, and to encourage the Commonwealth to actively communicate with and educate vendors about the process. This recommendation arose from discussion related to *Short-Term Goals Item No. 1*.
2. Instituting a limitation of liability clause in state procurement contracts instead of the present unlimited liability. The amount of liability should reflect a well-defined and measurable nexus with the value of the contract with the particular vendor. This recommendation arose from discussion related to *Short-Term Goals Item No. 2*.
3.
 - a. Increasing the use of mandatory state contracts and catalog purchasing.
 - b. Standardizing terms and conditions in state contracts, and implement standardized templates for use in competitive sealed bidding and competitive negotiation procurement procedures as another means of increasing standardization.

These recommendations arose from discussion related to *Short-Term Goals Item No. 3*. The Committee felt that change in this area is more a matter of changing agency attitude regarding IT procurement and the surrounding environment than changing the underlying regulations.

4. Allowing term contracts for IT services. This recommendation is *Short-Term Goals Item No. 4*. The Committee endorsed DIT's activities in this area.
5. Developing a task order/mini-request for proposals process for small projects. This recommendation is *Short-Term Goals Item No. 5*. The Committee endorsed DIT's activities in this area.
6. Encouraging DIT to continue exploring allowing agencies to "piggyback" on beneficial contracts established by other entities. This recommendation arose from discussion related to *Short-Term Goals Item No. 6*.
7. Amending the Public-Private Education Facilities and Infrastructure Act (PPEA) of 2002 (§ 56-575.1 et seq.) to include IT projects. Although this recommendation is *Long-Term Goals Item No. 1*, the Committee discussed amending the PPEA as a

separate agenda item. During its discussion, the Committee examined a draft mark-up amending the PPEA, and voted to recommend the draft to the Commission.

In addition to consideration of issues listed on the IGov goals matrices, the Committee discussed several other matters. The Committee recommended that the Commission support:

8. Continuing the Integrated Government Advisory Committee's work during the 2003-2004 interim, including discussion of DIT's funding model and establishment of a technology trust fund similar to the Higher Education Trust Fund for Technology.
9. Requesting that the Virginia Community College System and the Department of Transportation help the General Assembly facilitate two regularly-scheduled times for videoconferences every month.

Finally, the Committee discussed legislative proposals from DIT's ProReform (or procurement reform). The Committee recommended that the Commission support:

10. Amending § 2.2-1303 to remove the requirement that DIT shall make technology and telecommunications purchases in accordance with Department of General Services (DGS) regulations or alternative regulations adopted pursuant to the Administrative Procedure Act (APA) to allow DIT to prescribe its own procurement regulations in these areas using the same exemption to the APA that applies to DGS's regulations.
11. Amending §§ 53.1-52, 2.2-1119 and 2.2-4304 to make it clear throughout the Code of Virginia that procurement authority for telecommunications and information technology goods and services now resides with DIT and not the Division of Purchases and Supply (DPS)/DGS.
12. Permanently repealing the sunset clause on reverse auctioning by adding reverse auctioning language back into §§ 2.2-4301 and 2.2-4303, thus negating the sunset clause in the second enactment clause of Senate Bill 1024 (Chapter 395, 2001 Acts of Assembly).

C. INTELLECTUAL PROPERTY AND ENTREPRENEURIAL DEVELOPMENT
Delegate Purkey, Senator Howell and Delegate Christian, co-chairs

1. Charge:

To examine the issues related to the intellectual property commercialization and capital funding of entrepreneurial development by the Commonwealth and monitor the progress being made by other parties studying these issues, such as the Secretary of Technology, Center for Innovative Technology and Virginia Research and Technology Advisory Commission (VRTAC).

2. Summary

The Intellectual Property and Entrepreneurial Development Advisory Committee met twice during the 2002 interim: on September 25 and October 30. The October 30 meeting was held at Old Dominion University. During its meetings, the Committee received briefings on the present state of intellectual property commercialization by Virginia colleges and universities, 2002 legislation addressing intellectual property and entrepreneurial development issues, the Commonwealth's participation in the federal Small Business Innovation Research program and the Hampton Roads region's science and technology experiences.

Intellectual Property Commercialization Overview

Kay Heidbreder, Associate General Counsel and Special Assistant Attorney General for Virginia Polytechnic Institute and State University (Virginia Tech), briefed the committee on the intellectual property commercialization process followed by Virginia colleges and universities, including an examination of the authority under which this process occurs. Ms. Heidbreder pointed out to the Committee that although many Virginia colleges and universities employ similar practices regarding intellectual property commercialization, her remarks were limited to Virginia Tech's policies and practices.

Intellectual property rights in the U.S. arise from Article 1, Section 8, Clause 8 of the U.S. Constitution. Accordingly, nearly all substantive intellectual property law is federal. Various Code of Virginia sections -- including §§ 23-4.3, 23-4.4 and 23-9.10:4 -- serve as the basis for Virginia Tech's intellectual property policies. Two of the most significant intellectual property practices followed by Virginia Tech are its observance of Policy 13000 and the Intellectual Properties Committee. Policy 13000 addresses such intellectual property issues as ownership, faculty obligation to disclose the possible creation of intellectual property, distribution of income following successful licensing or sale, and faculty right of appeal of Virginia Tech administration decisions. Virginia Tech's Intellectual Properties Committee determines ownership and makes recommendations to the provost on faculty appeals of administration decisions. While every Virginia institution of higher education engaged in the licensing of intellectual property is required by the Code to have a policy such as Policy 13000, creating and utilizing a body such as the Intellectual Properties Committee is not required.

Another important component of Virginia Tech's approach to managing its intellectual property assets is Virginia Tech Intellectual Properties, Inc. (VTIP). The mission of VTIP, which is a private, nonprofit foundation, is to “[s]upport Virginia Tech by maximizing return on the university research investment through effective management of intellectual property.” Its goals are to protect and license the university intellectual property; generate income by licensing and other activities resulting from university intellectual property; enable sponsored research funding; facilitate the creation of new or start-up businesses and jobs based on university intellectual property; and disseminate university expertise embodied in intellectual properties to society.

Responding to one Committee member's question regarding whether a dispute between a faculty member and Virginia Tech over intellectual property ownership is governed by an employment contract, Ms. Heidbreder explained that the faculty handbook, which states that Virginia Tech's intellectual property policy controls in such a situation, embodies a contract. When asked how much uniformity existed among the intellectual property policies at different colleges and universities in Virginia, Ms. Heidbreder told the Committee that the biggest difference among the policies is how royalties are divided. The State Council of Higher Education for Virginia has offered guidance in this area. Several Committee members also asked questions regarding the entrepreneurial environment among Virginia Tech's faculty, in particular, and among the faculty at other Virginia schools, in general. Dr. John C. Herr's presentation, below, examines this issue in detail.

*Update on Activity Surrounding VRTAC-related Legislation from 1002 Session
(H.J. 88 and H.B. 530)*

Delegate Jeannemarie Devolites and Dr. Chris Hill, Co-Chair, Virginia Research and Technology Advisory Commission (VRTAC) H.B. 530 Subcommittee, updated the Committee on the activity surrounding two VRTAC-related bills from the 2002 Session, House Joint Resolution (H.J.) 88 and House Bill (H.B.) 530 (Patron - Devolites). H.B. 530 requires VRTAC to develop a statewide policy and uniform standard for commercialization of intellectual property developed through university research. H.J. 88 asks the Secretary of Technology, in cooperation with the Center for Innovative Technology and VRTAC, to recommend incentives necessary to encourage the commercialization of university research and development.

Dr. Hill briefed the Committee on VRTAC's progress regarding H.B. 530 (requiring VRTAC to provide its recommended statewide policy and uniform standard for commercialization of intellectual property developed through university research to the Governor and the General Assembly and recommend any changes to the Code). He outlined VRTAC's early work in this area, and shared the H.B. 530 Subcommittee's schedule to meet this deadline. Delegate Devolites, who is also member of VRTAC, added that her intent in patroning this legislation was to create a more business-friendly environment for commercializing university-generated intellectual property in Virginia. VRTAC plans to submit its work to the General Assembly by the end of the year.

Update on H.J. 206

Ben English, Partner, LeClair Ryan, provided an overview on the activities related to H.J. 206 from the 2002 Session. The resolution asks the Secretary of Technology, in conjunction with the Secretary of Commerce and Trade, to establish a task force to study best practices for assisting the development of technology-based businesses that will produce jobs and other economic benefits throughout the Commonwealth. The resolution's genesis occurred as a result of collaborative efforts among Virginia's technology councils and venture capital forums. As part of its efforts, the task force convened pursuant to the legislation is forming focus groups of interested parties, and with the assistance of the National Commission on Entrepreneurship, will use the feedback from the focus groups to assist in developing

best practices for assisting the development of technology-based businesses in Virginia. The task force will submit its recommendations to the 2003 Session of the General Assembly.

IP Commercialization Case Study No. 1

Dr. Kent Murphy, Founder, CEO & Chairman, Luna Innovations, led the Committee through his observations and experiences regarding the commercialization of intellectual property generated by Virginia universities. Luna Innovations was created to identify market opportunities, develop new technologies, and provide the launch pad to fully develop their commercial potential. It licenses intellectual property from various sources and makes the intellectual property available to five companies along with venture capital. The companies work to transition the basic research and development embodied in the intellectual property into products for industry, defense, communities and the environment. The company presently holds more than 35 patents and licenses, receives more than \$70 million in non-government financing, and for the fifth consecutive year is second only to General Motors in funding research at Virginia Tech.

Prior to attending graduate school, Dr. Murphy worked in the private sector, observing how these companies use intellectual property. Upon entering graduate school at Virginia Tech, he saw faculty members creating intellectual property that could be profitable in the private sector. However, because most of the professors elected to publish their work first instead of protecting it, the business possibilities were eliminated. Dr. Murphy founded Luna Innovations to capitalize on the intellectual property generated at universities and taking it to market.

Dr. Murphy commented that intellectual property generated at universities and government labs in Virginia can play a key role in economic growth and are a fantastic resource. Notably, there are very few "homeruns" in university intellectual property portfolios – usually a small percent of licenses account for 90% of revenues. Dr. Murphy noted that, from their perspective, investors and industry must believe they will possess control of the intellectual property in question before they will enter an agreement. Given this perspective, Dr. Murphy is very concerned that Virginia needs to be innovative and take a leadership role in creating intellectual property policies for economic growth that demonstrate Virginia understands the issues and is willing to be a leader. To achieve leadership in this area, Virginia needs to have understanding of its goals at all levels, including state government, university leadership, university middle management, professors and students. If Virginia creates an environment where each level understands its role in commercializing university-generated intellectual property, the benefits include creating a greater understanding of how to build intellectual property value into research at state colleges and universities (Dr. Murphy recognized the conflict this creates with the traditional emphasis on publication of research); economic development rewards; and, the positive impact that such economic development would have on education, by bringing the "real-world" to research and teaching.

IP Commercialization Case Study No. 2

Dr. John C. Herr, President, ContraVac, Inc., provided his observations and experiences regarding the commercialization of intellectual property generated by Virginia universities. Dr. Herr, a Professor of

cell biology at the University of Virginia (UVA), founded ContraVac to develop technologies discovered in his UVA laboratory. ContraVac started in a home office, graduated to the Corridor One Office Incubator Complex and is currently located in the Corner Building on UVA's grounds in a space rented from Spinner Technologies, an arm of the UVA Patent Foundation (UVAPF).

ContraVac's key technologies derive from licenses and options of patents held by UVAPF. These patents cover sperm protein and carbohydrate antigens, their encoding genes and their diagnostic and therapeutic uses. UVAPF has helped ContraVac by offering its three in-house attorneys to assist with the patent application process; negotiating reasonable royalty rates and other terms in the license and option agreements; sponsoring the company in start-up office space in the Corridor One Building; developing laboratory space at the Spinner Technologies Incubator that ContraVac now rents; helping the company qualify for SBIR grants; and, providing business advice and negotiating services as needed in return for equity in the company (Spinner Technologies provided these services).

Dr. Herr shared his belief that as generators of new "real wealth" and as vehicles for major social change, the potential and promise of Virginia's universities is strong but remains, in large part, unrealized. Research in basic and applied sciences is strong at generating new ideas and making fundamental discoveries, but the academic culture in many departments does not recognize or reward translational research. Translational research encompasses those activities that follow from a basic discovery, enabling the strongest possible patent claims, validate or add value to a model, and are essential to the implementation, practice, or commercialization of an invention. Translational research includes proof of concept research for new drugs or devices; market research and analysis; prototype development and testing for software and devices; pre-clinical testing for pharmaceuticals and medical devices; human trials of experimental therapeutics; and, outcomes assessment.

To change the present academic environment, Dr. Herr suggested that a cultural change is required. New measures of academic performance and productivity are necessary, such as modifying the standards for promotion and tenure. Scholarship remains the gold standard for judging excellence. Productivity is measured in the number of papers published and by the ranking of the journals in which they are published. New measures --such as patent disclosures, industrial contracts and products that reach the marketplace-- need to be added to the tenure and promotion process that evaluates innovation, entrepreneurship and social impact. The first step to achieving such change is educating faculty, staff and students on the fundamentals of patenting to gain improvements in disclosure and protection of intellectual property. Innovation and entrepreneurship are fundamental missions of the universities -- these represent changes that must be driven by leadership and guidance from the highest levels of governance.

[SBIR in Virginia](#)

Dr. K.C. Das, Director of the Office of Science and Technology and Executive Director of VRTAC, briefed the Committee on Virginia's participation in the federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) programs. SBIR and STTR are set-aside programs for domestic small business concerns to engage in research and/or research and

development (R&D) that has the potential for commercialization. SBIR and STTR are intended to stimulate technological innovation, use small business to meet federal R&D needs, foster and encourage participation by minorities and disadvantaged persons in technological innovation, and increase private sector commercialization through innovations derived from federal R&D.

In FY 2002, federal government agencies made \$1.5 billion in SBIR grants and \$70 million in STTR grants. These programs are a major source of pre-venture capital for high risk/high payoff technology. SBIR and STTR funds are not a loan. Many participating companies use SBIR and STTR funds as a leveraging tool to attract venture capital and other sources of funding. To be eligible, companies must be organized for-profit, employ 500 or fewer employees, and meet other criteria. The SBIR and STTR programs are administered in three phases, with available funds increasing between Phase I and Phase II, and the possible outcome of Phase III being the private sector commercialization or the possibility of non-SBIR/non-STTR funds if the government is a customer.

Recipient companies receive intellectual property rights to technologies developed with program funds. Technologies developed under the SBIR program cannot be given to another firm for Phase III contracts except by licensing or through sub-contracts for a period of four years.

Virginia ranks third in the country in total SBIR/STTR dollars and number of awards. Virginia companies received more than \$69 million for Phase I and Phase II in FY 2001 and more than \$667 million since the inception of the SBIR program in 1983. The Commonwealth has received more than \$30.0 million total in STTR. About 300 small hi-tech companies have been established in Virginia with the help of the SBIR Program. Virginia has a very strong outreach effort, with its SBIR/STTR conferences being recognized as among the best in the country.

The Hampton Roads Region

The Committee held one of its meetings at Old Dominion University (ODU) to discuss one region's successes in intellectual property development and commercialization. The Committee received briefings (i) highlighting the region's science and technology successes, and national and world class capabilities; (ii) identifying the factors that got the region to its present state; and (iii) identifying obstacles to continued success that JCOTS and the General Assembly can help remove.

John Broderick, Vice-President for Institutional Advancement, ODU, opened the meeting by sharing some recent developments at ODU. ODU exceeded more than 23,000 registrations in distance learning, which, if translated to full-time equivalency, makes the University's distance learning enrollment larger than the campus enrollments of either Virginia State University or Virginia Military Institute. Additionally, this fall ODU welcomed its largest freshman class of the past 10 years, and did so while increasing admission standards. Many students are attracted to ODU because of success recent graduates have achieved. Indeed, in the past several years ODU students have become Rhodes Scholars, Truman Fellows, *USA Today* Academic All-Americans, and Jack Kent Cooke Fellows. Additionally, in the past 10 years, the State Council of Higher Education has honored 13 members of the University's faculty for teaching excellence.

Delegate Bob Purkey, Committee Co-Chair, added that Hampton Roads needs continued investment in and commitment to research and development to fuel its economy, especially as the region's population continues to grow. He asked Committee members and speakers what the General Assembly has to do to help promote research and development growth, adding that at the least, he does not want the General Assembly to be an impediment to such growth.

Regional High Technology Overview

Terry Riley, Executive Director, Hampton Roads Technology Council (HRTC), provided the Committee with an overview of Hampton Roads' principal strengths and assets as a technology environment. Despite the recent national economic downturn, the region's unemployment level for high technology workers continues at an historic low, demonstrating the ongoing need high technology employers have for qualified employees and the stability the high technology industries provide the region.

Mr. Riley also shared the HRTC's legislative priorities for 2003. One legislative priority is taking steps to increase the number of engineering, science, technology and math graduates from Virginia's universities. As Virginia's economy grows and becomes more reliant on technology-related industry, the need for such graduates becomes even more vital. Another legislative priority for the HRTC is expanding Virginia's support for business incubation and seed capital. These initiatives have been repeatedly identified as key success factors in the growth of high technology companies throughout the United States. Another priority Mr. Riley shared with the Committee is a greater commitment by Virginia to effectively commercialize intellectual property from public institutions of higher education. Specifically, Mr. Riley recommended linking individual institution funding to the institution's value of patent license revenues realized annually per active patent owned. Additionally, Mr. Riley shared several other legislative priorities, such as tax reform to increase the financial health of municipalities, continuation of the Center for Innovative Technology, recommitment to the Hampton Roads Intelligent Highway System, and establishment of Virginia technology professorships.

Two Regional Entities With a Global Influence:

The Joint Training and Simulation Center (JTASC)/Joint Forces Command, and the ODU Modeling and Simulation Program

Mr. John Sokoloski, former Director, Simulation Office, Joint Forces Command, Joint Warfighting Center, and Dr. Ralph Rogers, Chairman, Engineering Management/Systems Management Department, College of Engineering and Technology, ODU, briefed the Committee on Hampton Roads' emergence as one of the most significant centers of modeling and simulation (M&S) in the U.S. The genesis of this M&S center in Hampton Roads occurred during 1995-1996, when the U.S. Joint Forces Command (USJFCOM) required robust simulation capability to train warfare commanders and staffs. To meet this need, USJFCOM developed a 280,000 square-foot facility to support 15 worldwide simulation-based exercises a year. Despite the high cost of building such a world-class facility, it is still far less expensive and dangerous than putting troops in the field to conduct exercises.

In order to sustain this M&S capability, USJFCOM sought help from ODU. As a result, ODU and the Commonwealth responded by creating the Virginia Modeling, Analysis and Simulation Center (VMASC) in 1997. VMASC acquired a 6,500 square-foot space in Tidewater Community College near the Joint Warfighting Center and received funding from 15 companies to support the effort. These developments, as well as ODU's establishment of an M&S degree program in 1998, have led to the facility expanding to 26,000 square feet, the Center's research funding producing a tenfold return on annual state investment, national recognition in research and education, and ODU's creation of the first M&S doctoral program at a public institution in the country. Despite its successes, however, ODU's M&S program lacks core funding. If the programs received more consistent funding, it would be able to take greater advantage of its successes.

Hampton Roads' Research Capabilities

Dr. Lee Beach, Executive Director, Hampton Roads Research Partnership (HRRP), provided an overview of Hampton Roads' research capabilities. The HRRP, a consortium of eight universities and two federal laboratories, was formed to foster regional high-tech economic growth through collaboration. Cities and communities that have been successful at high-tech business development have a large research university in close proximity, but Hampton Roads does not have one. For example, according to the National Science Foundation, six Hampton Roads universities spent a combined \$95 million to research in 2000. By contrast, Johns Hopkins spent \$901 million. Closer to home, Virginia Tech, the University of Virginia and Virginia Commonwealth University spent \$193 million, \$175 million and \$88 million, respectively.

However, Hampton Roads does enjoy the presence of world-class federal labs such as NASA Langley and Jefferson Lab. Additionally, two recent additions to the region, the National Institute of Aerospace at Langley and Virginia Advanced Shipbuilding and Carrier Integration Center, will further solidify Hampton Roads' ability to conduct cutting-edge research. Given these assets, the region can focus on its strengths by pooling its resources and focusing on research clusters, such as maritime transportation, aerospace and biomedical devices in the short-term, and nanotechnology, composite materials and photonics in the long-term.

Developing ODU's Intellectual Property Infrastructure

Clovia Hamilton, Director of Technology Transfer & Research Compliance, Office of Research, ODU, briefed the Committee on measures taken by ODU to increase revenue from intellectual property licenses. Ms. Hamilton highlighted seven steps in commercializing intellectual property: disclosure; evaluating; protecting; marketing; building industry relationships; establishing licensing terms; and closing the deal.

Often, the first step --when faculty members disclose the existence of intellectual property that may warrant protection to their institution's administration-- is the most challenging. Inventions, software, course content, and visual art photos are among the intellectual property for which Ms. Hamilton has

sought copyright or patent protection on behalf of ODU. ODU's emphasis on increasing intellectual property license revenue has required the university to systematically search for new intellectual property from among its colleges, enterprise centers and distance learning centers. As an incentive to disclose the creation of intellectual property, ODU provides creators with up to 50 percent of the licensing revenues. Additionally, ODU holds new patent ceremonies, where it awards plaques and cash bonuses to the creators of licensed patents. Its efforts to increase revenue from intellectual property licenses have resulted in increased disclosures, from five per year to more than 30 in 2002.

Medical Research and Technology Transfer

Dr. William Wasilenko, Director, Office of Research, Eastern Virginia Medical School (EVMS), and Dr. Bob Williams, Director of Technology Transfer, EVMS, offered an overview of the medical research and technology transfer activities at EVMS. In addition to providing traditional medical education, Dr. Wasilenko informed the Committee that EVMS is committed to conducting basic research, applied research, clinical research and clinical trials. The school employs 75 investigative faculty, 150 research staff and 30 research administration and support personnel. The school's present entrepreneurial research initiatives seek to apply medical sensor technology to such diverse areas as modeling simulation, ocular pharmacology, diabetes, reproduction and sleep disorders. The challenges EVMS has encountered with implementing its entrepreneurial research and development include obtaining early stage and seed funding, balancing academics and research and identifying appropriate strategic collaborators.

Dr. Williams highlighted EVMS's intellectual property commercialization efforts for the Committee. Over the past 10 years, EVMS has earned \$15 million in licensing fee income, and has another \$30 million pending. The school attributes its success to community self-reliance, entrepreneurial spirit, community and EVMS flexibility, and EVMS's partnerships with Hampton Roads institutions and organizations.

Hampton Roads' Entrepreneurial Environment for Technology

Marty Kaszubowski, Executive Director, Hampton Roads Technology Incubator (HRTI), examined the entrepreneurial environment for technology in Hampton Roads. The region has tremendous technology resources, and has recently begun taking advantage of them.

Additionally, Hampton Roads has a potential "cluster" in sensors and instrumentation that promises to be a focal point for future economic growth. Even though commercialization of new technology is difficult and complex, Hampton Roads is making progress.

However, technology-based start-ups need significant support, including relevant service providers (patent lawyers, CPAs, networking organizations, etc.), local management and technical talent, on-going research and development support from universities and government labs, and local, early stage, *risk* capital -- not venture capital. Incubators, like HRTI, provide important services that help start-ups progress. Business incubators provide hands-on management assistance, access to financing and orchestrated exposure to critical business or technical support services. According to the National

Business Incubation Association (NBIA), incubators in North America have created nearly 19,000 new companies, and more than 245,000 jobs, and 87 percent of incubator graduates are still in business. Locally, HRTI offers a structured environment that enables entrepreneurs to get the resources needed to be successful; a simplified means for businesses of all sizes to get access to the technologies developed in Hampton Roads; and a federal, state, local, public, private, academic partnership. Apparently, HRTI is serving its clients well: A recent “benchmarking” study by NBIA of technology-focused incubators worldwide placed HRTI in the eighty-seventh percentile of client revenue and job growth.

Licensing and Entrepreneurial Enterprise

Chris Domack, President, Nascent Technology Solutions (Nascent), shared his company's entrepreneurial and licensing experiences with the Committee. Founded in 1996, Nascent was HRTI's third client. The company focuses on diagnostic measurement science and nondestructive evaluation (NDE). Presently, Nascent is developing a suite of unique diagnostic measurement products, and specializes in NDE services and related training. Its current clients include The Boeing Company, Lockheed Martin, U.S. Office of Naval Research, U.S. Army Research Office, and U.S. Missile Defense Agency.

The development of new intellectual property is the cornerstone upon which Nascent's continued success will be constructed. Nascent is currently a licensee as well as licensor of new technology. However, relatively few early-stage technology businesses effectively address intellectual property issues. Mr. Domack emphasized to the Committee that JCOTS and the General Assembly can improve intellectual property commercialization in the Commonwealth by striving to reduce elements of uncertainty and unwelcome surprises for investors licensing intellectual property from public institutions of higher education. He also asked the Committee to discourage policies that place Virginia's institutions into taxpayer-funded competition with small business. The proper research and development funding model will provide incentive and leverage to both attract investors to high-tech business startups and grow intellectual property-based return to the universities.

3. Recommendations

The Committee reached no consensus except to continue to review, analyze and monitor these and related issues.

D. PRIVACY

Delegate May, Senator Ticer and Senator Bolling, co-chairs

1. Charge

To establishing privacy principles to serve as a guideline for legislative proposals and balance the interests involved.

2. Summary

The Privacy Advisory Committee met four times during the 2002 interim: on August 6, September 23, November 7 and December 3. During its meetings, the Committee discussed legislation that the 2002 General Assembly continued and referred to the Commission for study and continued its study from the 2001 interim on privacy in the workplace.

Unsolicited Facsimile Transmissions [House Bill No. 1363/Senate Bill No. 612](#)

Delegate Nutter and Congressman Goodlatte presented House Bill No. 1363, a bill that makes the unsolicited transmission of advertising materials by facsimile a prohibited practice under the Consumer Protection Act. The bill eliminates the requirement that the unsolicited facsimile be advertising goods or services for sale or lease. The State Corporation Commission would be empowered to block access to any telephone number used in connection with such transmissions. Enforcement provisions under the Consumer Protection Act (i) permit the Attorney General to issue civil investigative demands and assurances of voluntary compliance, (ii) create an individual action for damages, and (iii) permit aggrieved parties or the Attorney General to seek injunctive relief to prevent further violations. Senate Bill No. 612 is similar, but it does not contain the provision involving the State Corporation Commission.

Unsolicited facsimile transmissions shift the costs to the recipient by enabling advertisers to use their phone lines, paper, ink, and equipment. Some of these transmissions are even misleading. Congressman Goodlatte gave an example of a fax that gave the appearance of a poll with a toll-free number. In reality, people called a "pay-per-call service" and were charged substantial rates. The offending company moved to Canada to escape U.S. jurisdiction.

They explained that the current statute lacks the authority for the Commonwealth to block access from the source of these faxes or to stop payments to these sources. In addition, many cases are too small are for people to fight individually. This statute gives the Commonwealth the ability to step in and help consumers with all of the enforcement mechanisms of the Consumer Protection Act.

The Committee raised a number of questions about provisions in the bill, including the definition of unsolicited facsimile and the perceived lack of due process. Other questions concerned the jurisdiction of the State Corporation Commission over interstate telephone calls. The Committee voted not to recommend the bill at this time with the possibility of discussing it at a later date after its concerns were addressed.

Unsolicited Commercial Electronic Mail [House Bill No. 533/Senate Bill No. 567](#)

With the patrons unavailable for the first meeting, Mitchell Goldstein, Commission Director, presented House Bill No. 1363 and Senate Bill No. 567 to the Committee. The bills basically require all

commercial electronic mail (e-mail) to have a valid, working e-mail address that enables recipients to opt-out of more solicitations and a truthful subject line. The bills do not prohibit sending unsolicited e-mail (no prohibition exists), obscene materials (§ 18.2-372 et seq. of the Code of Virginia prohibits it) or e-mail containing false or forged transmission information (§ 18.2-152.4 of the Computer Crimes Act prohibits it and § 18.2-152.12 offers civil relief).

Specifically, they prohibit sending commercial e-mail to a person if it uses a third party's domain name without permission, contains false or misleading information in the subject line or if the person indicates that he does not wish to receive e-mail from the sender. The bills require the sender to identify the message as an advertisement or solicitation; provide notice of the right to decline to receive further e-mail messages from the sender, a valid physical address and a valid return e-mail address for receiving requests to not receive further e-mail messages from the sender. They allow interactive service providers to block e-mail sent in violation of its provisions and provide immunity from liability for such actions taken in good faith. An injured person can sue for actual damages or the lesser of \$10 for each e-mail message or \$25,000 per day. However, the injured person shall not have a cause of action against a provider that merely transmits the e-mail message. The Attorney General, an attorney for the Commonwealth or an attorney for a locality may bring an action to enforce its provisions. These damages provisions are similar to the civil damages available for violations of the Computer Crimes Act.

Several members of the Committee were concerned that this bill would punish companies that send e-mail in situations where consumers did not realize that they opted in to receive it, where they had a prior relationship with the company, or where the consumer opted out of all e-mail except specific notices (e.g., warranty-related information). Members pointed out that market mechanisms are currently available to combat unsolicited e-mail (spam). For example, software available from ISPs and third parties can filter out e-mail from unfamiliar senders or enable consumers to mark e-mail as spam, which will automatically forward all e-mail from that sender to a separate folder and notify other users. Trade associations like the Direct Marketing Association have developed mandatory rules regarding spam that its members must follow. Companies, such as TRUSTe and IronPort Systems, have developed spam seals of approval. IronPort Systems' seal requires companies to post a cash bond against which recipients could charge a small fee if they were improperly targeted with e-mail. One company even enables consumers to vote on which senders should be treated as spammers.

The Federal Trade Commission (FTC) and other law enforcement agencies tested whether "remove me" or "unsubscribe" options in spam were being honored. The agencies discovered that the vast majority of addresses to which they sent the requests were invalid. Most of the "remove me" requests did not get through. The FTC has sent more than 75 letters warning spammers that using deceptive "removal" claims in unsolicited e-mail is a deceptive trade practice and is illegal (FTC Act § 5).

Delegate Devolites informed the Committee that she and others decided not to pursue HB 533 in favor of a proposal that would expand the Computer Crimes Act to include criminal penalties for pornographic e-mail. While the problems still exist, she explained that the most complaints come from constituents who receive unsolicited pornographic e-mail. The problem with civil penalties is that

companies plan for them as a cost of doing business. Because they have little effect and much controversy, a targeted approach like this should offer at least some relief.

Senator Byrne reminded the Committee that spam is “Internet pollution.” According to one study, unsolicited e-mail (“spam”) accounts for 25 percent of all electronic mail today, with projections that it will increase to 40 percent by 2007. For people who pay a flat fee for access to their e-mail, spam is a nuisance and wastes time. However, users of wireless devices pay by the minute and must pay for spam. With limits on other forms of communication, like telephones, Senator Byrne argued that spam should be put on equal footing.

One Committee member was concerned that the 10-day lead-time that companies have to act on a removal request. He asked how the bill would deal with a situation where the company uses the time to sell their e-mail list or create a new company and start over. Senator Byrne responded that this action would constitute conspiracy and also is prohibited under her bill. Another Committee member cautioned that any law regulating spam would offer, at most, an illusion of protection. While probably illegal, spammers could avoid detection by using false telephone numbers or addresses. In the end, while doing little to stem the tide of spam, the bill could have severe unintended consequences to legitimate businesses.

After the discussion, the Committee agreed with Delegate Devolites’s request and decided to make no recommendations regarding HB 533. Failing to receive a second, the Committee did not consider a motion to recommend SB 567. Instead, by a vote of 11 to 2, the Committee took the same action with SB 567. While the issue was unresolved, the Committee had so many concerns with legislative solutions that it moved on to another privacy issue.

Expectation of Privacy in Electronic Communications
House Bill No. 28

With the patron unavailable, Mr. Goldstein presented House Bill No. 28 to the Committee. This bill prohibits the Department of Human Resource Management (DHRM) from enforcing any policy that has the effect of denying an expectation of privacy in electronic communications to students, faculty and professional staff of those public institutions of higher education in the Commonwealth that have previously adopted acceptable use of computing policies approved by the State Council of Higher Education of Virginia (SCHEV). The bill tasks SCHEV with the duty, responsibility and authority to review these acceptable use of computing policies to determine whether to approve them.

Under current case law, no one has an expectation of privacy when using systems owned by their employer, including the state and universities, unless they are given an expectation of privacy, either by the employer or by law. DHRM’s policy attempted to reduce this to writing. Other laws may still offer privacy rights.

Not wanting to develop different policies for every group, the Committee decided not to recommend this bill.

Workplace Privacy

Next, the Committee discussed a [proposed bill on workplace privacy](#). To find a privacy violation, courts must first determine if a person had an expectation of privacy and then evaluate whether it was reasonable. If not, there can be no privacy violation. However, whether an expectation of privacy in the workplace is reasonable depends on the circumstances of a given situation. Therefore, the Committee's objective was to define the expectations of employers and employees in the workplace and develop an even-handed approach to govern the use of electronic devices to monitor employees' activities and communications.

Mitchell Goldstein, Commission Director, presented the proposal. The proposal addresses all types of electronic monitoring by every employer, including governments, of every employee. An employer can only monitor its employees on the employer's premises and only if it provides adequate notice to the employee. The employee is spared from and protected from the information gathered by covert monitoring and the employer, if it complies with the proposal, receives immunity from liability for privacy violations. However, the employer is not required to provide notice if it has reasonable grounds to believe that employees are engaged in conduct that violates the law or the legal rights of the employer or the employer's employees, or creates a hostile workplace environment, and the monitoring will produce evidence of the misconduct. The proposal also limits the employers' ability to disclose the information that they gather, except under certain circumstances.

Some members of the Committee expressed concern about the breadth of the proposal because it covers all forms of electronic monitoring for any purpose. A proposal that the 2001 Privacy Advisory Committee discussed only applied to employers with less than 15 employees and applied to monitoring electronic communications (i.e., telephone, e-mail, Internet). The Committee reviewed both proposals and the differences between the two.

The Committee raised a number of issues like whether smaller companies should be exempted and whether damages were appropriate. The Committee also grappled with whether it should limit which officials could conduct the monitoring and under what circumstances should they be allowed to disclose the information that they gathered.

The bill with explanations of the discussions of various sections follows:

Section 1. Definitions

- (a) "Electronic Monitoring" means the collection, storage or analysis of information concerning employee activities or communications by any means other than direct observation, including the use of a computer, telephone, wire, radio, camera, electromagnetic, photoelectronic or photo-optical system, but not including the collection of information (i) for security purposes in common areas of the employer's premises which are held out for use by the public, or (ii) which is prohibited under state or federal law.

This definition includes all types of electronic monitoring regardless of the technology unless it is used for security purposes in public areas or federal or state law prohibits it.

- (b) "Employee" has the same meaning as specified in § 40.1-2.
- (c) "Employer" has the same meaning as specified in § 40.1-2 and includes a state agency, statewide system, or political subdivision, but for the purposes of this Act shall include only those persons or organizations with ten or more full-time employees.

The last phrase of this subsection (1(c)) limits the act's application to exclude small businesses (defined as those with fewer than 10 employees). The Committee believed that this bill could be burdensome on very small businesses.

Section 2. Monitoring Restrictions; Use Limitations; Disclosure

- (a) An employer may use electronic monitoring to collect any information so long as the information is collected at the employer's premises. However,
 - (i) No employer shall engage in electronic monitoring of an employee unless the employer complies with the requirements of section. The employer shall not be liable to the employee for relief as provided in this statute if the employer has provided the employee notice meeting the requirements of section 3.
 - (ii) No employer shall engage in audio or visual monitoring of an employee in toilet areas, changing facilities, shower facilities, or other similar private areas, unless agreed to by all interested parties or such monitoring is subject to the exemptions provided in section 3(d).

This subsection (2(a)(ii)) prohibits audio or visual monitoring in those private areas provided for employees to change clothing or otherwise disrobe, partially or totally. This provision is limited to audio and visual monitoring only. It originally applied to audio and "video," but was changed to "visual" to include technologies such as night vision goggles, in addition to video cameras and other visual monitoring devices. It was written to specifically exclude other technologies, such as those that determine time of entry or location using something other audio or visual monitoring.

If not prohibited by other laws, employers could conduct monitoring in these areas in situations where they are not required to give notice before monitoring or if all interested parties agree to it. For example, in a case where someone is

stealing from a changing facility and the employees request video cameras to catch the thief.

- (b) Information concerning employees that is collected through electronic monitoring may be disclosed only (i) with the prior written consent of the employee; (ii) to officers, employees, or authorized agents of the employer who have a legitimate need for the information in performance of their duties; (iii) to appropriate law enforcement agencies; (iv) as required by other state or federal laws; or (v) to protect the legal rights of the employer or of the employer's employees.

Removed a requirement prohibiting taking action against an employee who asserts his rights under this act or using information obtained in violation of this act, except in the case of criminal investigations. The Committee did not want to change the "at-will" provisions of employment in the Commonwealth and left the prohibitions to the "wrongful discharge" claims, if such prohibitions exist. The Committee also did not want to prohibit the employer from using information to protect his rights or those of others, especially in a situation where reporting the information may be required to protect the employer's rights or those of others (e.g., to stop workplace violence or sexual harassment, to report child pornography, or to protect trade secrets or intellectual property).

Section 3. General Notice

- (a) An employer who intends to engage in electronic monitoring of its employees shall prepare and post for the review by all employees, at a location accessible to all employees, the employer's workplace privacy and electronic monitoring policies and practices. The employer must provide a means for the employee to attest to the fact that the employee has read and understands the policy.

This subsection (3(a)) requires an employer to notify his employees before engaging in electronic as defined in section 1(a). Requiring that the employer provide some means for the employee to acknowledge receipt and understanding of the policy ensures that both the employer and employee have proof that actual notice was or was not given.

- (b) The notice must include disclosure of the employer's policies with respect to non-business use of employer-owned or controlled equipment. At a minimum, the notice must describe (i) the forms of communication or computer usage that will be monitored, (ii) the means by which such monitoring will be accomplished, (iii) the frequency of such monitoring, and (iv) how information will obtained by such monitoring will be stored, used or disclosed.

By their actions, employers could inadvertently grant employees a greater expectation of privacy than the law would otherwise recognize. This subsection (3(b)) is not meant to require a great deal of specificity in the notice, but merely to provide enough information for the notice to be adequate. For example, “we regularly monitor (frequency) all communications using systems owned by the company (form of communications) using all means legally allowed (means) and will use the information that we gather to protect our rights and those of our employees to the extent allowed by law (how information will be used).”

- (c) Before implementing a material change in an electronic monitoring practice described in this act, an employer shall provide notice meeting the requirements of this section to all employees of the employer who are subject to electronic monitoring as a result of the change.

This subsection (3(c)) treats material change in a policy as if it were a new policy.

- (d) Exception: Where an employer has reasonable grounds to believe that a particular employee of the employer is engaged in conduct which violates the law, the legal rights of the employer or the employer's employees, or creates a hostile workplace environment, and that electronic monitoring will produce evidence of this misconduct, the employer may conduct monitoring without giving notice.

Understanding that there are situations where monitoring is necessary and prior notice would frustrate otherwise legitimate and lawful objectives, this subsection (3(d)) provides exemptions to the notice requirement.

Section 4. Remedies

- (a) An employee has standing to bring an action under this section for injunctive relief requesting the court to enjoin an employer that commits or proposes to commit an act in violation of this statute.

Not wanting to make this a punitive statute, the Committee removed provisions for monetary damages and limited damages to injunctive relief.

- (b) No action may be brought under this section unless such action is begun within 2 years from the date of the act complained of or within one year from the date such act is discovered or by the exercise of due diligence reasonably should have been discovered, whichever is later.

Section 5. Waiver of Rights

The rights provided by this act may not be waived by contract or otherwise, unless such waiver is part of a written settlement to a pending action or complaint.

[The Motley Fool, Inc. - One Company's Experience](#)

Lawrence Greenberg, Chief Legal Officer, [The Motley Fool \(the "Fool"\)](#), presented the committee with a practical outlook on electronic monitoring in the workplace. Typically companies monitor their systems to maintain quality control, to protect intellectual property, to monitor productivity and for voyeurism. Companies also monitor to protect their rights and the rights of their employees as well as for public safety reasons. The ways to monitor include capturing keystrokes from the computer, clickstreams from Internet use, or screen shots; intercepting e-mail; scanning networks and e-mail archives; monitoring telephones; and using video cameras.

The Fool notifies its employees through the employee handbook, on the computer's startup screen, and through computer use and security policies that it conducts electronic monitoring. The company reminds employees regularly at company meetings. All employees receive notice of the policy and must sign consent forms. Where possible, the company uses substitutes to monitoring, like scanning the system and deleting MP3 files to reduce the amount of information stored on its systems and using software and Web filters to block websites. The Fool also created an open workplace, which affords its employees a lower expectation of privacy and enables everyone to see what is happening. The company also provides training in proper office protocol.

The Fool's policy is that it has the right to monitor because it owns the equipment and the work. Its policy recognizes that some personal use of this equipment is inevitable. Mr. Greenberg alerted the Committee that while electronic monitoring is allowed, it does affect the workplace environment. All electronic monitoring must be approved by the Chief Legal Officer and, where necessary, other named officials of the company. The Fool's Security Group carries it out.

Mr. Greenberg questioned the need for legislation, arguing that its policies are just prudent business practice. He reasoned that posters, similar to the ones required by the Department of Labor, notifying employees of monitoring policies may not be effective because there are already too many notices posted for employees to read. He also asked whether it was necessary to create a private cause of action given the uncertainty of damages and how to prove them. In addition, he warned that bad monitoring situations would end up in court regardless of the existence of a statute. The laws, court-created and statutory, already exist; the important course of action now is education.

3. Recommendations

The Committee recommended the bill as discussed and explained above that requires notice before electronic monitoring can take place and provides guidance to employers and employees regarding what they can expect.

IV. CONCLUSIONS

In helping the Commonwealth's legislators sort through the vast array of technology and science issues, the Commission relies heavily on the experts appointed to its advisory committees. These committees offer non-legislators a significant opportunity to share their particular knowledge for the betterment of the General Assembly's collective understanding of these challenging issues. If trying to understand more about such matters is an example of trying to hit a moving target, the advisory committees at least slow the target's speed for the benefit of the Commission. Indeed, the Commonwealth is very fortunate to have citizens willing to share their insights and ideas on technology and science issues that, by their very nature, often are changing as they are being discussed.

In addition to the dynamic nature of the topics the Commission addresses, the Commission is confronted by a potentially overwhelming list of technology and science related issues worthy of exploration. During the 2002-2003 interim, the Commission and its advisory committees examined some of the most significant and complex issues confronting the Commonwealth's citizens and government today. Everyday matters such as unsolicited bulk e-mail, personal privacy in the information age and citizen interaction with the government online may sound more exciting and pressing than electronic procurement or intellectual property, yet all of these issues and many more are important to Virginians and require the General Assembly's attention on some level.

As the Commission turns its attention to the 2003-2004 interim, it will again assist the General Assembly in identifying the most pressing technology and science issues for closer scrutiny and possible legislation. To ensure that the Commonwealth remains at the forefront of the business of technology and science, the Commission will continue to help Virginia distinguish itself by actively addressing --whether through legislation, formal study or simple consideration-- some of today's most challenging technology and science issues.

The Joint Commission on Technology and Science extends its sincere appreciation to everyone who participated in its work during the past year. We look forward to continuing to build on this work in 2003-2004.

Respectfully submitted,

Delegate Joe T. May, Chair
Senator Stephen D. Newman, Vice Chair
Senator William T. Bolling
Delegate Mary T. Christian
Senator Janet D. Howell
Delegate Daniel W. Marshall, III

Delegate Sam A. Nixon, Jr.
Delegate Jay K. O'Brien, Jr.
Delegate Kenneth R. Plum
Delegate Harry R. Purkey
Senator Patricia S. Ticer
Senator William C. Wampler, Jr.

Appendix 1

2002-2003 Commission Work Plan (Adopted June 18, 2002)

Issues to Actively Study through Advisory Committees

Center for Innovative Technology

Virginia's Center for Innovative Technology (CIT) was created by the General Assembly in 1984 as a nonprofit organization designed to enhance the research and development capability of the Commonwealth's major research universities. In its first decade, CIT implemented that original legislative intent by bringing Virginia businesses and institutions of higher education into relationships that promote a climate of cooperation and technological innovation. In 1994, CIT adopted a new mission, one that measured CIT's success in terms of jobs created/retained, companies created/retained/converted and competitiveness created for Virginia's businesses. However, during the 2002 Session, some in Virginia openly questioned CIT's ongoing value to the Commonwealth.

This committee will explore whether CIT is fulfilling its mission. Among the topics and questions it will address are:

- Review CIT's objectives and role.
- Examine quantifiable data and case studies regarding CIT's performance and economic value. What is the Commonwealth's "return on investment" in CIT?
- Hear from Virginia businesses working or wishing to work with CIT.
- Review the report required by Item 464 of H.B. 30 (Budget Bill, Appropriations for 2002-04 biennium), which requires the Secretary of Technology to prepare a report on the land and property owned or controlled by CIT.

Integrated Government (I-Gov): The Future of Government in the Electronic Age

Since its inception, the Commission has studied this subject in some form, whether reviewing government's structure, function, partners or customers. The Commonwealth is recognized nationally and internationally as a leader in the development of what has become known as electronic government. However, the Commonwealth has also evolved beyond merely digitizing the services and materials it has always offered to rethinking its underlying policies and processes. I-Gov involves integrating paper- and jurisdiction-based governmental processes; it involves a transformation from the way government operated prior to the information age.

This committee will explore the issues raised by this transformation of government. Among the topics and questions that it will address are:

A. External

- How can the Commonwealth continue to simplify access to information and services?
- How should government agencies conduct meetings and hearings in a digital environment?
- What are the Commonwealth's success stories and how can they continue?

B. Internal

- How can agencies fund an integrated system in an enterprise environment (e.g., through a centralized network, through public/private partnerships)?
- What are the benefits of outsourcing technology projects and services? Are there instances where the Commonwealth would be better served by not outsourcing?
- Review the present state of the Commonwealth's critical infrastructure and the report required by H.B. 823, requiring the Secretary of Technology to develop policies, procedures and standards for conducting audits of government database and data communications.
- Review the Commonwealth's reporting requirements for attacks on Commonwealth IT systems (viruses, denial-of-service, direct hack, etc.) and the role played by Virginia's Commonwealth Information Security Center at James Madison University.
- What are the implications of H.B. 519, which transfers responsibility for IT procurement from the Department of General Services to the Department of Information Technology?
- Is private sector sponsorship or government websites appropriate? (S.J.R. 82 - requests the Secretary of Technology, in consultation with the Joint Commission on Technology and Science, to study and develop guidelines for the use of private sector sponsorship funds on government websites.)
- Review the results of S.J.R. 361 (2001 Session) - Requesting the Secretary of Finance to study the assessment of additional transaction fees when citizens pay Commonwealth penalties, taxes, license fees and other charges with credit cards or other electronic methods of payment.

Intellectual Property and Entrepreneurial Development

For the last few years, the Virginia Research and Technology Advisory Commission (VRTAC) has studied the laws, policies and procedures surrounding the commercialization of intellectual property developed from collaborations between public educational institutions and private industry. Most parties involved in the Commonwealth's present approach to commercializing intellectual property agree

that greater uniformity and consistency in the process are necessary to increase the level of commercialization.

A related subject is the Commonwealth's ability to help promote technology- and science-related commercial endeavors by providing or facilitating capital funding to entrepreneurs and small companies. Other states have experienced significant success and return on investment by funding innovative ideas within their own borders.

This committee will examine the issues related to the intellectual property commercialization and capital funding of entrepreneurial development by the Commonwealth. It will monitor the progress being made by -- and where appropriate, work with -- other parties studying these issues, such as the Secretary of Technology, CIT and VRTAC.

Among the topics it will address are:

- The Secretary of Technology's H.J.R. 88 report, asking the Secretary, in conjunction with CIT and VRTAC, to recommend incentives to encourage the commercialization of university research and development. Written findings and recommendations reported to the Governor and the 2003 Session of the General Assembly.
- VRTAC's H.B. 530 report, directing VRTAC, in conjunction with CIT, OAG, and the Commonwealth's research universities, to develop a statewide policy and uniform standard for the commercialization of intellectual property developed through university research. Report to the Governor and General Assembly, recommending any changes to the Code of Virginia, due by Dec. 1, 2002.
- The Secretary of Technology's H.J.R. 206 study, asking the Secretary, in conjunction with the Secretary of Commerce and Trade, to study best practices for assisting the development of technology-based businesses that will produce jobs and other economic benefits through the Commonwealth. This resolution directs the Secretary to submit periodic progress reports to JCOTS and a final progress report in time for JCOTS to finalize its legislative recommendations for the 2003 Session of the General Assembly.
- H.J.R. 35 (2000 Session) - Biotechnology venture capital study, requesting the Innovative Technology Authority, in consultation with the Virginia Biotechnology Research Park Authority, to study the feasibility of establishing a state-sponsored venture capital program tailored for biotechnology.

Privacy: The Flow of Information

One survey indicates that 80 percent of Americans receive unsolicited commercial e-mail (UCE), 10 percent read it and 4 percent claim to retaliate against it. Other studies show that while three in ten people will "opt-out" of consenting to the collection, use and disclosure of personal information, only one in ten will choose to share their information, or "opt-in." This information only represents the proverbial tip of the iceberg with regard to the privacy issues raised by the ongoing proliferation of communication technologies. In addition to matters such as UCE and opt-out versus opt-in, people

often must make daily decisions regarding their personal privacy. A number of other issues affect personal privacy, including unsolicited telephone and facsimile communications, workplace monitoring of electronic communications, medical record privacy, identity theft, and third party sharing of personal information.

This committee will establish privacy principles that should serve as a guideline for legislative proposals and should balance the interests involved. Among the issues such principles should address are:

- Who owns personal information? Should the parties make a difference (i.e., government, business, or public or private citizen)?
- Should the amount and type of information contained in public records vary depending on the format (i.e., paper or digital)?
- Do the current privacy laws meet the needs of the people of the Commonwealth?
- When conducting a commercial transaction through the Internet, should consumers have a choice about what personal information they provide, in addition to the information necessary to complete the transaction?
- The Commonwealth's present protections, or lack thereof, regarding workplace privacy, identity theft, cyberstalking and pretexting.
- UCE - bulk unsolicited communications and the consumer (HB533/SB567)
 - What is UCE? What is the harm? Who is hurt by it? What are the damages?
 - Should companies bear the responsibility of getting permission to send electronic mail (opt-in) or should the citizen bear the responsibility of asking the company to refrain from sending it (opt-out)? Should candidates for public office, non-profit institutions or others be included?
 - Is it still unsolicited if the recipient has a prior relationship with the sender? What constitutes a prior relationship?
- Unsolicited facsimile transmissions (HB1363/SB612)
- Privacy in universities (HB28)

Issues to Actively Study through Commission Meetings

Issues Affecting the Commonwealth

A. Cybercrimes

Technology has brought new opportunities for old world criminals. Some of these individuals escape the law because statutes do not always address their activities, some because of problems with detection or underfunded law enforcement departments, and others because the individual's physical location is beyond the "arm of the law."

During 2001, the Internet Fraud Complaint Center, a partnership between the National White Collar Crime Center (NW3C) and the Federal Bureau of Investigation (FBI), received 49,711 complaints, one-third of which involved fraud. Auction fraud accounts for 42.8 percent of those fraud complaints. Over 80 percent of the complainants were defrauded by e-mail or through a web page. In situations where the state of either the complainant or perpetrator is known, Virginia is one of the top ten sites.

Data from the Federal Trade Commission (FTC) and the Secret Service show that a particular form of fraud, identity theft, is growing throughout the nation and in Virginia in particular. The FTC has declared identity theft the fastest growing crime today, with more than 700,000 victims in 2000 alone. According to the FTC, in 2000, Virginians reported between 601 and 1200 incidents of identity theft (or 9-12 per 100,000 population). Authorities believe that the actual number of incidents is much higher, because police do not always take reports.

Moreover, the Secret Service estimates that in 1997 consumers lost more than \$745 million due to identity theft. Police detectives around the country now estimate that loss to be more than several billion dollars, when losses to credit card companies, victim costs (including legal assistance), and judicial and law enforcement time in investigating and trying cases are included

State and federal governments have taken a number of actions to combat this threat. The Commission will receive presentations on the successes and challenges of these attempts and learn more about what it can do in this "new frontier" fight against crime.

B. Economic Development - Updates on Biotechnology and Nanotechnology

The Commission will receive presentations on these rapidly developing and promising areas of new technology.

Biotechnology

The expanding field of biotechnology enables Virginians to develop new medicines and foods to improve the lives of our fellow citizens here in the Commonwealth and around the globe. Discoveries in biotechnology can significantly enhance our quality of life in many areas, from the food we eat, to the medicines we use, to the environment in which we live. Biotechnology promises a range of benefits for people around the world.

In Virginia, biotechnology is becoming an increasingly important engine in the economic growth of the Commonwealth.

According to a Virginia Commonwealth University study completed in 1999, in 1997 there were 17,135 people employed by 370 biotechnology related establishments in Virginia. The average salary was \$54,200, about 83% higher than the state average of \$29,600. The total contribution to Gross State Product was \$2.58 billion in 1997, or 1% of GSP.

Nanotechnology

Nanotechnology is the science of creating new materials and devices on the atomic and sub-atomic level through the manipulation of individual atoms and molecules. In nanotechnology, mankind is poised to take the next major leap into the future where the possibilities are endless. Applications of nanotechnology could include materials (desirable properties such as high strength, chemical sensing or optical switching designed in from the start), information technology (quantum computing and computer chips that store trillions of bits of information on a pin-head device), medical (improved drug and gene delivery, biocompatible materials for implants and nanoscale sensors for detection of disease), and environmental (water purification, artificial photosynthesis of clean energy and pollution control systems). The National Science Foundation predicts that the total market for nanotechnology products and services will reach over \$1 trillion by 2015.

C. Infrastructure: The Highway to the Future

The 2001 Infrastructure Advisory Committee worked with the providers and consumers of advanced communications services in the Commonwealth to analyze the availability of such services throughout the Commonwealth. The Commission will continue to work with interested parties including the Rural Virginia Prosperity Commission, the Virginia Tobacco Indemnification and Community Revitalization Commission, the Office of the Secretary of Technology and the Center for Innovative Technology to complete this analysis and promote the deployment of advanced communications services throughout the Commonwealth. JCOTS staff will also monitor *Bristol v. Earley* and other related courts cases and federal bills that may impact the Commission's objectives.

Studies to Monitor

- H.J.R. 89 - Establishes a joint subcommittee to study protection of information contained in the records, documents and cases filed in the courts of the Commonwealth.
- H.J.R. 162 - Continues the [Rural Virginia Prosperity] Commission for the purpose of establishing the Center for Rural Virginia.
- H.J.R. 163 - Requests the Center for Innovative Technology and the Secretary of Technology to study the means for advancing affordable, high-bandwidth electronic networks in rural Virginia.
- S.J.R. 87 - State-funding formula for educational technology and technology support personnel (JLARC study).

Appendix 2

2002 - 2003 JCOTS Calendar

2002

- **June 18** - Organizational Meeting (10 a.m. - GAB)
- **July 30** - Commission Meeting on *Cybercops and Cybercriminals* (1 p.m. – Dyncorp, Chantilly)
- **August 1** - Center for Innovative Technology Advisory Committee (First Meeting)
(10 a.m. – CIT, Herndon)
- **August 6** - Privacy Advisory Committee (First Meeting) (10 a.m. - GAB)
- **August 13** - Integrated Government Advisory Committee (First Meeting) (10 a.m. - GAB)
- **September 18** – Center for Innovative Technology Advisory Committee (Second Meeting)
(1 p.m. – UVA, Charlottesville)
- **September 19** – Integrated Government Advisory Committee (Second Meeting)
(10 a.m. - GAB)
- **September 23** – Privacy Advisory Committee (Second Meeting) (1 p.m. - GAB)
- **September 25** - Intellectual Property and Entrepreneurial Development Advisory Committee
(First Meeting) (10 a.m. - GAB)
- **October 24** – Integrated Government Advisory Committee (Second Meeting) (10 a.m. - GAB)
- **October 29** – Center for Innovative Technology Advisory Committee (Third Meeting)
(10 a.m. - GAB)
- **October 30** - Intellectual Property and Entrepreneurial Development Advisory Committee
(Second Meeting) (1 p.m. – ODU, Norfolk)
- **November 7** – Privacy Advisory Committee (Third Meeting) (10 a.m. - GAB)
- **November 20** – Integrated Government Advisory Committee (Third Meeting) (1 p.m. – GAB)
- **December 3** – Privacy Advisory Committee (Fourth Meeting) (1 p.m. - GAB)
- **December 10** - Commission Meeting (10 a.m. - GAB) (*Topic: 2003 Legislative and Policy Proposals*)

2003

- **January 8** - First day of 2003 Session

Appendix 3

JCOTS 2002 Advisory Committees¹ (Final 12/31/2002)

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Delegate May, Delegate Plum and Senator Wampler (12)**

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Appendix 4

I-Gov Short-Term Goals Matrix

10/24/2002; revised 11/19/02

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
1	Ron Jordan Craig Kennedy Fred Norman	Revise state procurement manual	-Allow educational communication -Include the estimated budget for the procurement -Include evaluation weighting	Administrative	<ul style="list-style-type: none"> • By March 1, 2003, DIT will release agency and vendor manuals containing new IT procurement processes and procedures for public comment; final version approx. July 1. • DIT is currently exempt from Vendors Manual and APSPM for IT procurements.
2	Ron Jordan Chris Law Fred Norman	Standardize terms and conditions	-Reasonable limitation of liability clause	Administrative	<ul style="list-style-type: none"> • A major component of ProReform is the standardization of T's and C's. • T's and C's will be standardized and linked to commodity codes. • T's and C's templates grouped per commodity code will be available for reference by the vendor community.
3	Chris Law	Standardize contracts	-Negotiate once, not every project -Focus on negotiating Statement of Work/Deliverables	Administrative	<ul style="list-style-type: none"> • ProReform is recommending increased use of mandatory state contracts and catalog purchasing. These types of contracts will be rebid at pre-scheduled periods. • Standardized T's and C's as well as template IFB & RFP procedures (which will not vary with each solicitation) will increase standardization.

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
4	Ken Anderson Greg Phillips Ron Jordan	Allow Term contracts for IT services	- A term contract for firms would allow firms to bring all of their expertise, experience, and flexibility to bear in accomplishing specific tasks. They are then held accountable for results. -E.g. Ohio approach uses GSA schedule contract price as benchmark.	Administrative	<ul style="list-style-type: none"> • ProReform is analyzing several variations for contracts for COVA IT services including a vendor-management solution or asking for a vendor partnership solution.
5	Ron Jordan Greg Phillips	Develop a task order/mini RFP process	-For small projects -North Carolina approach -Solution-oriented contract	Administrative	<ul style="list-style-type: none"> • A task order/mini RFP process is a central component of DIT's ProReform recommendations. • This would increase productivity and responsiveness while decreasing labor and paper-driven processes. • eVA provides e-Mall and catalog-type functionality which can be adapted for this purpose.
6	Dan Galloway Joy Hughes Greg Phillips	Allow agencies to piggyback on beneficial contracts established by other entities	-Contracts by entities such as GSA, state and local govt., VDOT and higher education (e.g. VASCUPP).	Administrative	<ul style="list-style-type: none"> • ProReform is looking at achieving desirable "piggybacking" benefits through prenegotiated master contracts.
7	Ken Anderson	Allow professional procurement procedures for some specific types of information technology services	-Some information technology services are much like professional services (e.g., accounting, architecture, etc.) yet the Code does not allow this procedure since it is limited to those specifically designated as professional services.	Statutory	

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
8	Ben Lewis Fred Norman	Establish a pre-approved vendor list.	<p>-Vendors accepted through any competitive process should be pre-qualified for other contracts.</p> <p>-Similarly, if vendors are awarded and successfully complete a competitively award contract, they should have the ability to be added to a blanket contract every year.</p>	Administrative	<ul style="list-style-type: none"> • ProReform is analyzing other states' procurement models which have list of prequalified vendors available for some type of "instant bid/reverse auction" process. • Some of this prequalification will be achieved through prenegotiated master contracts.
9	Fred Norman	Pre-approve out-of-state vendors	<p>-Amend the Fair Procurement Act to allow vendors, their products and services, selected through competitive bid process in other states, and, that agree to Virginia's Terms and Conditions to be added to Virginia's approved vendor, products and services lists.</p>	Statutory	
10	Fred Norman	Increase the dollar thresholds associated with particular procurements	<p>-Increase the dollar thresholds that determine when each type of procurement procedure is required, increasing procurement cards purchasing limits accordingly.</p>	Administrative?	<ul style="list-style-type: none"> • ProReform is analyzing dollar limits as well as agencies' delegated authority and its relevance to IT purchasing as well as COVA's ability to leverage its buying power. • DIT is not restricted by DGS dollar limits (only by Code).
11	Dan Galloway	Create a library of RFPs and IFBs	<p>-Drawn from state agencies as well as local governments so that government organizations do not have to "reinvent the wheel" every time they need to do a major IT procurement.</p>	Administrative	<ul style="list-style-type: none"> • All RFPs & IFBs will be in template form tied to commodity codes. • Template forms will only change on a pre-scheduled basis. • Vendors will know if they are interested in bidding on a certain commodity, what the RFP or IFB will look like.

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
12	Dan Galloway	Extend the old DIT "Body Shop" contract	-Extend at least through the end of this fiscal year. This will allow those organizations that are currently using consulting companies off that contract that did not get awarded the new contract enough time to develop a plan for a smooth transition to the use of other types of services, or to hire FTEs to replace these consultants if appropriate.	Administrative	<ul style="list-style-type: none"> DIT has completed its analysis of the gap explained in this goal. DIT is prepared to bridge the gap by the best available method in light of COVA's fiscal crisis and Strategic Plan goals.
13	Joy Hughes	For "approval to purchase" process for large procurements, set measurable goals for timeliness of response	-Also, hold DTP accountable for meeting those goals; also raise the approval threshold significantly now that agencies are required to include all kinds of costs in their determination of project costs.	Administrative	<ul style="list-style-type: none"> ProReform has recommended that all IT procurements be tied to a tracking system. "Best practices" working time frames from receipt of complete specs to award will be established based on commodity codes. All IT procurements may be tracked by agencies and vendors through Internet.
14	Fred Norman	Establish a vendor liaison with Secretary of Technology	-Would act as a single point of contact for IT vendors to navigate the maze of the Commonwealth.	Administrative	<ul style="list-style-type: none"> This goal may be more appropriately addressed by the Secretary of Technology or his CIO Advisory Board.
15	Fred Norman	Agencies provide timely notification of short list selections	-Once the short list is chosen, it should be published and vendors notified so that they can commit resources to other projects instead of being left waiting for an answer.	Administrative	<ul style="list-style-type: none"> ProReform is looking at many ways to decrease the amount of time vendors have to spend in the procurement process. Publishing a "short list" of "intended awards" may leave DIT open to protest before negotiations and a true intent to award are complete.

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
16	Chris Long	Initial review of whether service or good being procured is an appropriate role for government	-Commonwealth should consider whether government should be involved in the function before it seeks to procure goods or services to achieve it. That review should be based on merit and appropriateness of the function and requires openness and public comment.	Administrative	<ul style="list-style-type: none"> • This requires a policy determination that is outside of the ProReform process. • §2.2-1303(c) requires DIT to be procurement vehicle for all IT.
17	Diane Horvath Bud Oakey	Establish IT procurement best practices		Administrative	<ul style="list-style-type: none"> • DIT's ProReform recommendations are based on the following "best practices:" • Use of technology brokering services • Solution-oriented IFBs and RFPs • Value-based purchasing – the state buys the best IT solution available, not the one that costs the least. • Long-term strategic partnerships with qualified vendors. • Shared risks and benefits between the state and its vendor-partners. • Pool of qualified vendors. • Enterprise-wide architecture for COVA.

No.	Source(s)	Goal	Explanation	Statutory or Administrative	PRELIMINARY DIT PROREFORM ADMINISTRATIVE PROPOSALS
1	Ron Jordan	Enact a Public-Private Technology Partnership Act	<ul style="list-style-type: none"> -Allow unsolicited proposals -Encourage vendor consortiums -State does not have the general fund resources to successfully develop, implement and operate large ERP projects/systems 	Statutory	
2	Ron Jordan Bud Oakey	Establish a Technology Trust Fund similar to Higher Education Trust Fund for Technology	<ul style="list-style-type: none"> -Debt financing for major general fund projects and for technology upgrades -Direct appropriations to the fund buy-down the cost of borrowing by agencies -Agencies repay loans through operating appropriations on a pre-determined basis -Assures funding continuity for general fund multi-year projects without getting caught in the budget process each year. 	Statutory	
3	Ron Jordan	Establish a single entity and review process	<ul style="list-style-type: none"> -Review the business case and agency capacity -Review the total cost of ownership or return on investment as appropriate -Monitor progress on an exception basis 	Administrative	<ul style="list-style-type: none"> • This goal may be more appropriately addressed by DTP.
4	Bud Oakey Bruce Wine	Replace the existing state PC contract with a subscription to WSCA.	<ul style="list-style-type: none"> -Western States Contracting Alliance (WSCA) is a contracting vehicle available to all government entities where the volume of purchases is pooled with other members of the alliance to obtain the very lowest prices. Over 30 states including Louisiana and Georgia currently use WSCA nearly exclusively. Over \$2Billion has been purchased through WSCA since October of 1999. 	Administrative	<ul style="list-style-type: none"> • ProReform research reveals a 3-4% across the board savings for purchases made through WSCA vs. COVA negotiated volume discounts. • ProReform is currently evaluating whether it would be more beneficial to COVA to join WSCA (and diminish its IFA recovery) or develop a WSCA-like entity with a beneficial IFA recovery mechanism.

Appendix 5

2003 LEGISLATION WITH TECHNOLOGY OR SCIENCE CONTENT (ALPHABETICALLY BY SUBJECT MATTER)

Legislation recommended by the Joint Commission on Technology and Science is in **bold**.
Passed legislation is *italicized*.
Bills carried over from the 2002 Session that failed in 2003 are not included in this appendix.

	HB	HJ	SB	SJ	Totals
Introduced	130	16	58	6	210
Passed	65	7	30	6	108
Failed	65	9	28	0	102

2003 Legislation with Technology and Science Content

Space Shuttle Columbia

HJ 856 Commending David M. Brown.

Commerce (37)

- HB 1386 Telecommuting Enhancement Act.
- HB 1387 Local business license fees; telecommuting enhancement exemption.
- HB 1426 Corporate income tax; Virginia Entrepreneurial Encouragement Act.
- HB 1524 Reporting radioactive materials.*
- HB 1543 Sales harmful to juveniles; debt collection; age verification devices.
- HB 1652 Alcoholic beverage control; direct shipments beer/wine to consumers.*
- HB 1778 Uniform Commercial Code; general provisions.*
- HB 1887 Workplace privacy.**
- HB 1939 Va. Residential Landlord and Tenant Act; access to cable/TV facilities.*
- HB 2148 Reduced sales; use tax for certain clothing, footwear, and computers.
- HB 2311 Telephone Privacy Protection Act; Do-Not-Call List.
- HB 2351 Withholding tax filing; electronic funds transfer.*
- HB 2366 Human Embryo Research Act.
- HB 2523 The Virginia Anti-Spamming Act.
- HB 2564 E-mail transactions; place of contract formation.
- HB 2611 Taxation of certain telecommunications companies.
- HB 2618 Unsolicited facsimile transmissions.*
- HB 2771 Telephonic reading services.
- HB 2790 Blood-borne pathogen hazards in the workplace; injury protection.
- HB 2800 Secretary of Administration; telecommuting reports.
- HJ 517 Telecommuting.

HJ 573	Study; joint subcommittee to study medical, ethical, and scientific issues relating to stem cell research conducted in the Commonwealth.
<i>HJ 651</i>	<i>Study; joint subcommittee studying taxation of telecommunications industry.</i>
SB 815	General receivers; use of social security numbers, etc. on affidavits.
SB 833	Withholding tax filing; electronic funds transfer.
SB 835	Cigarette manufacturing tax.
SB 836	Virginia Human Rights Act; discrimination in employment on the basis of genetic testing or genetic characteristics.
<i>SB 858</i>	<i>Telecommunications taxes; taxation of bundled transactions.</i>
SB 873	Communications services; excess capacity.
<i>SB 882</i>	<i>Va. Residential Landlord and Tenant Act; access to cable facilities.</i>
SB 918	Telephone Privacy Protection Act.
SB 924	Commercial electronic mail; prohibitions; penalties.
SB 925	Unsolicited text message advertisements.
<i>SB 942</i>	<i>Wireless enhanced 9-1-1 surcharge.</i>
SB 1106	Sale of liquid mercury fever thermometers prohibited.
<i>SB 1188</i>	<i>Virginia Residential Landlord and Tenant Act; access to cable TV.</i>
SB 1289	Workplace privacy.

Criminal Law and the Courts (38)

<i>HB 1434</i>	<i>Sex Offender Registry.</i>
HB 1607	Thresholds for larceny and other related crimes.
HB 1768	Blood, saliva or tissue sample for DNA analysis.
<i>HB 1832</i>	<i>Amber Alert.</i>
<i>HB 1845</i>	<i>Electronic filing of court documents.</i>
HB 1898	Circuit court clerks; recordation of documents. (Incorporated into HB 2291)
<i>HB 1931</i>	<i>Electronic communications devices.</i>
<i>HB 1954</i>	<i>Licenses; identification cards; fraudulent representation; penalty.</i>
HB 1980	Virginia Alert Plan.
HB 2064	Amber Alert. (Incorporated into HB 1832)
HB 2102	Code Adam alerts; Virginia Amber Alert Program. (Incorporated into HB 1832)
HB 2165	Circuit court clerks; recordation of documents. (Incorporated into HB 2291)
HB 2190	Crimes; production, possession; sexually explicit material; children. (Incorporated into HB 2457)
<i>HB 2226</i>	<i>Supreme Court; distribution of reports.</i>
<i>HB 2290</i>	<i>Computer crimes; enhanced penalties; forfeiture; etc.</i>
HB 2291	Circuit court clerks; recordation of documents.
<i>HB 2294</i>	<i>Remote access to land records.</i>
<i>HB 2431</i>	<i>DNA samples.</i>
<i>HB 2432</i>	<i>DNA of juvenile felons.</i>
<i>HB 2457</i>	<i>Child Pornography Images Registry; certain computer crimes; penalties.</i>
HB 2506	Orders for facial recognition technology.
HB 2587	Criminal procedure; DNA analysis after arrest for violent felony.
HB 2588	Procedures for taking saliva or tissue sample for DNA analysis. (Incorporated into HB 2661)

HB 2661 DNA samples for violent crime arrests.
HB 2812 Department of Professional and Occupational Regulation; regulation of polygraph examiners.
HJ 631 Study; Court Records.
SB 694 Amber Alert. (Incorporated into SB 1204)
SB 714 Circuit court clerks; recordation of documents.
SB 733 Criminal sentencing; record of prior convictions.
SB 734 Felonies and misdemeanors; penalties.
SB 740 Fees collected by circuit court clerks; information technology fee.
SB 856 Rules of court.
SB 1139 Computer crimes; enhanced penalties; forfeiture.
SB 1153 Child Pornography Images Registry.
SB 1164 Sex Offender and Crimes Against Minors Registry.
SB 1204 Code Adam alerts; Virginia Amber Alert Program.
SB 1296 Department of Professional and Occupational Regulation; Polygraph Examiners.
SB 1332 Sex Offender and Crimes Against Minors Registry.

Privacy and Identity Theft (26)

HB 1523 Identity theft. (Incorporated into HB 2061)
HB 1593 Driver's license numbers.
HB 1675 Information; health professionals; posting home address on Internet.
HB 1708 Government Data Collection and Dissemination Practices Act; genetic info.
HB 1716 Student social security numbers.
HB 1744 Government Data Collection and Dissemination Practices Act; SSNs.
HB 1794 Student directory information.
HB 1820 Information concerning health professionals; posting of home addresses.
HB 2038 Disclosure of information in criminal cases.
HB 2061 Identity theft.
HB 2062 Government Data Collection and Dissemination Practices Act; SSNs.
HB 2063 Government Data Collection and Dissemination Practices Act; SSNs.
HB 2073 Insurance; use of social security number.
HB 2175 Identity theft.
HB 2292 Confidential information in divorce cases; summary orders.
HB 2305 Name change; preventing identity theft.
HB 2325 Government Data Collection and Dissemination Practices Act; social security numbers.
HB 2426 Posting certain information on the Internet; prohibitions.
HB 2524 Insurance information privacy.
HB 2646 Student records in private or independent schools.
HB 2731 Government Data Collection & Dissemination Practices Act; definition.
SB 878 Insurance information security programs.
SB 922 Electronic monitoring; nursing homes; detect abuse, neglect of residents.
SB 979 Identity theft.
SB 1016 Insurance; use of social security number.

SB 1056 Student directory information.

State and Local Government (88)

Local Government (14)

HB 1719 Charter; City of Bristol.
HB 2138 Acceptable Internet use policies.
HB 2164 Virginia Wireless Service Authorities Act.
HB 2397 Public utilities; communications services.
HB 2756 Towns may provide certain telecommunications services.
HB 2768 Schools and libraries; Internet filtering.
HB 2774 Remote access to nonconfidential public records maintained by the treasurer; fee.
HJ 617 Commending the Liberty High School Technology Student Association.
HJ 752 Memorializing Congress concerning the reauthorization of the Carl D. Perkins Vocational and Applied Technology Act.

SB 659 School board employees; testing for blood-borne pathogens.
SB 796 Charter; City of Bristol.
SB 874 Telecommunications services; certificate.
SB 875 Telecommunications services; certificate.
SB 1347 Southside-Southwest Fiber Optic Network Authority.

Procurement (15)

HB 1545 Release of procurement records under the Public-Private Transportation Act of 1995 and the Public-Private Education Facilities and Infrastructure Act of 2002.
HB 1575 Review and approval of certain information technology projects.
HB 1761 Department of Information Technology; contracts - personal computers.
HB 1812 Genetic characteristics; discrimination.
HB 1925 Technology infrastructure projects added to PPEFI Act of 2002.
HB 1927 Procurement of information technology; reverse auctioning.
HB 2192 Virginia Public Procurement Act; reverse auctioning.
HB 2701 Virginia Public Procurement Act; cooperative procurement.
HB 2822 Virginia Public Procurement Act; prohibited procurements. (Incorporated into HB 2533)
HB 2823 Virginia Public Procurement Act; preference for Virginia products and firms.
SB 737 Freedom of Information Act; exemptions-contract negotiations.
SB 1321 Virginia Public Procurement Act; prohibited procurements. (Incorporated into SB 938)
SB 1322 Virginia Public Procurement Act; preference for Va. products & firms.
SB 1330 Public-Private Education Facilities and Infrastructure Act of 2002.
SB 1351 Procurement by the Department of Transportation; lighting systems.

State Government (59)

HB 1391 Secretary of Transportation; posting of certain transportation information related to transportation construction project funding. (Incorporated into HB 2259)
HB 1400 Budget Bill.
HB 1478 Space Radiation Effects Laboratory.

HB 1509 State Networking Users Advisory Board.
HB 1529 Governor's Secretaries; Finance and Administration.
HB 1530 Governor's Secretaries; Commerce and Trade and Technology.
HB 1531 Governor's Secretaries; Public Safety and Transportation.
HB 1693 Campaign Finance Disclosure Act; mandatory electronic filing-report.
HB 1727 Protection of certain records in the possession of building officials.
HB 1816 Center for Innovative Technology; duties; advanced electronic communications.
HB 1926 Virginia Information Technologies Agency.
HB 1957 Secretary of Commerce and Technology.
HB 1958 Secretary of Administration; Secretary of the Commonwealth.
HB 2075 Virginia Workforce Council; membership; powers and duties.
HB 2115 General Assembly; creation of state boards and commissions; duration.
HB 2139 Pilot program for certain uniformed and overseas citizens to transmit absentee ballots electronically and by the Internet.

HB 2194 Campaign Finance Disclosure Act; mandatory electronic filing of report.
HB 2200 Voter registration cards.
HB 2210 Sensitive Records Protection Act; penalty.
HB 2211 Freedom of Information Act; critical infrastructure and vulnerability assessments.
HB 2283 Conflict of interests; contracts for R&D and intellectual property.
HB 2284 Commonwealth Technology Research Fund continued.
HB 2285 Authorization to transfer; patents and copyrights of higher education.
HB 2375 Electronic equipment recycling program. (Incorporated into HB 2376)
HB 2376 Cathode ray tube recycling program.
HB 2436 Invasive Species Council established.
HB 2639 Virginia Research and Technology Advisory Commission (VRTAC); strategies for the incubation of science and technology industries; report.

HB 2665 Freedom of Information Act; closed meetings to discuss threats to public safety.
HB 2720 Vehicle dealers; on-line system filing fees; manual transaction fees.
HB 2721 Telecommunications services; arbitration.
HB 2760 Virginia Research and Technology Advisory Commission (VRTAC); strategic plan for research and development; report.

HB 2792 Electronic Government Services Act created.
HB 2816 Preparedness and Coordination Program.
HB 2825 Department of Law; Division of Human Rights.
HJ 205 Study; biodiesel fuel.
HJ 515 Constitutional amendment (1st resolution); Governor's term of office.
HJ 526 Commending Dr. Ronald E. Carrier.
HJ 563 General Assembly; television coverage of legislative sessions.
HJ 584 Study; public-private funding of studies.
HJ 647 General Assembly; session coverage.
HJ 650 Study; computer physician order entry systems as a means of reducing medication errors.
HJ 653 Directing the Joint Commission on Technology and Science to study the development of an Internet II Advanced Performance Standard Initiative; report.

HJ 657 Study resolution; Streamlined Sales Tax Project agreement.
 SB 695 *Dept. of Business Assistance; Workforce Retraining Program and Fund.*
 SB 700 Budget Bill.
 SB 751 *Administration; records on gubernatorial appointees.*
 SB 793 Pollbooks and precinct registered voter lists. (Incorporated into SB 1107)
 SB 847 Virginia Information Technologies Agency. (Incorporated into SB 1427)
 SB 1203 *Freedom of Information Act; electronic communication meetings.*
 SB 1247 *Information Technology Investment Board; Chief Information Officer.*
 SB 1286 Absentee voting; students attending Virginia universities & colleges.
 SB 1320 Biennial appropriation act.
 SB 1344 *Electronic meetings of the Board of Visitors of the University of Virginia; authority for holding telephonic or video broadcast meetings.*
 SB 1352 Television or other electronic signals generated by the Senate of Virginia.
 SJ 347 *Study resolution; Streamlined Sales Tax Project agreement.*
 SJ 382 *Confirming Governor's appointments; agency heads.*
 SJ 384 *Confirming Governor's appointments; commerce and trade.*
 SJ 385 *Confirming Governor's appointments; education.*
 SJ 390 *Confirming Governor's appointments; technology.*

Transportation and Motor Vehicles (20)

HB 1430 *Determining speed of vehicle with various devices.*
 HB 1632 "Photo-toll" program.
 HB 1687 Television receivers and video monitors in motor vehicles.
 HB 1696 Photo-monitoring systems to enforce traffic light signals.
 HB 1728 Speed limits; enforcement using photo-radar technology.
 HB 1882 "Photo-toll" program.
 HB 1910 Driving while distracted.
 HB 2150 *Computer terminals; offices of the Department of Motor Vehicles (DMV).*
 HB 2479 *Laser speed determination devices.*
 HB 2149 Discounts on certain transactions with the Department of Motor Vehicle.
 HB 2493 Wireless telecommunications devices.
 HB 2682 "Photo-red" programs.
 HB 2767 *Department of Motor Vehicles (DMV); Library of Virginia.*
 SB 721 *"Photo-toll" program.*
 SB 748 Hand-held telecommunications devices.
 SB 840 "Photo-red" programs.
 SB 906 Wireless phones in motor vehicles; civil penalty; reporting requirement.
 SB 1024 Smart Road" fund.
 SB 1276 *Department of Motor Vehicles (DMV); customer service pilot project.*
 SJ 459 *Aviation Centennial Year in Virginia.*

Appendix 6

Final Summaries of 2003 Enacted and Adopted Legislation with Technology or Science Content

(In Numerical Order by HBs, HJR, SBs and SJRs)

Full Text of Legislation Appears in the 2003 Acts of Assembly

BILL NUMBER: House Bill 1400 (Chapter No.)
PATRON: Callahan
SUMMARY: **Budget Bill.** Appropriation of the public revenue for the two years ending respectively, on the thirtieth day of June, 2003, and the thirtieth day of June, 2004.

BILL NUMBER: House Bill 1430 (Chapter No. 965)
PATRON: Albo
SUMMARY: **Determining speed of vehicle with various devices; certificate as to accuracy of device.** Provides that in any court in which any question arises about the calibration or accuracy of any laser vehicle speed determination device, a certificate showing the calibration or accuracy of any method employed in calibrating or testing any laser is admissible as evidence. Currently, there is no specific provision for allowing laser calibrations into evidence. This bill incorporates HB 2298.

BILL NUMBER: House Bill 1434 (Chapter No. 391)
PATRON: Sherwood
SUMMARY: **Sex Offender Registry.** Requires the Department of State Police to provide the Virginia Criminal Sentencing Commission with Registry data in an electronic format. The Commission may use the data for research, evaluative or statistical purposes only and must ensure the confidentiality and security of the data. The Commission is required to keep the data confidential and secure. Use of the information for unauthorized purposes is a Class 1 misdemeanor.

BILL NUMBER: House Bill 1478 (Chapter No. 586)
PATRON: Landes
SUMMARY: **Space Radiation Effects Laboratory.** Repeals the authorization to enter into a joint agreement to operate and manage such a laboratory because the laboratory was decommissioned around 1980 and sold. This bill is a recommendation of the Virginia Code Commission.

BILL NUMBER: House Bill 1509 (Chapter No. 176)
PATRON: Cox
SUMMARY: **State Networking Users Advisory Board.** Abolishes the State Networking Users Advisory Board. The Board was created in the 1980s to enable integration of the library networking system between the Library of Virginia and other libraries across the state. The Board is no longer necessary because it has accomplished its objective. This bill is a recommendation of the Joint Subcommittee Studying the Operations, Practices, Duties, and Funding of the Commonwealth's Agencies, Boards, Commissions, Councils, and Other Governmental Entities pursuant to HJR 159 (2002).

BILL NUMBER: House Bill 1524 (Chapter No. 635)
PATRON: Purkey
SUMMARY: **Reporting radioactive materials.** Requires, when required by the United States Nuclear Regulatory Commission, immediate reporting to the State Departments of Health and Police when radioactive materials, including sources of ionizing radiation approved by the Federal Food and Drug Administration for the treatment of foods pursuant to the Federal Food, Drug and Cosmetic Act (21 U.S.C. 301 et seq.), cannot be accounted for within 24 hours. This bill also provides that the reports of the missing radioactive materials will not be public records pursuant to the Freedom of Information Act. However, the information may be made public in whole or in part (i) where the release of the report may assist in the prevention of imminent harm to public health or safety, or (ii) where the release of the report may be useful for education of the public on health, safety or homeland defense issues. The Department must cooperate with and may share this information with the Department of Emergency Management, United States Nuclear Regulatory Commission, United States Food and Drug Administration, and state, local and federal law-enforcement agencies, as appropriate.

BILL NUMBER: House Bill 1545 (Chapter No. 968)
PATRON: Marshall, R.G.
SUMMARY: **Release of procurement records under the Public-Private Transportation Act of 1995 and the Public-Private Education Facilities and Infrastructure Act of 2002.** Provides that once a comprehensive agreement has been entered into under the Public-Private Transportation Act of 1995 and the Public-Private Education Facilities and Infrastructure Act of 2002, a responsible public entity shall make available, upon request, procurement records in accordance with § 2.2-4342. The bill provides that procurement records shall not be interpreted to include proprietary, commercial or financial information, balance sheets, financial statements, or trade secrets that may be provided by the private entity as evidence of its qualifications. The bill also contains a technical amendment.

BILL NUMBER: House Bill 1575 (Chapter No. 888)
PATRON: Parrish
SUMMARY: **Review and approval of certain information technology projects.** Directs the Secretary of Technology to review all information technology projects regardless of whether the project is purchased by contract, agreement or some other financing agreement or such other arrangement that requires that the Commonwealth either pay for the contract by foregoing revenue collections, or allows or assigns to another party the collection on behalf of or for the Commonwealth any fees, charges, or other assessments or revenues to pay for the project. Requires approval by the Secretary of Technology for procurements in excess of \$1 million. Finally, requires the information provided by the Governor with the Budget Bill to include a schedule and description of all capital outlay, data processing, or other projects in which the Commonwealth has entered into or plans to enter into a contract, agreement or other financing agreement.

BILL NUMBER: House Bill 1593 (Chapter No. 306)
PATRON: Byron
SUMMARY: **Driver's license numbers.** Eliminates optional use of social security numbers as driver's license numbers for licenses issued or renewed on or after July 1, 2003.

BILL NUMBER: House Bill 1652 (Chapter No. 1030)
PATRON: Albo
SUMMARY: **Alcoholic beverage control; wine and beer shippers' licenses.** Provides for licensure by the ABC Board of wineries, farm wineries and breweries located within and outside of the Commonwealth to sell, deliver or ship by common carrier no more than two cases of wine or beer per consumer per month, in closed containers, to persons to whom alcoholic beverages may be lawfully sold in the Commonwealth for their personal use only and not for resale. Persons within or outside the Commonwealth, who are not wineries, farm wineries, or breweries may also apply for wine and/or beer shippers' licenses. Wineries, farm wineries, or breweries that apply for a shippers' license or that authorize any other person, other than retail off-premises licensees, to apply for a license shall notify any wholesale licensees that have been authorized to distribute such brands that an application has been filed for a shipper's license. Any applicant for a shipper's license must obtain the written consent of the winery, farm winery or brewery whose brands they propose to ship. Written authorization by the winery, farm winery or brewery may be withdrawn at any time. Such licensees are required to affix a conspicuous notice in 16-point type or greater to the outside of each shipping container of wine so shipped stating: "CONTAINS ALCOHOL BEVERAGES; SIGNATURE OF PERSON AGED 21 YEARS OR OLDER REQUIRED FOR DELIVERY."

The bill provides that each shipment of wine or beer by a licensed shipper to a person in the Commonwealth shall be deemed to be sold in Virginia. Licensees collect taxes and remit such taxes to the Commonwealth on a monthly basis and are required to meet recordkeeping requirements. All deliveries of wine, farm wine and/or beer shall be performed by the owner or any agent, officer, director, shareholder or employee of the licensee. The Board may engage the services of alcoholic beverage control authorities in any state to assist with the inspection of the premises of a wine or beer shipper licensee or any applicant for such license.

BILL NUMBER: House Bill 1693 (Chapter No. 242)

PATRON: McQuigg

SUMMARY: **Campaign Finance Disclosure Act; mandatory electronic filing of reports; political committees.** Requires political committees (including PACs and political party committees subject to the Act's reporting requirements) to file campaign finance reports electronically in accordance with State Board of Elections standards. Exceptions are made for county or city political party committees that file reports locally and for political committees that do not accept contributions or make expenditures in excess of \$10,000 in any calendar year. The bill provides for a filing deadline extension in the event of a failure in the computer and electronic filing system.

BILL NUMBER: House Bill 1716 (Chapter No. 637)

PATRON: Hogan

SUMMARY: **Student social security numbers.** Authorizes the division superintendent or his designee to assign another identifying number to students who are ineligible to obtain a federal social security number or if the student's parent is unwilling to present such number or waive the requirement. Currently, a student enrolled in the public schools must provide a federal social security number within 90 days of his enrollment. The U.S. Supreme Court ruled in *Plyler v. Doe*, 457 U. S. 202 (1982), that the withholding of state funds for the education of undocumented children or denying such children enrollment in the public schools violates the Equal Protection Clause of the Fourteenth Amendment. This decision affords undocumented students the right to attend public schools and participate in all school activities. School officials may not require children or their parents to prove that they are in the country legally through evidence such as green cards, citizenship papers or social security numbers. Pursuant to § 22.1-260, the division superintendent or his designee may waive the social security number requirement. However, in practice, the division superintendent or his designee is allowed, pursuant to guidance from the Department of Education, to assign another number for identification purposes to students who are ineligible to obtain a federal social security number. This bill authorizes that practice.

BILL NUMBER: House Bill 1719 (Chapter No. 539)
PATRON: Johnson
SUMMARY: **Charter; City of Bristol.** Changes the composition of the utilities board and the youth services board. This bill is identical to SB 796.

BILL NUMBER: House Bill 1727 (Chapter No. 891)
PATRON: Sherwood
SUMMARY: **Protection of certain records in the possession of building officials.** Expands the current exemption under the Freedom of Information Act relating to building permit records to include critical structural components, security systems, telecommunications equipment, etc., submitted for the purpose of complying with the Uniform Statewide Building Code or the Statewide Fire Prevention Code, the disclosure of which would jeopardize the safety or security of any public or private commercial, multi-family residential or retail building or its occupants in the event of terrorism or other threat to public safety. The bill requires the owner or lessee to invoke these protections in writing, identify the drawings, plans, or other materials to be protected; and state the reasons why protection is necessary. The bill provides that nothing shall prevent disclosure of information relating to any building in connection with an inquiry into the performance of that building after it has been subjected to fire, explosion, natural disaster or other catastrophic event. The bill also requires building officials to institute procedures to ensure these sensitive records are securely stored, handled, and released in accordance with law.

BILL NUMBER: House Bill 1744 (Chapter No. 974)
PATRON: Byron
SUMMARY: **Government Data Collection and Dissemination Practices Act; social security numbers.** Prohibits agency-issued identification cards, student identification cards or license certificates issued or replaced after July 1, 2003, from displaying an individual's entire social security number. The bill provides exceptions from the general prohibition for the following circumstances: (i) certain licensing and identification cards issued by the Department of Motor Vehicles issued prior to July 1, 2003, which are required to be replaced no later than July 1, 2006, (ii) voter registration cards, which are required to be replaced by the December 31 next following the decennial redistricting from the 2010 census, (iii) insurance licenses issued by the State Corporation Commission, which shall be replaced no later than 12 months after the creation and implementation in all states of a national insurance producer identification number, and (iv) road tax licenses issued by the Department of Motor Vehicles to motor carriers under the terms of the International Fuel Tax Agreement.

BILL NUMBER: House Bill 1761 (Chapter No. 352)
PATRON: Amundson
SUMMARY: **Department of Information Technology; contracts for personal computers.** Authorizes the Department of Information Technology to establish contracts for the purchase of personal computers and related devices by public school teachers for use outside the classroom, provided that no more than 1 such computer and related device per year shall be so purchased.

BILL NUMBER: House Bill 1778 (Chapter No. 353)
PATRON: Woodrum
SUMMARY: **Uniform Commercial Code; general provisions.** Replaces current Title 8.1 of the Uniform Commercial Code with the revision approved by the National Conference of Commissioners on Uniform State Laws in 2001. The revisions are intended to update the law and are in recognition of changes in business practices, including the increased use of electronic media. The bill is recommended by the National Conference of Commissioners on Uniform State Laws.

BILL NUMBER: House Bill 1820 (Chapter No. 310)
PATRON: Morgan
SUMMARY: **Information concerning health professionals; posting of home addresses on the Internet.** Mandates that, in order to protect the privacy and security of health professionals, every health regulatory board posting addresses of record for regulated persons to the on-line licensure lookup or any successor in interest thereof on the Internet shall only disclose the city or county provided to the Department of Health Professionals and shall not include any street, rural delivery route or post-office address. However, the street address of facilities regulated by the Boards of Funeral Directors and Embalmers, Nursing, Pharmacy, and Veterinary Medicare shall be posted.

BILL NUMBER: House Bill 1832 (Chapter No. 83)
PATRON: Athey
SUMMARY: **Code Adam alerts; Virginia Amber Alert Program.** Requires state buildings open to the public to have a Code Adam program as a preventive tool against child abductions and for locating lost children in certain public buildings. The alerts are used to lock down buildings where a child has been lost or possibly abducted. The bill requires the Board of Education to develop, in cooperation with private entities, a program to provide parents with child identification kits through school distribution. The kits shall include identification information about the subject child, including current photo, fingerprints, DNA samples, and important medical information and shall include instructions for the proper safekeeping of the kit. Such kits shall be held for safekeeping by the parent, not a school, school board, or other public entity. The bill also directs the

Department of State Police to develop a statewide child abduction alert plan (the Virginia Amber Alert Plan) to rapidly publicize information on a child abduction. Pursuant to procedures developed by the Department of State Police, local law enforcement will notify the Department of State Police, who will take action, including activating the emergency alert system. The bill provides that the Virginia State Police shall inform all local law-enforcement agencies operating or participating in the Amber Alert programs when this bill becomes law and shall offer them assistance in conforming their programs to the provisions of the bill. Incorporates HB 2064 and HB 2102. This bill is identical to SB 1204.

BILL NUMBER: House Bill 1845 (Chapter No. 127)

PATRON: Reese

SUMMARY: **Electronic filing of court documents.** Expands the provisions for recording documents electronically to anyone who has entered into such an agreement with the court clerk. The bill makes technical changes to refer to the Uniform Electronic Transactions Act and the Rules of the Supreme Court of Virginia regarding electronic filing and electronic signatures. The bill makes permanent these provisions by repealing the sunset.

BILL NUMBER: House Bill 1925 (Chapter No. 1034)

PATRON: Nixon

SUMMARY: **Technology infrastructure projects added to Public-Private Education Facilities and Infrastructure Act of 2002.** Amends the Public-Private Education Facilities and Infrastructure Act of 2002 to include technology infrastructure as a qualifying project. The original version of this bill was a recommendation of the Joint Commission on Technology and Science.

BILL NUMBER: House Bill 1926 (Chapter No. 981)

PATRON: Nixon

SUMMARY: **Information Technology Investment Board; Virginia Information Technologies Agency; Chief Information Officer.** Establishes the Information Technology Investment Board to oversee the Virginia Information Technologies Agency (VITA) in the planning, budgeting, acquiring, managing, and disposing of major information technology projects in the State. Under the bill the Board will hire a Chief Information Officer (CIO) of the State to serve as its chief administrative officer to oversee the day-to-day operations of VITA. The bill (i) abolishes the Department of Information Technology, the Department of Technology Planning, the Virginia Information Providers Network Authority, and the Chief Information Officer Advisory Board; (ii) establishes the Division of Project Management within VITA to assist the CIO in the development and implementation of a project management methodology to be used in the planning and development of information technology projects;

(iii) establishes a project planning, development and approval process for major information technology projects; (iv) authorizes the Virginia Public Building Authority to issue debt to finance major information technology projects; and (iv) provides for the consolidation of the procurement and operational functions of information technology for state agencies. The bill also provides an implementation schedule for the consolidation of operational functions, including but not limited to, servers and networks, for state agencies into VITA. In addition, the bill directs the Chief Information Officer to review all information technology projects regardless of whether the project is purchased by contract, agreement, or some other financing agreement or such other agreement that requires that the Commonwealth either pay for the contract by foregoing revenue collections, or allows or assigns to another party the collection on behalf of or for the Commonwealth any fees, charges, or other assessments or revenues to pay for the project. This bill incorporates SB 847 and is identical to SB 1247.

BILL NUMBER: House Bill 1927 (Chapter No. 895)
PATRON: Nixon
SUMMARY: **Procurement of information technology; reverse auctioning.** Amends provisions related to information technology procurement. The bill removes the requirement that the Department of Information Technology (DIT) follow the Administrative Process Act (APA) when promulgating and adopting regulations governing the procurement of telecommunications and information technology and restores the exemption from the APA for "the award or denial of state contracts, as well as decisions regarding compliance therewith" (See § 2.2-4002(B)(2)). The bill amends § 2.2-1119, governing cases in which purchasing through the Division of Purchases and Supply is not mandatory, § 2.2-4304, governing cooperative procurement agreements, and § 53.1-52, governing purchases by state correctional facilities, to reflect the requirement in § 2.2-1303 that purchases of telecommunications and information technology be made through DIT. This bill does not affect any current delegation of authority either by DIT or to institutions of higher education through the 2002-2004 Appropriations Act (this second provision reiterates the second enactment of House Bill 519 from the 2002 Session). The bill also repeals the sunset of July 1, 2003, for reverse auctioning, making it a permanent method of procurement. The original version of this bill is a recommendation of the Joint Commission on Technology and Science.

BILL NUMBER: House Bill 1931 (Chapter No. 354)
PATRON: Nixon
SUMMARY: **Electronic communications devices.** Replaces the term telecommunications with electronic communications, which is more accurate, and streamlines the definition of that term. Electronic communication includes all transfers of

information, which the statute addresses. The new definitions of "electronic communication device," "electronic communication service," and "electronic communication service provider" are equivalent to the old definitions of "telecommunication device," "telecommunication service," and "telecommunication service provider" except for the above-mentioned changes.

BILL NUMBER: House Bill 1939 (Chapter No. 64)

PATRON: Drake

SUMMARY: **Virginia Residential Landlord and Tenant Act; access to cable and other television facilities.** Authorizes a landlord to enter into a service agreement with a television service provider to provide marketing and other service to the television service provider and to receive compensation for the services. Compensation under such service agreement may also include the reasonable value of the landlord's property that is used by the television service provider. This bill is identical to SB 822 and SB 1188.

BILL NUMBER: House Bill 1954 (Chapter No. 817)

PATRON: Albo

SUMMARY: **Obtaining driver's licenses, special identification cards, etc.; legal presence in the US; fraudulent representation; penalty.** Makes it a Class 6 felony to obtain any document issued by the Department of Motor Vehicles (DMV) through the use of counterfeit, forged, or altered documents (unless the violation includes obtaining or possessing the documents for the purpose of engaging in an age-limited activity, in which case the violation is a Class 2 misdemeanor). The bill also provides that DMV will not issue an original license, permit, or special identification card to any applicant who has not presented with his application documentary evidence that he is either (i) a citizen of the United States, (ii) a legal permanent resident of the United States, or (iii) a conditional resident alien of the United States. An applicant who presents in person valid documentary evidence of (a) a valid, unexpired nonimmigrant visa or nonimmigrant visa status for entry into the United States, (b) a pending or approved application for asylum in the United States, (c) entry into the United States in refugee status, (d) a pending or approved application for temporary protected status in the United States, (e) approved deferred action status, or (f) a pending application for adjustment of status to legal permanent residence status or conditional resident status, may be issued a temporary license, permit, or special identification card. Such temporary license, permit, or special identification card shall be valid only during the period of time of the applicant's authorized stay in the United States or, if there is no definite end to the period of authorized stay, a period of one year. Any temporary license, permit, or special identification card issued pursuant to this subsection is required to clearly indicate that it is temporary and state the date that it expires. Such a temporary license, permit or identification card may be renewed only upon presentation of

valid documentary evidence that the status by which the applicant qualified for the temporary license, permit or special identification has been extended by the United States Immigration and Naturalization Service or the Bureau of Citizenship and Immigration Services of the Department of Homeland Security. Applications for renewal, duplication, or reissuance of licenses and special identification cards will be presumed to have been validly issued, provided that, at the time the application is made, the license has not expired, or been cancelled, suspended or revoked. The bill finally requires that driver's license endorsements by DMV including the issue, reissue, or renewal authorizing a driver to operate a vehicle transporting hazardous materials must comply with the requirements of the USA Patriot Act of 2001. The bill becomes effective on January 1, 2004, except that the provisions relating to the Patriot Act become effective on July 1, 2004. On or before December 1, 2003, DMV must report to the General Assembly the content of regulations that the Department of Motor Vehicles intends to promulgate to carry out the provisions of this act. This bill is the same as SB1058.

BILL NUMBER: House Bill 2061 (Chapter No. 847)
PATRON: Dudley
SUMMARY: **Identity theft.** Clarifies that the identities of dead, as well as living, people are protected and that the theft of the identity of a dead person is punishable.

BILL NUMBER: House Bill 2062 (Chapter No. 791)
PATRON: Dudley
SUMMARY: **Government Data Collection and Dissemination Practices Act; display of social security numbers prohibited.** Provides that after July 1, 2004, no agency, as defined in § 42.1-77, shall send or deliver or cause to be sent or delivered, any letter or package that displays a social security number on the face of the mailing envelope or package or from which a social security number is visible, whether on the outside or inside of the mailing envelope or package.

BILL NUMBER: House Bill 2063 (Chapter No. 927)
PATRON: Dudley
SUMMARY: **Government Data Collection and Dissemination Practices Act; social security numbers.** Prohibits the display of a data subject's entire social security number on any student or employee identification card by public agencies on and after July 1, 2006.

BILL NUMBER: House Bill 2075 (Chapter No. 642)
PATRON: Hogan
SUMMARY: **Virginia Workforce Council; membership; powers and duties.** Reduces the membership of the Virginia Workforce Council from 43 to 29, and expands the duties of the Council in its implementation of the Workforce Investment Act ("WIA"). The Council is required to create procedures, guidelines,

performance measures, and directives applicable to local workforce investment boards and the operation of one-stop centers required by the WIA. The bill also requires each local workforce investment board to develop and submit to the Council an annual workforce demand plan for its area based on a survey of local and regional businesses that reflects local employer needs and the availability of trained workers to meet those needs. Finally, the bill lists all programs that shall be mandatory partners in the one-stop centers under the WIA. This bill incorporates HB 2617.

BILL NUMBER: House Bill 2115 (Chapter No. 793)
PATRON: Reid
SUMMARY: **Creation of state boards and commissions; duration.** Provides that after January 1, 2003, all bills creating an advisory board, council, commission or other collegial body in the executive branch of state government shall contain a provision requiring the expiration of such body three years after its creation.

BILL NUMBER: House Bill 2150 (Chapter No. 320)
PATRON: Rust
SUMMARY: **Department of Motor Vehicles (DMV) to provide self-service options to customers.** Allows DMV to provide, at its offices, self-service options that will provide customers with access to the Department's Internet transactions for persons who would prefer to transact their business with the Department via the Internet.

BILL NUMBER: House Bill 2164 (Chapter No. 643)
PATRON: Phillips
SUMMARY: **Virginia Wireless Service Authorities Act.** Authorizes any locality to create a wireless service authority, which may provide qualifying communications services as authorized by Article 5.1 (§ 56-484.7:1 et seq.) of Chapter 15 of Title 56. The authority shall have many of the powers typically granted to authorities, including the issuance of revenue bonds.

BILL NUMBER: House Bill 2175 (Chapter No. 914)
PATRON: Bell
SUMMARY: **Identity theft.** Limits the appearance of social security numbers on identification cards and parcels. The bill punishes the distribution or possession with intent to distribute another's personal identifying information or the distribution of the means by which personal information may be stolen. The bill creates a mechanism whereby a victim may expunge a criminal charge resulting from identity theft. The bill punishes obtaining goods and services, and identification documents and information of another. The bill requires the Library Board to develop regulations providing for the destruction of social security numbers in public records. The bill allows a clerk of court to refuse to record a document upon which there appears a grantor's or grantee's social security

number. The bill sets up a procedure for blocking credit misinformation appearing in a credit report.

BILL NUMBER: House Bill 2192 (Chapter No. 644)
PATRON: McQuigg
SUMMARY: **Virginia Public Procurement Act; reverse auctioning.** Removes the sunset provision of July 1, 2003, for the use of reverse auctioning. As a result, reverse auctioning becomes an authorized method of procurement except that bulk purchases of commodities used in road and highway construction and maintenance, and aggregates shall not be procured by reverse auctioning..

BILL NUMBER: House Bill 2210 (Chapter No. 848)
PATRON: Jones, S.C.
SUMMARY: **Emergency services and disaster law; release of records.** Provides that the Governor or agencies acting on his behalf may receive information, voluntarily submitted from both public and nonpublic entities, related to the protection of the nation's critical infrastructure sectors and components that are located in Virginia or affect the health, safety, and welfare of the citizens of Virginia. The bill provides that information submitted by any public or nonpublic entity in accordance with the procedures set forth in subdivision A 57 of § 2.2-3705 shall not be disclosed unless: (1) it is requested by law-enforcement authorities in furtherance of an official investigation or the prosecution of a criminal act; (2) the agency holding the record is served with a proper judicial order; or (3) the agency holding the record has obtained the written consent to release the information from the entity voluntarily submitting it.

BILL NUMBER: House Bill 2211 (Chapter No. 704)
PATRON: Jones, S.C.
SUMMARY: **Freedom of Information Act; critical infrastructure and vulnerability assessments.** Expands the current record exemption for engineering and architectural drawings to protect the safety of any public building or its occupants, by clarifying that records relating to critical infrastructure or structural components, security equipment and systems, ventilation systems, fire protection equipment, mandatory building emergency equipment or systems, elevators, electrical systems, telecommunications equipment and systems, and other utility equipment and systems, as well as vulnerability assessments are exempt. The bill applies to all buildings, whether public or private. The bill requires certain procedures to be followed to protect such records. The bill also provides that nothing in this subdivision shall be construed to prohibit the disclosure of records relating to the structural or environmental soundness of any building, nor shall it prevent the disclosure of information relating to any building in connection with an inquiry into the performance of that building after it has been subjected to fire, explosion, natural disaster or other catastrophic

event. The bill also contains a corollary open meeting exemption for the discussion of such records in a closed meeting. The bill consolidates two related exemptions and contains other technical amendments.

BILL NUMBER: House Bill 2226 (Chapter No. 141)
PATRON: Cline
SUMMARY: **Supreme Court; distribution of reports.** Authorizes the Court to distribute the published reports of the decisions of the Supreme Court and the Court of Appeals either in print or in electronic format.

BILL NUMBER: House Bill 2283 (Chapter No. 646)
PATRON: Devolites
SUMMARY: **Conflict of interests in contracts for research and development or commercialization of intellectual property.** Authorizes the relevant board of visitors of a public institution of higher education in Virginia or the Eastern Virginia Medical School to delegate its authority to grant waivers to the conflict of interests statute for contracts between a business in which the employee has a personal interest and the institution for a contract for research and development or commercialization of intellectual property. If the board delegates this authority, it must include this delegation of authority in the formal policy required by clause (iii) of subdivision C 7. Additionally, if the board delegates this authority, the bill requires the president of the institution to file with the board of visitors by December 1 an annual report including the same information that the board of visitors is required to file with the Secretary of the Commonwealth under clause (v) of subdivision C 7.

BILL NUMBER: House Bill 2284 (Chapter No. 362)
PATRON: Devolites
SUMMARY: **Commonwealth Technology Research Fund continued.** Continues the Commonwealth Technology Research Fund originally established by subdivision J 1 of Item 548 of the 2000 Appropriation Act to help Virginia's institutions of higher education attract public and private research funding. The bill changes the agency responsible for the Fund from the Department of Planning and Budget to the Innovative Technology Authority, and expands it to include awards to help Virginia's institutions of higher education enhance their capabilities to commercialize resulting intellectual properties. The bill also requires the Authority to submit an annual report to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees with detailed information on the awards committed and an evaluation of the Fund.

BILL NUMBER: House Bill 2285 (Chapter No. 708)
PATRON: Devolites
SUMMARY: **Authorization to transfer interest in patents and copyrights owned by institutions of higher education.** Authorizes institutions of higher education to

transfer intellectual property in which it has an interest to a private entity without the Governor's approval if (i) the interest was developed without the use of federal funds, (ii) the private entity makes a clear and convincing case to the relevant board that its ownership of the interest is critical to its ability to commercialize that interest, and (iii) the institution receives, at a minimum, compensation equal to the anticipated revenue stream of licensing the interest.

BILL NUMBER: House Bill 2290 (Chapter No. 987)
PATRON: Devolites
SUMMARY: **Computer crimes; enhanced penalties; forfeiture; etc.** Provides that certain obscenity violations are, when accomplished with a computer, subject to separate and distinct punishment. Adds enhancements for punishment of computer fraud based on volume of e-mail and revenue generated. Raises penalty for computer trespass. Raises penalty for theft of computer services based on value of services. Establishes an alternate method for calculating statutory civil damages for a person who is injured by reason of any violation of the Computer Crimes Act, based on the number of complaints, degree of culpability, amount of economic gain, and prior history. The bill also adds a seizure and forfeiture provision allowing for forfeiture of all proceeds and equipment received from violations of the Computer Crimes Act. This bill is identical to SB 1139.

BILL NUMBER: House Bill 2294 (Chapter No. 205)
PATRON: Devolites
SUMMARY: **Remote access to land records.** Requires remote access to land records to be by paid subscription service through circuit court clerk's offices or designated application service providers.

BILL NUMBER: House Bill 2305 (Chapter No. 258)
PATRON: Devolites
SUMMARY: **Name change; preventing identity theft.** Provides that the court order granting a name change contains only the person's old name or names, new name, and address, and not the sensitive information (such as the applicant's mother's maiden name and possibly the applicant's social security number) required for the name change application. The bill thus protects sensitive information from being included in the public order and deed books, while ensuring that all necessary information is retained in the person's complete court file and is transmitted, as necessary, to the State Registrar of Vital Records and the Central Criminal Records Exchange. The bill also requires that name changes ordered as part of a decree of divorce are issued as separate orders, so that detailed and sensitive information contained within the decree of divorce (such as the names of minor children, and custody and support arrangements) is not disclosed in the order or deed books.

BILL NUMBER: House Bill 2351 (Chapter No. 36)
PATRON: Hull
SUMMARY: **Withholding tax filing; electronic funds transfer.** Requires any firm that files withholding taxes on behalf of 100 or more taxpayers to remit such withholding payments via electronic funds transfer using automatic clearinghouse credit transactions.

BILL NUMBER: House Bill 2376 (Chapter No. 743)
PATRON: Moran
SUMMARY: **Cathode ray tube recycling program.** Requires the Virginia Waste Management Board to adopt regulations to encourage cathode ray tube and electronics recycling. The bill also authorizes localities to prohibit the disposal of cathode ray tubes in any privately operated landfill within its jurisdiction, so long as the locality has implemented a recycling program that is capable of handling all cathode ray tubes generated within the jurisdiction. This bill incorporates HB 2375.

BILL NUMBER: House Bill 2397 (Chapter No. 711)
PATRON: May
SUMMARY: **Public utilities; communications services.** Gives the State Corporation Commission the authority to enforce the provisions of law that permit a locality to offer communications services, including local telephone service, to customers. Localities that have obtained a certificate to offer local telephone service are required to file an annual report demonstrating that they have complied with the requirements of law regarding certain accounting practices. Localities offering qualifying communications services, including high-speed data and Internet services, are required to provide nondiscriminatory access to for-profit providers of communications services on a first-come, first-served basis, are prohibited from cross-subsidizing such services, and are prohibited from acquiring facilities for such services by eminent domain. The Commission may deem telephone services competitive on the basis of a category of customers, and the Commission may also determine bundles of competitive and noncompetitive services if the noncompetitive services are available separately.

BILL NUMBER: House Bill 2426 (Chapter No. 988)
PATRON: Nixon
SUMMARY: **Posting certain information on the Internet; prohibitions.** Provides that beginning January 1, 2004, no court clerk shall post on a court-controlled website any document that contains the following information: (i) an actual signature; (ii) a social security number; (iii) a date of birth identified with a particular person; (iv) the maiden name of a person's parent so as to be identified with a particular person; (v) any financial account number or numbers; or (vi) the name and age of any minor child. The bill also provides an exception

for court clerks providing remote access to their records if their network or system that is used to provide the access has been certified by the Department of Technology Planning. It also requires the Department to establish security standards that must be followed by court clerks providing remote access to records in consultation with circuit court clerks, the Supreme Court, the Compensation Board, users of land and other court records, and other interested citizens. The bill has a July 1, 2005, sunset provision.

BILL NUMBER: House Bill 2431 (Chapter No. 607)
PATRON: Hugo
SUMMARY: **DNA samples.** Clarifies that DNA samples of juveniles charged with felonies can be taken from blood, saliva or tissue.

BILL NUMBER: House Bill 2432 (Chapter No. 432)
PATRON: Hugo
SUMMARY: **DNA of juvenile felons.** Provides that criminal history information concerning juveniles shall be available to the Division of Forensic Science to verify its authority (based upon the felonious nature of the juvenile's criminal act) to maintain the juvenile's sample in the DNA data bank.

BILL NUMBER: House Bill 2436 (Chapter No. 433)
PATRON: Dillard
SUMMARY: **Invasive Species Council established.** Establishes the nine member Invasive Species Council. The Council, which is composed of executive branch agency heads, and chaired by the Secretary of Natural Resources, is charged with providing state leadership regarding prevention and control of invasive species and preparation of an invasive species management plan. Invasive species are species that are not native to an ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. There is a 2006 sunset on the Council.

BILL NUMBER: House Bill 2457 (Chapter No. 935)
PATRON: McDougle
SUMMARY: **Child Pornography Images Registry; child pornography; penalties.** Establishes a Child Pornography Registry that includes images of sexually explicit visual material presented as evidence and used in a conviction for a child pornography offense. The bill increases the penalties for child pornography possession to a Class 6 felony (from a Class 1 misdemeanor) and second and subsequent offenses to a Class 5 felony (from a Class 6 felony). This bill is identical to SB 1153.

BILL NUMBER: House Bill 2479 (Chapter No. 608)
PATRON: Oder
SUMMARY: **Laser speed determination devices.** Allows all localities to use laser speed determination devices.

BILL NUMBER: House Bill 2524 (Chapter No. 266)
PATRON: Morgan
SUMMARY: **Insurance information privacy.** Permits the oral communication of an insurer's privacy practices provided that the insured is given written notice of such practices if a policy is issued. The bill also permits agents to be in compliance with notice requirements if the notice has been given within the previous 12 months.

BILL NUMBER: House Bill 2618 (Chapter No. 800)
PATRON: Nutter
SUMMARY: **Unsolicited facsimile transmissions.** Makes the unsolicited transmission of advertising materials by facsimile a prohibited practice under the Consumer Protection Act. The bill eliminates the requirement that the unsolicited facsimile be advertising goods or services for sale or lease. Enforcement provisions under the Consumer Protection Act (i) permit the Attorney General to issue civil investigative demands and assurances of voluntary compliance, (ii) create an individual action for damages, and (iii) permit aggrieved parties or the Attorney General to seek injunctive relief to prevent further violations.

BILL NUMBER: House Bill 2639 (Chapter No. 365)
PATRON: May
SUMMARY: **Virginia Research and Technology Advisory Commission (VRTAC); strategies for the incubation of science and technology industries; report.** Directs VRTAC to develop strategies for the incubation of new science and technology industries in the Commonwealth. The Commission is required to provide a report of such strategies to the Governor and the General Assembly by November 30, 2003.

BILL NUMBER: House Bill 2661 (Chapter No. 150)
PATRON: Janis
SUMMARY: **DNA samples for violent crime arrests.** Clarifies that a DNA sample may be taken upon an arrest pursuant to a finding of probable cause by a grand jury as well as a magistrate; clarifies that a DNA sample is not to be destroyed upon an acquittal if there is a pending arrest that requires DNA sample retention; and requires that the sample be taken at the location designated by the arrest booking law-enforcement agency rather than the magistrate. The bill makes other technical corrections.

BILL NUMBER: House Bill 2701 (Chapter No. 651)
PATRON: Reid
SUMMARY: **Virginia Public Procurement Act; cooperative procurement.** Clarifies that except for contracts for professional services, a public body may purchase from another public body's contract even if it did not participate in the request for proposal or invitation to bid, if the request for proposal or invitation to bid specified that the procurement was being conducted on behalf of other public bodies.

BILL NUMBER: House Bill 2720 (Chapter No. 997)
PATRON: Rollison
SUMMARY: **Vehicle dealers; on-line system filing fees; manual transaction fees.** Provides for, beginning December 31, 2003, collection of on-line filing fees from motor vehicle dealers who use a remote electronic filing system, approved by the Department of Motor Vehicles, to obtain a certificate of title or registration for the purchaser of a vehicle and for the collection of manual transaction fees (for manual transactions in excess of 10 transactions per month) from certain dealers who do not use a remote electronic filing system. Provisions of this bill dealing with manual transaction fees do not become effective until December 31, 2003.

BILL NUMBER: House Bill 2721 (Chapter No. 720)
PATRON: Morgan
SUMMARY: **Telecommunications services; arbitration.** Authorizes the State Corporation Commission to discharge the responsibilities of state commissions under the federal Telecommunications Act of 1996, including the arbitration of interconnection agreements between local exchange carriers. The Commission may defer selected issues. If additional costs incurred by the Commission cannot be recovered through the maximum levy currently authorized for telephone companies, the maximum levy will be increased to the extent necessary to recover the additional costs.

BILL NUMBER: House Bill 2731 (Chapter No. 272)
PATRON: Woodrum
SUMMARY: **Government Data Collection and Dissemination Practices Act; definition of agency.** Clarifies that the definition of "agency" in the Government Data Collection and Dissemination Practices Act includes constitutional officers, except as otherwise expressly provided by law. The bill contains a technical amendment. The bill is in response to a recent Virginia Supreme Court decision that held that the Government Data Collection and Dissemination Practices Act does not apply to constitutional officers.

BILL NUMBER: House Bill 2760 (Chapter No. 653)
PATRON: O'Bannon
SUMMARY: **Virginia Research and Technology Advisory Commission (VRTAC); strategic plan for research and development; report.** Directs VRTAC, in conjunction with the Secretaries of Technology, Commerce and Trade, and Education, to develop strategies for research and development in the Commonwealth. The Commission is required to provide a report of such strategies to the Governor and the General Assembly by November 30, 2003. The Innovative Technology Authority, Virginia Economic Development Partnership, and State Council of Higher Education shall provide staff support to the Commission.

BILL NUMBER: House Bill 2767 (Chapter No. 336)
PATRON: Brink
SUMMARY: **Department of Motor Vehicles (DMV); The Library of Virginia.** Provides for a partnership between DMV and The Library of Virginia to promote use of public library Internet access terminals to complete on-line transactions with the Department.

BILL NUMBER: House Bill 2812 (Chapter No. 545)
PATRON: Cosgrove
SUMMARY: **Department of Professional and Occupational Regulation; regulation of polygraph examiners.** Provides for the Director of the Department of Professional and Occupational Regulation to authorize the use by licensed polygraph examiners of instruments other than polygraphs that record physiological changes pertinent to the determination of truthfulness or the verification of the truth of statements. This bill is identical to SB 1296.

BILL NUMBER: House Bill 2816 (Chapter No. 622)
PATRON: Bolvin
SUMMARY: **Preparedness and Coordination Program.** Adds the following to the requirements of the State Department of Emergency Management in its administration of emergency services and disaster preparedness programs: (i) coordinating with political subdivisions and state agencies to ensure that the Commonwealth has the most up-to-date assessments and preparedness plans to prevent, respond to and recover from disasters, including acts of terrorism; (ii) conducting a statewide emergency management assessment; and (iii) submitting to the Governor and to the General Assembly an annual report on the status of emergency management response plans. The bill also provides that the Department shall encourage private industries whose goods and services are deemed vital to the public good to provide annually updated preparedness assessments to the local coordinator of emergency management and requires

political subdivisions to provide an annual emergency management assessment to the State Coordinator of Emergency Management.

BILL NUMBER: House Joint Resolution 526
PATRON: Landes
SUMMARY: **Commending Dr. Ronald E. Carrier.**

BILL NUMBER: House Joint Resolution 617
PATRON: Cole
SUMMARY: **Commending the Liberty High School Technology Student Association.**

BILL NUMBER: House Joint Resolution 631
PATRON: Devolites
SUMMARY: **Court records.** Continues the joint subcommittee studying the protection of court records. The joint subcommittee shall review the findings and recommendations of the Executive Secretary of the Supreme Court concerning information in court records and recommend necessary changes in the statutory law.

BILL NUMBER: House Joint Resolution 651
PATRON: Bryant
SUMMARY: **Taxation of telecommunications industry.** Continues the Joint Subcommittee to Study the State and Local Taxation of the Entire Telecommunications Industry and Its Customers within the Commonwealth for one year. The joint subcommittee shall complete its work begun in 2002 and present recommendations to the joint subcommittee to study and revise Virginia's State Tax Code or any similar group created during the 2003 session by August 1, 2003, and to submit its written findings and recommendations to the Governor and 2004 Session of the General Assembly.

BILL NUMBER: House Joint Resolution 653
PATRON: Rust
SUMMARY: **Development of an Internet II Advanced Performance Standard Initiative.** Directs the Joint Commission on Technology and Science to determine what public resources, including but not limited to public-private partnerships, other public and private resources, taxation policies, and direct financial assistance may be used to further the development of an Internet II, advanced, high-speed telecommunications backbone network with the capability of transmitting a minimum of one gigabyte per second (OC-24) utilizing the IPv6 Internet Protocol to all workstations within the Commonwealth; and monitor, cooperate, and coordinate with other agencies of the Commonwealth and committees of the General Assembly to ensure a sound, progressive statewide program is in place and being actively pursued. The Internet II project is a collaborative effort among a number of universities,

federal R&D agencies, and private sector firms to develop a next generation Internet for research and education, including both enhanced network services as well as the multimedia applications that will be enabled by those services. As part of its ongoing mandate, the Joint Commission on Technology and Science currently works with other state agencies to monitor broadband deployment.

BILL NUMBER: House Joint Resolution 752

PATRON: Bloxom

SUMMARY: **Memorializing Congress concerning the reauthorization of the Carl D. Perkins Vocational and Applied Technology Act.** Entreats the Congress of the United States to continue the funding for career and technical education in public secondary and postsecondary schools when reauthorizing the Carl D. Perkins Vocational and Applied Technology Act in 2003. Federal funding for career and technical education, formerly known as vocational/technical education, has been continuous since 1917. In fiscal year 2003, Virginia receives nearly \$25 million in basic grant funds, and another \$2.5 million in tech prep grant funds, with 85 percent of the funding being distributed to local school divisions, more than \$3.1 million being distributed to the Virginia Community College System, and \$3.7 million allocated for administration to the Department of Education. These funds are used to strengthen students' academic, vocational, and technical skills, implement industry certification programs, expand the use of technology, provide professional development to career and technical teachers, and involve parents, local businesses, and labor and industry leaders in the design, implementation, and evaluation of career and technical programs to meet the needs of the local economy and to comply with nationally adopted standards. Congress will take up reauthorization of the Carl D. Perkins Act in the coming months and proposals have been made that indicate the consideration may be given to diverting the federal dollars to other priorities. The Congress is also urged to continue this funding in an amount that will continue Virginia's \$27 million in funding or will increase this amount.

BILL NUMBER: House Joint Resolution 856

PATRON: Almand

SUMMARY: **Commending David M. Brown.**

BILL NUMBER: Senate Bill 659 (Chapter No. 1)

PATRON: Ruff

SUMMARY: **School board employees; consent to testing for blood-borne pathogens.** Adds school board employees who are exposed to persons in a manner that may transmit HIV or hepatitis B or C to those individuals deemed to have consented to testing for infection with HIV or hepatitis B or C viruses and the release of test results to the exposed person. In addition, persons, including students, directly exposed to the body fluids of a school board employee are

also deemed to have consented to testing for infection with these viruses and the release of the test results to the exposed school board employee. If the person to be tested is a minor, consent for the testing shall be obtained from the parent, guardian or person standing in loco parentis. If consent is withheld, the school board may petition the juvenile and domestic relations district court for an order requiring the testing. Procedures for teacher exposure to student body fluids are set forth in § 22.1-271.3, which directs school boards to ensure that school personnel having contact with students receive training in the prevention and effects of blood-borne pathogens. This measure mirrors current requirements for health care providers and law-enforcement personnel.

BILL NUMBER: Senate Bill 695 (Chapter No. 338)
PATRON: Miller, Y.B.
SUMMARY: **Department of Business Assistance; Workforce Retraining Program and Fund.** Provides for the Department of Business Assistance to develop a Workforce Retraining Program to provide consulting services and funding to companies and businesses to assist in retraining their existing workforces. To be eligible for funding under the program, a company must meet certain requirements and demonstrate that it is undergoing (i) integration of new technology into its production process, (ii) a change of product line in keeping with marketplace demands, or (iii) substantial change to its service delivery process, which would require assimilation of new skills and technological capabilities by the firm's existing labor force. The bill also creates the Workforce Retraining Fund.

BILL NUMBER: Senate Bill 714 (Chapter No. 862)
PATRON: Wampler
SUMMARY: **Circuit court clerks; recordation of documents.** Allows the clerk to refuse to file any instrument that includes a grantor's, grantee's or trustee's social security number.

BILL NUMBER: Senate Bill 721 (Chapter No. 768)
PATRON: Blevins
SUMMARY: **"Photo-toll" program.** Enhances penalties associated with failure to pay a required toll for using a toll facility using a "photo-toll" toll payment enforcement system and explicitly allows the use of "photo-toll" systems on non-VDOT toll facilities. The bill provides a mechanism by which penalties can be assessed against operators of rented and leased vehicles.

BILL NUMBER: Senate Bill 737 (Chapter No. 274)
PATRON: Houck
SUMMARY: **Virginia Freedom of Information Act; exemptions for contract negotiations.** Adds a record exemption for records relating to the negotiation and award of a specific contract where competition or bargaining is involved

and where the release of such records would adversely affect the bargaining position or negotiating strategy of the public body. The bill provides that such records shall not be withheld after the public body has made a decision to award or not to award the contract and shall not apply to the release of records in connection with procurement transactions governed by the Virginia Public Procurement Act. The bill also provides an open meeting exemption for the discussion of the award of a public contract involving the expenditure of public funds, including interviews of bidders or offerors, and discussion of the terms or scope of such contract, where discussion in an open session would adversely affect the bargaining position or negotiating strategy of the public body. The bill is a recommendation of the FOIA Council.

BILL NUMBER: Senate Bill 740 (Chapter No. 865)
PATRON: Marsh
SUMMARY: **Fees collected by circuit court clerks; information technology fee.** Extends the sunset on the collection of the Technology Trust Fund Fee from July 1, 2004, to July 1, 2008.

BILL NUMBER: Senate Bill 751 (Chapter No. 532)
PATRON: O'Brien
SUMMARY: **Administration; records on gubernatorial appointees.** Requires the Secretary of the Commonwealth to maintain and transfer to the Governor-elect certain records on collegial bodies and their members. The Secretary is required to keep records regarding contact information on the chairman, vice chairman and other current appointees and the staff to the collegial body. The database shall also list statutory provisions on terms and eligibility criteria. This bill is identical to HB 1784.

BILL NUMBER: Senate Bill 796 (Chapter No. 546)
PATRON: Wampler
SUMMARY: **Charter; City of Bristol.** Makes changes to the composition of the utilities board and the youth services board. This bill is identical to HB 1719.

BILL NUMBER: Senate Bill 815 (Chapter No. 97)
PATRON: Norment
SUMMARY: **General receivers; use of social security numbers, etc., on affidavits.** Deletes requirement that beneficiary's social security number and birthdate and the proposed dates of final and periodic disbursements routinely be included in the court order and provides instead that the general receiver file a sealed affidavit with this information.

BILL NUMBER: Senate Bill 833 (Chapter No. 39)
PATRON: Howell
SUMMARY: **Withholding tax filing; electronic funds transfer.** Requires any firm that files withholding taxes on behalf of 100 or more taxpayers to remit such withholding payments via electronic funds transfer using automatic clearinghouse credit transactions. This bill is identical to HB 2351.

BILL NUMBER: Senate Bill 856 (Chapter No. 280)
PATRON: Stosch
SUMMARY: **Rules of Court.** Provides that the Supreme Court will no longer have to distribute the Rules of Court to certain parties listed in the Code. Amendments to the Rules of Court are placed on the Supreme Court's Internet site as soon as they are adopted and this is the primary source for the bench, bar and public to become aware of new Rules. The Rules are also published in Virginia Lawyer's Weekly and included in the Code of Virginia when it is updated. The bill also deletes the requirement that circuit court clerks keep a special book of Rules and amendments to the Rules. The bill will save approximately \$7,500 in printing costs and was recommended by the Judicial Council for this reason.

BILL NUMBER: Senate Bill 858 (Chapter No. 160)
PATRON: Stosch
SUMMARY: **Telecommunications taxes; taxation of bundled transactions.** Allows nontaxable services to continue to be nontaxable when bundled with taxable communications services if the provider can identify the nontaxable portion from its books and records. In addition, if the services are taxable at different rates, they will not be taxed at the highest rate if the provider again can identify the services subject to a lower rate from its books and records.

BILL NUMBER: Senate Bill 875 (Chapter No. 677)
PATRON: Wampler
SUMMARY: **Telecommunications services; certificate.** Creates a statutory procedure for cities and towns that operate a municipal electric utility and obtain a certificate to operate as a telephone utility to offer cable television services. Before offering cable television services, a locality is required to (i) hold a preliminary public hearing, (ii) hire a consultant to perform a feasibility study, (iii) hold public hearings on the feasibility study, (iv) determine whether such study finds that certain revenue requirements can be met, and (v) hold a referendum. The municipality shall establish a separate department for operation of cable television services, and establish an enterprise fund to account for the provision of such services, and cross-subsidization is prohibited. The requirements of clauses (i) through (v) will not apply to a locality that had obtained a certificate to operate as a telephone utility and installed a cable television headend prior to December 31, 2002.

BILL NUMBER: Senate Bill 878 (Chapter No. 729)
PATRON: Wampler
SUMMARY: **Insurance information security programs.** Requires insurance institutions, agents, and insurance-support organizations to implement a comprehensive information security program to safeguard the privacy of consumer information. The measure is required pursuant to the federal Gramm-Leach-Bliley Act and is based on model language adopted by the National Association of Insurance Commissioners.

BILL NUMBER: Senate Bill 882 (Chapter No. 68)
PATRON: Wampler
SUMMARY: **Virginia Residential Landlord and Tenant Act; access to cable and other television facilities.** Authorizes a landlord to enter into a service agreement with a television service provider to provide marketing and other service to the television service provider and to receive compensation for the services. Compensation under such service agreement may also include the reasonable value of the landlord's property that is used by the television service provider. This bill is identical to SB 1188 and HB 1939.

BILL NUMBER: Senate Bill 942 (Chapter No. 341)
PATRON: Colgan
SUMMARY: **Wireless enhanced 9-1-1 surcharge.** Specifies how CMRS providers can collect the wireless E-911 surcharge. Under the current statute, the surcharge is defined as a monthly charge billed monthly. Because prepaid wireless is not billed monthly, the bill provides that the surcharge may be collected either through monthly billing, adding the surcharge at the point of sale, or deducting an equivalent number of minutes.

BILL NUMBER: Senate Bill 979 (Chapter No. 918)
PATRON: Mims
SUMMARY: **Identity theft.** Limits the appearance of social security numbers on identification cards and parcels. The bill expands limits on acquisition and use of the personal identifying information of another, including use of identifying information of a dead person. The bill requires the Library Board to develop regulations providing for the destruction of social security numbers in public records. The bill sets up a procedure for blocking credit misinformation appearing in a credit report and expungement of false identity information in police and court records.

BILL NUMBER: Senate Bill 1139 (Chapter No. 1016)
PATRON: Stolle
SUMMARY: **Computer crimes; enhanced penalties; forfeiture; etc.** Provides that certain obscenity violations are, when accomplished with a computer, subject to separate and distinct punishment. Adds enhancements for punishment of

computer fraud based on volume of e-mail and revenue generated. Raises penalty for computer trespass. Raises penalty for theft of computer services based on value of services. Establishes an alternate method for calculating statutory civil damages for a person who is injured by reason of any violation of the Computer Crimes Act, based on the number of complaints, degree of culpability, amount of economic gain, and prior history. The bill also adds a seizure and forfeiture provision allowing for forfeiture of all proceeds and equipment received from violations of the Computer Crimes Act. This bill is identical to HB 2290.

BILL NUMBER: Senate Bill 1153 (Chapter No. 938)
PATRON: Stolle
SUMMARY: **Child Pornography Images Registry; child pornography; penalties.** Requires the Office of the Attorney General, in cooperation with the Department of State Police, to maintain a Child Pornography Registry that includes images of sexually explicit visual material presented as evidence and used in a conviction for possession, production, publication, sale, financing or intent to distribute, sexually explicit items involving children. The Registry is to be used for the administration of criminal justice and unauthorized use is a Class 6 felony. The bill increases the penalties for child pornography possession to a Class 6 felony (from a Class 1 misdemeanor) and second and subsequent offenses to a Class 5 felony (from a Class 6 felony). This bill is identical to HB 2457.

BILL NUMBER: Senate Bill 1164 (Chapter No. 732)
PATRON: Ticer
SUMMARY: **Sex Offender and Crimes Against Minors Registry.** Requires registration of a person who has been convicted of a third or subsequent offense of unlawful photographing, videotaping or filming of a nonconsenting person who is nude or in a state of undress that exposes private body parts in circumstances where the person would have a reasonable expectation of privacy.

BILL NUMBER: Senate Bill 1188 (Chapter No. 60)
PATRON: Wagner
SUMMARY: **Virginia Residential Landlord and Tenant Act; access to cable and other television facilities.** Authorizes a landlord to enter into a service agreement with a television service provider to provide marketing and other service to the television service provider and to receive compensation for the services. Compensation under such service agreement may also include the reasonable value of the landlord's property that is used by the television service provider. This bill is identical to SB 882 and HB 1939.

BILL NUMBER: Senate Bill 1203 (Chapter No. 346)
PATRON: Newman
SUMMARY: **Virginia Freedom of Information Act; electronic communication meetings.** Extends the exemption of certain public bodies from the Virginia Freedom of Information Act's electronic communication meeting restrictions to public bodies in the legislative branch and any authority, board, bureau, commission, district or agency of the Commonwealth whose membership includes persons who reside or work more than 55 miles from the meeting location as stated in the required notice for such meeting. The bill also provides that these public bodies make an audio or audio/visual recording of the meeting that must be retained for three years. All authorized public bodies are required to submit a report detailing their experience with meetings held under this pilot program to the Freedom of Information Advisory Council and the Joint Commission on Technology and Science. The chairman of any meeting so held is required to make an announcement of the reporting provision during the course of such meeting. The bill also changes the required reporting date from April 15, 2003, to September 1 of each year and extends the sunset from July 1, 2003, to July 1, 2005. The bill contains an emergency clause.

BILL NUMBER: Senate Bill 1204 (Chapter No. 86)
PATRON: Newman
SUMMARY: **Code Adam alerts; Virginia Amber Alert Program.** Requires state buildings open to the public to have a Code Adam program as a preventive tool against child abductions and for locating lost children in certain public buildings. The alerts are used to lock down buildings where a child has been lost or possibly abducted. The bill requires the Board of Education to develop, in cooperation with private entities, a program to provide parents with child identification kits through school distribution. The kits shall include identification information about the subject child, including current photo, fingerprints, DNA samples, and important medical information and shall include instructions for the proper safekeeping of the kit. Such kits shall be held for safekeeping by the parent, not a school, school board, or other public entity. The bill also directs the Department of State Police to develop a statewide child abduction alert plan (the Virginia Amber Alert Plan) to rapidly publicize information on a child abduction. Pursuant to procedures developed by the Department of State Police, local law enforcement will notify the Department of State Police, who will take action, including activating the emergency alert system. The bill provides that the Virginia State Police shall inform all local law-enforcement agencies operating or participating in the Amber Alert programs when this bill becomes law and shall offer them assistance in conforming their programs to the provisions of the bill. This bill is identical to HB 1832.

BILL NUMBER: Senate Bill 1247 (Chapter No. 1021)
PATRON: Stosch
SUMMARY: **Information Technology Investment Board; Virginia Information Technologies Agency; Chief Information Officer.** Establishes the Information Technology Investment Board to oversee the Virginia Information Technologies Agency (VITA) in the planning, budgeting, acquiring, managing, and disposing of major information technology projects in the State. Under the bill the Board will hire a Chief Information Officer (CIO) of the State to serve as its chief administrative officer to oversee the day-to-day operations of VITA. The bill (i) abolishes the Department of Information Technology, the Department of Technology Planning, the Virginia Information Providers Network Authority, and the Chief Information Officer Advisory Board; (ii) establishes the Division of Project Management within VITA to assist the CIO in the development and implementation of a project management methodology to be used in the planning and development of information technology projects; (iii) establishes a project planning, development and approval process for major information technology projects; (iv) authorizes the Virginia Public Building Authority to issue debt to finance major information technology projects; and (v) provides for the consolidation of the procurement and operational functions of information technology for state agencies. The bill also provides an implementation schedule for the consolidation of operational functions, including but not limited to, servers and networks, for state agencies into VITA. In addition, the bill directs the Chief Information Officer to review all information technology projects regardless of whether the project is purchased by contract, agreement, or some other financing agreement or such other agreement that requires that the Commonwealth either pay for the contract by foregoing revenue collections, or allows or assigns to another party the collection on behalf of or for the Commonwealth any fees, charges, or other assessments or revenues to pay for the project. This bill incorporates SB 847 and is identical to HB 1926.

BILL NUMBER: Senate Bill 1276 (Chapter No. 1023)
PATRON: Wagner
SUMMARY: **Department of Motor Vehicles (DMV); customer service pilot project.** Establishes a pilot project whereby private business entities perform certain customer transactions with the DMV on behalf of business companies, firms, and corporations.

BILL NUMBER: Senate Bill 1296 (Chapter No. 554)
PATRON: Blevins
SUMMARY: **Department of Professional and Occupational Regulation; Polygraph Examiners.** Provides for the Director of the Department of Professional and Occupational Regulation to authorize the use by licensed polygraph examiners

of instruments other than polygraphs that record physiological changes pertinent to the determination of truthfulness or the verification of the truth of statements. This bill is identical to HB 2812.

BILL NUMBER: Senate Bill 1330 (Chapter No. 292)
PATRON: Stosch
SUMMARY: **Public-Private Education Facilities and Infrastructure Act of 2002; definitions; unsolicited proposals.** Clarifies that a responsible public entity may reject any unsolicited proposal and that, if a proposal is rejected, any fees related to the proposal must be returned to the private entity. In addition, the bill requires a responsible public entity to advertise a private entity's request for approval of a qualifying project in the Virginia Business Opportunities publication and, in the case of a state agency, to also post a notice on the Commonwealth's electronic procurement website. The bill also (i) provides for a responsible public entity to post and publish a private entity's request for approval of a qualifying project for a period of time appropriate to encourage competition, and (ii) clarifies that a qualifying project must consist of a specific project and may not include multi-year arrangements related to unspecified projects.

BILL NUMBER: Senate Bill 1332 (Chapter No. 584)
PATRON: Houck
SUMMARY: **Sex Offender and Crimes Against Minors Registry.** Moves current law provisions regarding the Registry into Title 9.1 (Commonwealth Public Safety) from Title 19.2 (Criminal Procedure). The bill breaks the Code provisions into shorter, more readable sections. The offenses for which registration is required and the registration requirements are not changed from current law. The bill states more explicitly than current law that July 1, 1994, is the trigger date for registration. The bill adds a provision that registrants who are enrolled or employed by an institution of higher education must indicate the name of the institution on their registration form and that the State Police must notify the chief law-enforcement officer of the institution of the person's registration. The institution of higher education provision is a requirement that Virginia must comply with by October 1, 2003, in order to avoid a possible reduction in Byrne grant funds.

BILL NUMBER: Senate Bill 1344 (Chapter No. 475)
PATRON: Stolle
SUMMARY: **Electronic meetings of the Board of Visitors of the University of Virginia; authority for holding telephonic or video broadcast meetings.** Modifies the exception to the Freedom of Information Act requirements for holding telephonic or video broadcast meetings that has been accorded to the Board of Visitors of the University of Virginia. This exception currently requires

that two-thirds of the board be physically assembled at its regular or primary location and that no more than 25 percent of all annual meetings be held via electronic means. This provision reduces the requirement for physical presence to a quorum of the Board and provides for electronic meetings to be held at locations other than the regular or primary location of the Board's meetings. The Board of Visitors of the University of Virginia consists of 16 members; however, § 23-74 provides that five members "constitute a quorum." In addition to these changes, public access is limited to hearing the participation during public sessions and the interruption of the telephonic or video broadcast of the meeting will result in suspension of public sessions. The original act authorizing the Board to hold electronic meetings that are removed from the Freedom of Information Act's general rules includes an enactment clause mandating that the Board keep a record of its electronic meetings, record complaints about such meetings, and report on these records to the Secretary of Education and the General Assembly. The bill also extends the sunset clause to July 1, 2005.

BILL NUMBER: Senate Bill 1351 (Chapter No. 294)

PATRON: Whipple

SUMMARY: **Procurement by the Department of Transportation; lighting systems.** Provides that for projects initiated on or after July 1, 2003, the Virginia Department of Transportation shall design all lighting systems in accordance with current Illuminating Engineering Society of North America standards and recommended practices. The lighting system shall utilize fixtures that minimize glare, light trespass, and skyglow while still providing a comfortable, visually effective, safe, and secure outdoor environment in a cost-effective manner over the life cycle of the lighting system.

BILL NUMBER: Senate Joint Resolution 347

PATRON: Hanger

SUMMARY: **Commission on the Revision of Virginia's State Tax Code and the Streamlined Sales Tax Project Agreement.** Establishes the Commission on the Revision of Virginia's State Tax Code and the Streamlined Sales Tax Project Agreement. In conducting the study, the Commission shall (i) examine the allocation of state and local government services and responsibilities; (ii) conduct a comprehensive review of the revenue impact of all tax preferences, including subtractions, deductions, credits, and exemptions; (iii) evaluate the tax rates for all major state taxes to determine their sufficiency and appropriateness in the modern economy; and (iv) consider the appropriateness of adopting the policies in the Streamlined Sales Tax Project Agreement and identify and evaluate changes that may be needed in Virginia's sales and use tax laws to facilitate Virginia's compliance with the agreement should the General Assembly decide to adopt such policies. The Commission must complete its meetings by

November 30, 2003, and submit an executive summary of its findings and recommendations no later than the first day of the 2004 Regular Session of the General Assembly.

BILL NUMBER: Senate Joint Resolution 382
PATRON: Miller, K.G.
SUMMARY: **Confirming Governor's appointments; agency heads.** Confirms interim appointments made by Governor Warner of certain agency heads and personnel.

BILL NUMBER: Senate Joint Resolution 384
PATRON: Miller, K.G.
SUMMARY: **Confirming Governor's appointments; commerce and trade.** Confirms interim appointments made by Governor Warner and related to commerce and trade.

BILL NUMBER: Senate Joint Resolution 385
PATRON: Miller, K.G.
SUMMARY: **Confirming Governor's appointments; education.** Confirms interim appointments made by Governor Warner and related to education.

BILL NUMBER: Senate Joint Resolution 390
PATRON: Miller, K.G.
SUMMARY: **Confirming Governor's appointments; technology.** Confirms interim appointments made by Governor Warner and related to technology.

BILL NUMBER: Senate Joint Resolution 459
PATRON: Colgan, C. J.
SUMMARY: **Aviation Centennial Year in Virginia.** Designates 2003 as Aviation Centennial Year in Virginia in honor of the 100th anniversary of the first powered flight by Orville and Wilbur Wright on December 17, 1903, in Kitty Hawk, North Carolina.