

pjmathison

2013-14
PA State Government
Technology Investment
Forecast ©

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Overview

Please enjoy your copy of the [pjmathison](#) 2013-14 Pennsylvania State Government Technology Investment Forecast. Our forecasts help solve the perennial problem of having to plow through and decipher mountains of government budget proposals, bills, acts and websites in order to find information that can benefit, or harm, your interests. They provide advanced details on upcoming technology procurement, consulting, and economic development initiatives, and complement our firm's professional service offerings. Forecast contents include tech-related budgets, priorities, projects, metrics, agencies/offices, organizational updates, legislative references and tips. Tech spending is "marbled" throughout virtually every unit of government. Extensive *mining* (of paper & data), *cajoling* (of people) and *drawing* (on experience) is required in order to produce these information-rich documents.

Our firm's deep-dive into proposed 2013-14 Pennsylvania state government technology-related spending (estimated to *easily* exceed **\$2.0 billion**) reveals: a slightly larger (than last year) overall state budget that belies significant ongoing tech-related spending; greater use of mobile and geospatial technologies by more agencies; large temporary streams of state & federal funding for broadband, health IT and transportation; large continuing streams of state & federal funding for human services; agency websites and online services growing in number or in need of upgrades (or possibly retirement); new funding derived from the regulated gaming & energy industries; and an openness to productivity and streamlining initiatives that entail tech-related spending. In addition, as always, based on experience, unforeseeable opportunities will arise to devise altogether new partnerships between industry, the nonprofit sector, and government that leverage scarce resources for mutual gain.

This forecast contains continually evolving information obtained from an expanding universe of sources: print, digital and human. All dollar amounts herein are rounded and unless otherwise noted refer to operating (vs. capital) budget amounts, state (vs. federal) funds, and the 2013-14 (FY14) time period. PA's FY14 fiscal year begins July 1, 2013 and extends through June 30, 2014. Prior fiscal-year actual amounts may be included, if available, and if they differ measurably (by our subjective definition) from FY14 amounts. Abbreviations are defined (for the most part) and are copiously used throughout this document. Information is presented in an order that approximates functional units. This forecast omits millions of dollars of technology spending embedded within agencies' administrative and seemingly non-tech budgets. We strive to include the essential and provide clarity and avoid the superfluous – a tall order. The Commonwealth of Pennsylvania's main web portal is www.pa.gov.

New in 2013: Our staff votes the Fish & Boat Commission's website (www.fishandboat.com) "Best PA State Agency Website Of The Year" for its simple yet sophisticated design, creative use of technology, ease of navigation, and sensible business model. Lastly, 99% of attempts at humor, displays of bias, and bursts of sarcasm have been edited out of this document. We apologize for the inadvertent remaining 1%.

About pjmathison

[pjmathison](#) is a global government affairs and management consulting firm and a leading advisor on innovation strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our approach combines deep insight into the dynamics of governments, private institutions, markets and, especially, people, with close collaboration at all levels of the client organization. Founded in 1990, our firm is based in Pennsylvania – America's Incubator. Our vision for this forecasting venture is a global online marketplace of users and suppliers (i.e., buyers and sellers) of government technology spending and policy information for political jurisdictions everywhere. For more information, please visit www.pjmathison.com.

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- The Governor's (Guv's) proposed total FY14 Commonwealth of PA state government (CoPA) operating budget from all sources is \$66.7 billion (B). Of this total amount, 43% or \$28.4B (a 2.4% increase over FY13) is derived from the General Fund (GF), the largest state fund. Federal funds make up 33% or \$21.7B of the total amount.
- Six (6) Reform Initiatives: The Guv proposes 6 overarching FY14 CoPA reform initiatives involving the movement of billions of dollars. Generally these initiatives are as follows: privatizing PA Lottery management (mgmt); combining economic development programs and modernizing workforce development programs; Justice Reinvestment Initiative - a data-driven approach to reducing corrections spending and reinvesting savings in strategies that can decrease crime and increase safety; pension plan reform; privatizing PA Liquor Stores and investing the proceeds in education; and a transportation investment initiative. Although they are not paramount, technology implications exist in each of these initiatives and thus are addressed in this forecast.
- Privatization & Innovation: Guv's Advisory Council on Privatization & Innovation was formed in 2011 to review govt operations and recommend areas of refinement to more efficiently & effectively deliver programs & services to citizens. The council identified several areas of CoPA that would benefit from deeper exploration & redesign. CoPA has begun to move forward in some of these areas evidenced by the above privatization efforts (aka "unhatched chickens"). Meanwhile, the Guv will continue to move forward with dozens of relatively smaller efforts--some tech-related--to streamline govt through consolidations or realignments of programs & agencies.
- Guv's Budget Instructions: Agencies under the Guv's jurisdiction were directed in their FY14 budget requests to "continue to evaluate current programs and recommend changes that would improve program mgmt & operations, reduce costs and optimize services." Agencies were asked to answer such questions as: Can the agency eliminate, retool or enhance programs to better leverage & target limited resources to help rebuild the economy? Can the agency outsource programs, or consider privatization or public-private partnerships? As in the past, agencies were not to propose new IT projects unless the projects were approved through OIT's IT strategic review process. Project requests not approved by OIT would not be funded through the budget process.
- American Recovery and Reinvestment Act (ARRA): In 2009, the Prez signed this federal act to "jumpstart the economy" and so forth. PA expected to receive \$32.6B+/- from ARRA. The web site www.recovery.pa.gov was created as a window for the public to see how & where that money is being used to promote economic recovery in PA. For updates on PA's ARRA spending by agency look under the Reports tab for Quarterly Update Reports. This forecast contains \$214 million (M) in tech-related ARRA funding that CoPA expects to receive for FY14.
- In constructing CoPA tax revenue estimates, DOR & OB continue to be assisted by economic forecasts provided by 2 private economic forecasting & consulting firms: IHS Global Insight and Moody's Analytics. PA's economic forecast, condensed to practically-Tweetable brevity, is as follows: Fairly subdued economic growth is forecast for the national economy from Q1-2013 through at least Q2-2014, with stronger growth forecast to occur from Q3-2014 through at least 2017. Short-term, PA's economy remains heavily dependent on the national economy.

Information Technology and PA State Government: FY14 organizational overview, updates and activities...

- Office of Administration (OA, www.oa.state.pa.us), a Cabinet-level agency, provides policy direction & support to all agencies under Guv's jurisdiction for five functions: HR; continuity of govt (CoG); records/directives mgmt; strategic enhancements to help improve results, reduce costs, and enhance customer service; and IT. Office of HR Mgmt manages HR Services Center, the central point of contact for employees & managers for common HR, benefits (e.g., www.pebtf.org), and payroll services and info. CoG office oversees creation of agency CoG plans to ensure continued operation of key govt support functions in the event of an emergency. Enterprise Records Mgmt (ERM) office administers CoPA's records mgmt program, elevates awareness of ERM, provides guidance on records mgmt to state agencies, and manages official documents such as Executive Orders (ExO), Mgmt Directives, Admin Circulars, Manuals, Org Charts and Policies & Procedures, and makes these documents available online. Guv's Innovation Office seeks to improve efficiency & productivity in CoPA operations.
- Human Resources: Employee Self Service (ESS, www.myWorkplace.state.pa.us) is the online system provided to CoPA employees to perform a variety of personal and work-related activities. 2013 OA launched an online orientation process aka onboarding for newly hired employees that will generate an estimated \$433,000 in annual savings and productivity.

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- Gov's Innovation Office (GIO, www.innovation.pa.gov) reviews, approves and tracks initiatives by state agencies to save money, increase efficiency and improve customer service. GIO receives guidance from a steering committee with reps from Gov's Policy Office, OA, GBO and DGS. Initiatives undertaken by GIO are largely accomplished using Innovation Teams (I-Teams) comprised of employees from across state agencies. I-Teams also recommend new initiatives for consideration. GIO metrics as of March 2013 include: 38 participating agencies, 172 initiatives underway, 46 initiatives completed, and \$200.8M in estimated savings. Many of these initiatives are tech-related. Learn about successful initiatives at GIO's website -- and submit your own ideas. FY14 priority projects include: streamlining print, imaging, and mail operations, saving \$7M; coordinating CoPA vehicle fueling operations and fuel purchases, saving \$1M; and implementing electronic grants processing, with the potential to save, at a minimum, \$50M.
- Business Objects (BO) Dashboards (Db's): Offered by OA to agencies under Gov's jurisdiction to create reports that weave together data from multiple systems. The four Db's currently available: HR Services Center Executive Db, Manager's Db, Overtime Db, and Workforce Statistics.
- OA Office for Information Technology (OIT, www.oit.state.pa.us) oversees investments in and performance of all IT systems across the state. OIT establishes & implements policies, standards, and guidelines re planning, mgmt, acquisition, and security of IT assets in all state agencies under Gov's jurisdiction. OIT is responsible for IT procurements, including hardware, software, services and telecom. OIT provides direct oversight for large, enterprise-wide initiatives, such as IT consolidation, shared services, cyber security, enterprise IT tech support, and PA Justice Network (JNET). OIT is lead by Deputy Secretary for IT/State CIO. OIT executive staff also includes Deputy CIO; Director, Office of Enterprise Services & Solutions; Director, Office of Policy, Planning and Performance Mgmt; and Executive Director, JNET. OIT IT Strategic Plan 2012-2015 (19 pgs) includes 10 OIT goals and 11 OIT objectives for time period through FY15. Downloadable annual reports for OIT offices, outlined below, are available on OIT's website.
 - Office of Enterprise Technology Services (OETS) manages CoPA's enterprise data center and manages delivery of shared services, e.g., email, help desk, statewide telecom network, GIS, security and tech support to state agencies. OETS supports PA's official public GIS clearinghouse, PA Spatial Data Access (www.pasda.psu.edu), developed & maintained by Penn State U (PSU) / used by DCNR, DEP, DOT, et al.
 - Office of Enterprise Services & Solutions (OESS) builds & maintains enterprise applications (apps), develops web-based apps, provides enterprise app shared services, and maintains CoPA's enterprise web portal. OESS manages the Integrated Enterprise System (IES) by SAP Inc., which provides core budget, finance, HR, payroll, procurement and reporting functionality to state agencies. IES team works with agencies to refine business processes and system operating efficiencies.
 - Office of Enterprise Policy, Planning and Performance Mgmt (PPPM) conducts research and maintains CoPA's enterprise architecture, issues technology standards & policies, coordinates agency IT strategic plans and maintains enterprise project mgmt activities. PPPM oversees enterprise IT procurement including issuance & mgmt of IT statewide contracts and assisting agencies with IT contract creation & mgmt. PPPM also oversees the eHealth Partnership and the statewide broadband initiative.
 - JNET (www.pajnet.state.pa.us) Office: JNET is CoPA's primary public safety and criminal justice info broker providing an integrated, secure, justice portal to the criminal justice community. State agencies contributing info to JNET: AOPC, JCJC, PBPP, PCCD, PCS, DOC, DOH, DPW, DOT and PSP. JNET Annual Report FY12, downloadable at JNET website, includes Five-Year 2009-2014 Strategic Plan that identifies key JNET projects, processes and activities through June 30, 2014.
- IT Professional Training: Effective March 2013 CoPA replaced its Electronic Learning Mgmt System with SAP Learning Solution (LSO), accessible through ESS above, for all CoPA training-related activities. Courses require approval of either an employee's supervisor or agency training officer to attend. In addition to LSO, a Govt IT Manager Certificate Program is available for employees through Harrisburg U. of Science & Technology.
- Project Mgmt: Enterprise Project Mgmt Office (EPMO) provides business process reviews and portfolio & project mgmt services to agency IT employees. EPM Methodology Process Guide contains foundational project mgmt process info for use within agencies that do not currently have a methodology in place. The Guide has 6 processes to be followed when managing a project and each has specific deliverables associated with it: Pre-Initiation, Initiating, Planning, Executing, Monitoring and controlling, and Closing.

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- IT Policies are presented in IT Bulletins (ITBs) and Mgmt Directives (MDs). ITBs direct agencies to engage or avoid specific practices and specify enterprise product standards. Technologies & standards set by ITBs are summarized in periodically updated Enterprise IT Standards Quick Reference Guide. MDs are general policies established to guide agency activities. ITBs & MDs can help vendors evaluate a fit within CoPA.
- IT Procedures are implemented across all agencies under Guv's jurisdiction to facilitate cross-agency coordination, best practices, standards and collaboration. Procedures exist in 5 categories as follows:

- Procurement: OIT is responsible for all IT procurements. Services available to agencies include: write business & technical requirements, develop statements of work, and ensure that upfront issuance of procurement documents facilitate back-end evaluation, award, and payment; agency-specific assistance for individual procurements; and develop new contracts and maintain existing statewide contracts. OIT reviews & responds to Notice of Forthcoming Procurements, Emergency, and Sole Source requests and manages specific procurements that are not delegated to agencies. For further guidance, see ITB-PRO001 - IT Procurement Review Process. In addition, PA's Master IT Services Invitation to Qualify (IT-ITQ) is a statewide, multiple-award contract that provides agencies an efficient way to procure IT services from pre-qualified vendors. Agencies under Guv's control are required to use IT-ITQ process, which provides a "hunting license" for vendors -- vendors still must market their products & services. See DGS section below for more about ITQ process. Procedures for using IT-ITQ are based on project cost:

Cost	Procedure
\$50,000 or under	Use any qualified vendor from the appropriate ITQ service category.
\$50,000.01 to \$250,000	Solicit all qualified vendors from the appropriate ITQ service category. These procurements can follow an expedited RFQ process.
\$250,000.01 or over	Solicit all qualified vendors from appropriate ITQ service category. Follow standard RFQ process, which mimics RFP process. (Requires higher-level approval).

- Project Approval: Agencies must get approval, through a specified process, before initiating any IT project that meets the parameters defined in ITB-EPM006 - IT Projects and Project Mgmt. Projects that exceed \$1M must assign a project manager.
 - Strategic Planning: Agency IT strategic planning helps accomplish agency business objectives by defining IT strategy, goals, initiatives and resources. IT SPs should include the agency's vision, Guv's program policy guidelines, business objectives with performance metrics, planned outcomes, IT vision, and IT objectives with metrics and risk analysis. Agency IT SPs are due one-week after submission of budget info to GBO.
 - Service Engagement Request Process (SERP): provides a consistent methodology and review process agencies can use to request selected OIT services. SERP is for new projects & events, and for items that require new or substantial design or system study. It is not for changes to existing services already provided by OIT, or for Data Powerhouse requests for service. SERP projects generally must be funded by the requesting agency, and SERP does not replace Procurement or Project Approval processes above.
 - IT Services Catalogue describes services offered by OIT to CoPA agencies.
- IT Applications: OIT supports state IT solutions by cataloging app assets, managing enterprise apps, developing custom apps and establishing development standards. Agencies are required to produce accessible web sites, or, if this is not achievable, info must be made available thru alternative means. Agencies may either procure IT apps or have apps custom built as follows:
 - Agencies can procure apps in 2 ways: Primary (statewide) Contracts -- enable agencies to procure supplies/services from established vendors in an expedited way (most software is purchased using ASAP/Dell contract); and Enterprise License Agreement -- OIT negotiates these agreements for certain apps (each app has a designated contact for procurement & support).
 - Custom-Built Apps: Agencies can develop custom apps internally or procure services of a third-party app developer. OIT also provides app development services for selected agencies. Agencies needing app development services can submit a request via the SERP process.

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- IT Infrastructure: OIT supports hardware, software, networks, facilities and other tech infrastructure that drive CoPA daily IT operations. Infrastructure services include end-user support for hardware & network issues and for apps agencies use to manage IT assets & services. Infrastructure includes: Data Powerhouse - provides data processing services; Enterprise Data Center (www.esfportal.state.pa.us) - houses servers for agency web apps; OA-LAN mgmt - provides PC, network, conference room and printer support for agencies; and Service mgmt – helps agencies provide IT service to their employees (“Remedy” app supports these IT service mgmt functions).
- Telecommunications: OIT telecom services include consulting with agencies to determine requirements and helping to coordinate procurement and use of telecom equipment, software and services in 4 areas: cable/satellite TV; conferencing - voice, video and web; data network – mostly provided through Verizon (remote access provided through Juniper, Cisco and selected business partners); and voice (phone & radio). Penn Connect Unified Communications (www.pennconnect.pa.gov) is CoPA’s integration of various communications tools such as telephone, instant messaging, email and web conferencing.
- IT Security: CoPA cybersecurity is lead by Chief Info Security Officer, Enterprise Info Security Office (EISO, <http://cybersecurity.state.pa.us>), within OIT. CoPA’s Computer Incident Response Team (PA-CSIRT) and EISO together provide a rapid reporting & response capability to help mitigate & prevent future incidents.
- 4,800+ PA state employees made six figures in 2012. CoPA’s CIO, at \$137,200, was 1,159th highest on the list. Psychiatrists were the highest paid state employees. Discuss. (Source: *The Patriot-News*)

Hereafter are proposed FY14 tech-related budgets and supporting information presented by functional unit...

- \$130.06M to Executive Offices (EO) for OA tech-related uses allocated as follows:
 - \$112.97M (FY13 = \$118.18M) to OIT for Commonwealth Technology Services allocated as follows: \$51.91M from GF; \$16.42M (FY13 = \$26.7M) in ARRA–Broadband (Bb) Tech Opportunities (BTO) funds; \$5.15M (FY13 = \$4.5M) in ARRA–BTO–Mapping funds; \$163,000 in federal J-NET funds for infrastructure support; \$36.6M (FY13 = \$43M) for Integrated Enterprise System; \$2.26M from Motor License Fund (MLF); \$417,000 for shared services delivery; and \$50,000 for project mgmt resources.
 - \$7.7M (FY13 = \$0) for the Technology Innovation Investment Fund (TIIF) - to fund enterprise investments to improve CoPA’s IT infrastructure (plus \$7.7M/year for FY15 through FY18).
 - \$2.28M for Office of Strategic Services.
 - \$7.18M for HR Shared Service Center.
- \$2.55M in federal funds to PA Commission on Crime & Delinquency (PCCD, www.pccd.state.pa.us) for tech-related uses allocated as follows: \$150,000 for Statistical Analysis Center; \$800,000 (FY13 = \$1M) for criminal I.D. technology; \$1M for Statewide Automated Victim Info Notification; \$500,000 (FY13 = \$2M) for National Instant Criminal Background Check System (NICS) Act Record Improvement Program; and \$100,000 (FY13 = \$0) in SORNA funds (federal Sex Offender Registration & Notification Act of 2006). Another PCCD website is PA Crime Victims and Identity Theft Action Plan (www.identitythefactionplan.com).
- \$3.68M (FY13 = \$3.32M) from GF, plus various federal funds, to PCCD for General Operations (GO), portion for Office of Research, Evaluation and Strategic Policy Development (ORESPD), Office of Criminal Justice System Improvements (OCJSI), and Office of Victims Services (www.pacrimevictims.com).
 - ORESPD, with the assistance of an advisory committee and staff, evaluates performance of grant recipient projects, develops best practices and researches emerging criminal and juvenile justice trends to ensure federal & state funds are allocated to the most effective initiatives. PCCD also compiles crime, corrections, and sentencing data; develops unified population projections for sentencing, corrections, and probation & parole; monitors system performance measures to ensure ongoing compliance; and responds to special justice research & data requests from federal, state, and local agencies plus the general public.
- \$7.68M, portion for tech-related uses, to EO for Juvenile Court Judges’ Commission (JCJC, www.jcjc.state.pa.us) allocated as follows: \$2.68M from GF for GO; and \$5.0M increase for Juvenile Probation

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Services JRI – to identify & target evidence-based interventions for high risk offenders, assess juveniles at risk to re-offend and facilitate analysis & collection of offender specific case plan data. JCJC develops & improves juvenile probation services throughout PA. JCJC participates in JNET by assisting with design, development and implementation of the Juvenile Tracking System (JTS), which is part of JNET. In FY13 all 67 PA counties participated in JCJC's grant-in-aid program, which supports software to enable counties to participate in JTS.

- \$66.5M total to Guv's Office of the Budget (OB, www.budget.state.pa.us) : OB's two main operational areas are Guv's Budget Office (GBO), which oversees preparation & implementation of CoPA's budget, and Comptroller Operations, which oversees CoPA's accounting, payroll and financial reporting systems. In addition, Office of Admin Services provides EOs with budget mgmt, purchasing, payment, messenger and facilities mgmt services. Office for Performance Improvement works with state agencies to help make their operations more efficient & effective. OB's online resources include:
 - PennWATCH (www.pennwatch.pa.gov) : FY13 Guv announced launch of CoPA's transparency website, which stems from Act 18 of 2011. PennWATCH posts detailed info on payments made by agencies, including names & address of recipients, as well as agency employee & compensation info. Per Act 18, PennWATCH data is updated monthly and is available online for 8 yrs from when it was posted.
 - State Performance Dashboard (SPD): allows readers to review activities & results of 30 state agencies and see CoPA efforts "to deliver quality services and improve the lives of PA's citizens." SPD is organized into 7 goal areas, summarizes agency key objectives, and presents results for dozens of distinct measures.
 - Vendor Payment Inquiry: provides most vendors with an immediate status report on their invoice.
- \$35.45M from GF to Attorney General (AG, www.attorneygeneral.gov) for GO, portion for tech-related uses. AG's CIO leads the agency's IT Section. Bureau of Consumer Protection (BCP) operates website for PA citizens to file consumer complaints against an individual or company. Complaints can be filed re consumer issues, health care issues, insurance fraud, violations of Do Not Call Law, SPAM & junk mail, and other subjects. A Do Not Call online enrollment form is also provided. BCP also operates Home Improvement Contractor (HIC) website <http://hicsearch.attorneygeneral.gov> where consumers can lookup HICs who must register per state law. Other tech-related BCP services & programs include an Identity Theft Toolkit and FAQs re Telemarketing in PA. Plus \$1.3M for Child Predator Unit, which investigates cases in which a minor is the victim of a sexual solicitation from an adult via the Internet. AG's office has created an Internet safety program called Operation SAFE SURF that includes a DVD created for adults to help them better understand the importance of Internet safety.
- \$7.12M (FY13 = \$12.5M) in federal funds to AG for Middle Atlantic-Great Lakes Organized Crime Law Enforcement Network (MAGLOCLLEN, www.riss.net/Centers/maglocclen), a regional info sharing system which is congressionally funded and administered by the U.S. Dept of Justice.
- \$40.78M to Dept of Auditor General (DAG, www.auditorgen.state.pa.us) for GO, portion for tech-related uses. DAG IT functions are the responsibility of its Office of Mgmt Info Systems, overseen by a Director.
 - DAG is in the midst of a comprehensive technology review that will result in an IT strategic plan, similar to the Treasury's. DAG still uses Lotus Notes for electronic communications and DAG does not have smart phones, despite that 60% of employees work in the field. Other examples of DAG tech needs: Computers used by auditors are between 7 and 12 yrs old; On average, 8 computer hard drives crash each month; DAG is in danger of running out of data storage space by June 2013; Windows XP operating system that runs all DAG computers will no longer be supported in 2014; Telephone system is >12 yrs old and parts to fix it are no longer available; DAG is the only CoPA agency that submits payroll to the Treasury on paper - beginning in 2014, Treasury will no longer accept our paper-based transactions; Network security needs to be a priority; Current bandwidth limits DAG's ability to take advantage of video conferencing; Capacity to do electronic data analytics - to help develop risk-based audit practices so auditors can focus attention on areas most at risk — is limited by hardware & software; Audit tracking system is out of date and forces a labor- and paper-intensive process that further reduces auditing abilities; and Admin software for payroll, accounting, and personnel mgmt is out of date – current business processes are still too much paper-based.
- \$12.0M (FY13 = \$7.43M) to Treasury Dept (TD, www.patreasury.gov) for IT modernization. Out-year projections for IT modernization: FY15 = \$9.0M and FY16 = \$5.0M. TD's CIO oversees the agency's Bureau of IT. Via its website, TD offers several financial education webinars and other online resources for the public, such as:

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www.retirepa.com which offers tips & tools that help Pennsylvanians plan, save and retire with financial security; an eBay store (<http://stores.ebay.com/pastatetreasury>) for selling unclaimed property; and Contracts e-Library (www.patreasury.gov/eContracts.html), a centralized source of info about CoPA goods & services contracts. TD continues to operate the Campus Energy Efficiency Fund (CEEF) financing program, in partnership with Blue Hill Partners, designed to help up PA colleges & universities cut utility costs through energy efficiency improvements that also contribute to a cleaner environment. TD will invest as much as \$10M, which is expected to leverage total investments of up to \$45M in projects that include technologies such as efficient lighting, advanced heating & cooling systems, building controls and automation, and on-site generation.

- \$7.96M (FY13 = \$6.7M) to Dept of Aging (DOA, www.aging.state.pa.us) for GO, portion for tech-related uses. The “Aging IT Administrator” (that’s an IT administrator who happens to work for DOA) oversees DOA’s IT support functions. In FY13 DOA completed the 2012-2016 State Plan on Aging (SPA), a “living document.” Every 4 years DOA prepares this strategic plan. A SPA goal is to use technology to enhance coordination, delivery and assessment of services. Tech-related objectives include: capitalize on available & emerging assistive technologies, and ITs, that help the elderly and those with disabilities live active, healthy lives; use data & benchmarking to help inform decisions and drive outcomes; promote use of technology to facilitate aging in place; track development of systems, procedures, or technological capabilities; provide individuals with info on provider performance (via public access to Internet-based provider performance reports) so they can make informed choices; increase awareness of adaptive technologies, remote monitoring, and assistive devices; and seek new mechanisms to reach individuals including expanding use of successful tech-based models.
- \$22.75M (FY13 = \$26.2M) from GF to Dept of Agriculture (DA, www.agriculture.state.pa.us) for GO, portion for tech-related uses. Plus \$2.72M (FY13 = \$5.4M) for research-related activities allocated as follows: \$2.72M (FY13 = \$3.35M) from Racing Fund for Equine Toxicology & Research Lab; \$0 (FY13 = \$787,000) for agricultural (ag) research; \$0 (FY13 = \$270,000) for hardwoods research & promotion; \$0 (FY13 = \$494,000) for food marketing & research; and \$0 (FY13 = \$500,000) for PA Preferred Program Licensing. Ag research grants – to support scientific research into plant & animal health and identify prevention mechanisms for disease and proactive mechanisms for enhancing quality & quantity of ag products and industry technology. DA’s CIO is responsible for all IT & telecom needs for DA, and serves as CIO for the Animal Health Commission / PA Animal Diagnostic Lab System. By 2014, Bureau of Food Safety and Lab Services plans to launch an online restaurant safety inspection reporting system that has been under development since 2012.
 - DA’s mission of promoting & protecting ag and related industries is performed through several dozen programs that entail in varying degrees the identification, capture, recording, manipulation, reporting, monitoring, etc. of very large amounts of data from disparate sources (e.g., animal, mineral and vegetable) and the exchange of this data in various formats directly to and between disparate audiences.
- DA online services:
 - PA Preferred® (www.papreferred.com) : members of PA Preferred are licensed to use the Program’s registered logo. Products bearing the logo have been grown, harvested and, if applicable, processed in PA.
 - PA Animal Health Emergency Reporting Diagnostic System (PAHerds), developed & implemented by Bureau of Health & Diagnostic Services (BHDS), is an integrated database that combines an animal tracking app and lab info mgmt system. PAHerds was the prototype used to develop USAHerds.org. DA owns the software but it is offered to other states free of charge by a licensing agreement.
 - Weights and Measures Inspection Search: DA is tasked with annual inspections on many commercial devices throughout PA, including fuel dispensers, scales, scanning equipment, and timing devices.
 - Pesticide Hypersensitivity Registry: DA maintains a list of hypersensitive individuals who requested to have their home and/or other location placed in the Registry. The Registry is distributed to all pesticide businesses 4 times/year. These businesses are required to notify (via in-person, phone, mail, text msg, etc.) any registered person if they will be making an application to/near a listed location.
 - Taxidermy Search: DA is the licensing entity for PA taxidermists. Recordkeeping and reporting requirements for both the taxidermist and DA apply.
 - Other Online Services provided by DA or third parties include: AgMAP (<http://agmap.psu.edu>), ag business directory; Amusement Ride Inspection System; Certified Chronic Wasting Disease Technicians database for use by deer farmers, et al.; Certified PA Organic Growers database; Certified Poultry Technician database; Dog Kennel inspections database; FarmMAP (<http://farmmap.psu.edu>), a place to advertise farm land to

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buy, sell or lease; Farm Markets & Stands data base and maps; Food Safety Inspection Results; Humane Society Police Officers Registry; Nursery Dealers & Stock Locator; PA Plants (www.paplants.state.pa.us), a portal for plant industry professionals who use DA services: DA Weekly e-Newsletter; Ag Law Resource & Reference Center; Photo Gallery; Premises Registration for livestock operators; and Research Grants.

- Other DA tech-related programs:
 - Ag Technology (Matching) Revolving Loan Program allows PA farmers to compete annually for low-cost loans. Farmers demonstrating greatest need and proposing most innovative use of technology are awarded low-cost loans for projects that increase productivity or provide entrance into new product markets.
 - Brand Records: BHDS has the authority to impose requirements & methods to identify domestic animals owned, kept, possessed or transported in PA. BHDS authorizes & records the adoption and exclusive use of unique ID marks, numbers or devices, including distinctive branding marks, tattoos, microchips, and other forms of ID that are affixed upon domestic animals. In addition, BHDC maintains a registry of such forms of ID. Interested parties apply for, and periodically renew, a license.
 - Biofuel Development and In-State Production: DA assures compliance with Act 78 of 2008, which mandates the use of renewable fuels and promotion of the production of renewable fuels in PA.
 - Dangerous Dogs: Per PA law, if a dog is deemed dangerous by a judge, the owner must register/re-register the dog with the proper office, microchip the dog, comply with any court orders, and pay an annual fee.
- \$29.9M total to Dept of Banking & Securities (DBS, www.dobs.state.pa.us). DBS resulted from merger effective Oct 1, 2012 between Dept of Banking and PA Securities Commission. DBS regulates financial services (FS) industry through licensing functions and examination of records, filings, accounts, policies and practices of FS institutions & professionals. This merger purportedly reduced costs by \$747,000 in FY13 and is anticipated to produce an additional \$1.25M in savings in FY14 resulting from ongoing changes to DBS business processes. FS institutions use online forms & apps on DBS's website to comply with FS laws & regulations. Online consumer resources include: Investor Education (www.secure.psc.state.pa.us/investor); Consumer Financial Education (www.moneysbestfriend.com); and Financial Institution Search (www.instsearch.state.pa.us). DBS also utilizes an 800 phone # and online complaint/inquiry form and related support systems to assist consumers.
- \$14.04M total (mostly derived from billing customer agencies) to Civil Service Commission (CSC, www.scsc.state.pa.us), which administers PA's merit system. CSC operates computerized application, scheduling, examination, imaging, and workflow systems. FY13 initiatives include: explore additional opportunities to improve operational efficiencies & effectiveness, enhance delivery of customer services and leverage IT resources to better provide merit services to applicants and client agencies. Improvements already underway include: deploying new applicant examination work stations at regional offices; implementing plans for converting to new electronic document system; initiating comprehensive study of CSC operations to identify opportunities for streamlining processes and expanding recruitment & outreach efforts to promote state & local govt employment to the public & veterans. FY14 program measures include projected 102,000 persons taking computerized exams. CoPA employees can view most positions that are available on the State Employees Job Net (<http://jobnet.scsc.state.pa.us>). Reduced budgets of client agencies have increased reliance on CSC to promote individual agency employment needs via the web, hard copy, and audio PowerPoint presentations. Strengthening synergies with PA CareerLink continues to be a focus. Number of applications CSC receives annually online continues to increase and by paper to decrease. CSC tech-related units & activities include:
 - Bureau of IT Systems consists of 4 units: Enterprise Governance and Program Mgmt; App Development; Enterprise Network and Technical Support Admin; and Database. FY12 accomplishments included: Transitioned to Verizon Enterprise Internet Security infrastructure; Converted stand-alone servers to virtual servers and upgraded to Windows Server 2008; Completed discovery phase to migrate to new electronic document mgmt system; Finalized 4-year Enterprise Agreement for all Microsoft Licensing; Deployed PCs within CSC; Virtualized & modernized server environments; and Enhanced CSC website to improve customer service quality and to increase promotion of employment opportunities.
 - Bureau of Personnel Assessment (BPA): develops exams to assess candidates needed to meet HR requirements of client agencies; coordinates admin of computerized written exams, work simulation and oral exams at statewide locations; evaluates qualifications of candidates, and rates their experience & training; conducts applied research to evaluate & improve personnel selection techniques; surveys client agencies on

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- their projected hiring plans and makes this info available online; and develops exams and administers specialized testing for agencies on a contracted basis.
- Administrative Services Office provides a variety of tech-related services. Its Central Records and Imaging Unit converts internal & external paper documents to electronic documents. Additional services include procurement and approval of software licenses and maintenance agreements, and executing equipment maintenance, repair and rental agreements.
 - Legal Services Office online resources include: hearings schedule, issued adjudications, forms for filing appeals, links to prior adjudications, and info needed to prepare for hearings such as court opinions.
 - Bureau of Employment Services serves as the central hub for employment info and computerized test administration at CSC's HQ and in coordination with regional offices.
 - Video: A CSC commissioner participated in production of a recruitment video public service announcement and CSC, in partnership with DL&I, developed and posted to its website a new realistic job preview video.
- Dept of Community & Economic Development (DCED, www.newpa.com) is the main CoPA portal that tech industry stakeholders should use to explore and apply for grants, loans and other incentives, including those outlined below. The FY14 DCED budget emphasizes public/private partnerships, international business development, and the proposed PA Business Development Authority, which, if approved, will consolidate 8 business financing programs into one large pool of assets totaling \$1.1B and leverage additional dollars and create a more flexible financing tool. Proposed Small Business Champion Network is a team of business experts within DCED to help employers navigate permitting processes, identify resources, and connect with PA's statewide small business support network. FY14 DCED Tech Investment program measures include: jobs created = 2,660; jobs retained = 5,250; businesses assisted = 4,000; and new tech companies established = 75.
 - DCED's Single Application for Assistance (www.esa.dced.state.pa.us) allows an applicant to apply for funding programs using one form. A Program Finder provides applicants with a list of programs based on eligibility and/or use of funds, and provides a short program description along with links to the program's fact sheet and guidelines. To find info on executed contracts for a grant, loan or tax credit filed through DCED, go to the Investment Tracker (www.dced.state.pa.us/investmenttracker).
 - \$5.94M (FY13 = \$941,000) to DCED for Marketing to Attract Business, which funds efforts to increase domestic & foreign investment in PA through targeted marketing & advertising, including electronic magazine *Keystone Edge* (www.keystoneedge.com). Cornerstone of all marketing efforts is NewPA.com, DCED's website that highlights PA business success stories, helps entities understand PA's business climate and available state support, and connects to websites such as www.PASiteSearch.com, which in turn connects to 2 GIS-based online directories for finding a suitable business location or a brownfield site for redevelopment.
 - \$5.81M to DCED for Marketing to Attract Tourists, which funds a marketing agenda including www.visitPA.com and various print & online publications. Tourism Office (TO) utilizes Twitter, Facebook, YouTube, Flickr and Foursquare to provide customized, personalized and targeted info directly to travelers in an authentic real-time medium. Guv proposes creation of a public-private PA Tourism Partnership to promote PA to domestic & international travelers. Partnership will consist of reps from TO, DCNR and members of tourism industry.
 - \$8.58M (FY13 = \$6.1M) to DCED for World Trade PA (WTP), which promotes PA exports in international markets and pursues foreign investments into PA. WTP reports that it has improved the existing performance-based compensation system for its international contractors and regional partners; developed sector-specific, fee-based initiatives such as the PA Mining Equipment Export Initiative; enhanced private sector participation in WTP program; and established new connections between PA companies, universities and partners worldwide. FY14 program measures include: \$553M in export sales facilitated; 22 foreign direct investment projects completed; 2,130 businesses assisted; and \$178M in FDI / capital investment facilitated.
 - \$9.9M to DCED for Discovered in PA, Developed in PA (D2PA), which aims to build capacity to better support PA businesses and to spur creativity & innovation -- from business incubating, to mentoring, to marketing and more. One goal is to capitalize on PA's research universities across several disciplines (life sciences, robotics, nanotech, energy, advanced manufacturing & materials, IT, etc.) as well as its network of economic development (e/d) partners who focus on tech transfer and creation of start-ups. D2PA funds innovative proposals to promote entrepreneurship, encourage tech transfer and commercialization of IP, enhance capacity of e/d service providers, and support other innovative business development initiatives.

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- \$1.5M from Broadband Outreach and Aggregation Fund (BOAF) to DCED for BO grants, including \$50,000 for admin. BOAF grants support: (1) Outreach programs for political subdivisions, e/d entities, schools, health care facilities, businesses and residential customers concerning the benefits, use and procurement of Bb services; and (2) Seed grants to aggregate customer demand for Bb services in political subdivisions with limited access to such services. Plus \$800,000 (FY13 = \$1.1M) in ARRA funds to DCED for Broadband Technology Opportunities Program (BTOP), including \$60,000 (FY13 = \$81,000) for admin.
- \$19.0M (FY13 = \$28.0M) from Ben Franklin Technology Development Authority (BFTDA) Fund to DCED for BFT Partners (BFTP) program (<http://benfranklin.org>) which supports 4 regional BFTP centers and a statewide office. Includes \$14.5M transfer from GF to BFTDA. In FY13 BFTP launched PA Energy Map™ (<http://energymap.benfranklin.org>), an interactive, web-based map that details PA's traditional & alternative commercial energy markets and higher ed assets. The Map was developed by BFTP of SEPA and is a product of BFTP of PA. Funding was provided by DCED through BFTDA and Alternative Energy Development Program.
 - BFTDA, established by Act 38 of 2001, promotes advanced technology in traditional & emerging industries, and small business, through a series of programs. BFTDA also provides vehicles for investment for university-based and entrepreneurial innovation through four programs: BFTP centers; risk capital to venture partnerships that invest in PA companies; technology development grants, which support consortia of PA companies at the cutting edge of emerging technologies; and university-research tech transfer grants.
- Innovation Partnership (IPart, <http://innovationpartnership.net>), launched FY13, is a consortium of PA e/d and biz assistance organizations, including BFT Partners. IPart partners comprise a single SBIR/STTR (Small Business Innovation Research / Small Business Tech Transfer) federal funding assistance program for the entire state.
- \$3.0M from Tobacco Settlement Fund (TSF) to DCED for 3 regional PA Life Sciences Greenhouses (LSGs) that provide early-stage risk capital and serve as a catalyst for development and creation of new life-science-related products and companies per Act 77 of 2001. The 3 LSGs are as follows: LSG of Central PA (www.lsgpa.com), BioAdvance-SEPA (www.bioadvance.com), and Pittsburgh LSG (www.plsg.com). Annual TSF funds have been "redirected" for various purposes in varying percentages since 2001, most recently per Act 87 of 2012.
- \$0 from TSF allocated to Health Venture Investment Account (HVIA). Background: HVIA account revenues were provided by an appropriation of **\$60M** from TSF per Act 77 of 2001 and transfer of **\$6M** from Machinery & Equipment Loan Fund (MELF) per Act 53 of 2008. Funds were invested in multiple limited partnerships that make venture capital (VC) investments in health care, biotech or in other health-related businesses expected to grow substantially. Plus \$0 from TSF to Biotechnology Commercialization Account (BCA). Background: BCA revenues were provided by the transfer of \$6M from MELF per Act 53 of 2008, distributed equally to the 3 LSGs.
 - The \$66M above for HVIA has been leveraged more than 35:1 in additional capital for PA investments. HVIA valuation decreased by 5.3% to \$59.38M, net of fees, for the 12 months ending 6/30/12. General Partners in the 4 VC firms managing HVIA investments report that they have sufficient reserves or access to capital to successfully overcome economic headwinds. 27 PA life science firms have been funded as of 12/31/11.
- \$39.5M (FY13 = \$29.5M) to DCED for PA First grant program, a "closing fund" that supports job creation & retention and workforce development projects. Eligible tech-related uses include: customized or advanced training for employees, infrastructure improvements, land or building acquisition & improvements, machinery & equipment purchase, and working capital. Clawback provisions apply if grantee does not honor its commitments.
- \$11.88M to DCED for Partnerships for Regional Economic Performance (PREP) program, which provides grants to consortia of e/d service providers that may co-locate, develop partnership agreements, or otherwise create a coordinated & performance-based service delivery system. PREP currently supports PA's 7 Industrial Resource Centers (www.pamade.org) and 18 university & college based Small Business Dev. Centers (www.pasbdc.org).
- \$1.78M to DCED for Early Intervention for Distressed Municipalities - to develop & implement multiyear financial plans to assist municipalities and counties *before* they reach a crisis point aka Act 47. Plus \$9.0M (FY13 = \$12.0M) from Municipalities Financial Recovery (MFR) Revolving Aid Fund to DCED for distressed community assistance. When local govts are facing potential financial insolvency, MFR program (Act 47) assists through

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grants, no-interest loans, and extensive technical planning assistance. Act 47 also empowers DCED to declare certain municipalities distressed and provides grants & loans to aid in the recovery process. FY14 program measures: 16 early intervention communities and 23 Act 47 communities to be assisted.

- Guv proposes to implement an early warning system (EWS) to identify potentially distressed municipalities and work to prevent them from becoming financially distressed. The EWS will either push the municipality toward the Early Intervention program (at a total cost of \$150,000 - 5% of the average lifetime cost of Act 47) or avoid both programs all together. The EWS would also produce data and regional help to allow those municipalities already in Act 47 to make an early exit from the program.
- Municipal Statistics: DCED is responsible for collecting a variety of data from counties, cities, boroughs, townships, school districts, and municipal authorities. DCED Center for Local Govt Services fulfills this requirement by utilizing forms and creating reports, e.g., Tax Reports (<http://munstatspa.dced.state.pa.us>).
- \$1.09M (FY13 = \$892,000) to DCED for Municipal Assistance Program (MAP) including: \$350,000 in federal FEMA technical assistance funds and \$100,000 (FY13 = \$250,000) in federal FEMA mapping funds. MAP funds support activities including 1) shared services - such as "high impact projects," regionalization, consolidation, or merging of services, boundary changes, or shared equipment and 2) flood plain mgmt - to reimburse municipalities for costs incurred, including for mapping, per Act 166 of 1978 – PA Flood Plain Mgmt Act.
- \$14.1M in federal funds to DCED for State Small Business Credit Initiative (SSBCI), including \$487,000 for admin. The federal Small Business Jobs Act of 2010 created SSBCI, which was funded with \$1.5B to strengthen state programs that support lending to small businesses & manufacturers. Under SSCBI, participating states use the federal funds for programs that leverage additional private lending to help finance small companies that are creditworthy, but are not getting the loans they need to expand and create jobs. Tech companies are eligible.
- \$92M (FY13 = \$85.5M) to DCED for transfer to Commonwealth Finance Authority (CFA) – the \$6.5M increase is to provide debt service for e/d bonds. Plus \$2.8M (FY13 = \$2.5M) to CFA for GO. CFA was established as an independent agency of CoPA to administer PA's economic stimulus packages. CFA holds fiduciary responsibility over the funding of numerous e/d programs & investments. CFA has approved >\$1B in grants, loans and guarantees, including \$197.5M in guarantees for 8 VC funds that invest primarily in tech-based ventures.
- \$3.7M from Marcellus Legacy Fund (M-LF) to CFA for energy development projects. Q1-2013 CFA announced initial stream of funding--\$14.5M--for 5 programs established by M-LF (per Act 13 of 2012) to support conservation projects and environmental protection measures. The 5 programs include Baseline Water Quality Data Program that provides grants to use for water sample collection & analysis to document existing groundwater quality conditions. Applications are currently being accepted through July 31, 2013 for consideration at Nov. 13, 2013 CFA meeting. Future dates TBD.
- \$70.9M to DCED for other tech-related programs allocated as follows: \$25.8M from MELF, including \$778,000 for GO, for low-interest loans to manufacturing, industrial, medical, IT, biotech, and other businesses; \$25.5M (FY13 = \$28.3M) from Small Business First Fund, including \$19.0M for loans, \$1.5M for pollution prevention loans, \$0 (FY13 = \$3.0M) in federal EDA funds for loans, and \$3.0M for Community E/D Loans; \$19.4 million for Infrastructure & Facilities Improvement Grants; \$200,000 increase to GO for Base Realignment and Closure support activities for communities competing to justify maintaining U.S. military facilities in PA; \$0 (FY13 = \$1.5M) for PA Infrastructure Technology Alliance (www.ices.cmu.edu/pita.asp), a collaboration between Carnegie Mellon U (CMU) and Lehigh U (LU); and \$0 (FY13 = \$100,000) for powdered metals.
 - FY13 Guv announced \$1M from DCED to CMU & LU for Research for Advanced Manufacturing in PA aka RAMP program, which provides grants from \$25,000 - \$75,000 to grad students who will work with for-profit companies to develop a new product or adopt cutting-edge production methods.
- Various tax credits, deductions, exemptions, and exclusions are provided which result in reductions in revenue that would otherwise be received by CoPA at current tax rates. These so-called tax expenditures (TEs) are characterized by the fact that they confer special treatment to specific taxpayers, activities, or goods or services. TEs listed in the FY14 budget are the accumulation of many prior legislative sessions. In 2013 a bill was introduced to provide producers of video games with a tax credit for relocating to PA. Tech-related TEs include:

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- \$10.1M available thru DCED and DOR for Job Creation Tax Credits to high-tech and other companies in the amount of \$1,000 per job created for each year in the approved term. The tax credit may be applied against several PA business taxes. Other terms & conditions apply, including certain changes made to the program per Act 85 of 2012. 125+/- companies and 125+/- individuals in PA benefit from this program.
- \$55.0M (including \$11M set aside for small businesses) in Research & Development (R&D) Tax Credits available thru DCED & DOR for companies performing qualified research in PA. The credit may be applied against several PA business taxes. Other terms & conditions apply, including certain changes made to the program per Act 85 of 2012. 490+/- companies in PA benefit from this program.
- \$60.0M in state tax credits available thru DCED's Film Marketing Office (FMO) in the amount of 25% of qualified film production expenses incurred in PA. Expenses must be incurred in the production of a film, TV commercial, or certain TV shows intended for a national audience. $\geq 60\%$ of total production expenses must have been incurred in PA. 80+/- film projects will benefit from this expenditure. Several acts have changed the film production tax credit statute over the years. The program brings productions that rely on PA businesses to provide such products & services as cutting-edge visual effects, lighting and editing services.
- \$30.0M in state tax credits available thru DOR to call centers for sales & use taxes paid on interstate telecommunications. Eligible call centers must employ ≥ 150 employees who initiate or answer calls using ≥ 200 phone lines and utilize an automated call distribution system. Several acts have changed this tax credit statute over the years. 20+/- call centers in PA will benefit from this tax credit in FY14.
- \$21.8M (FY13 = \$24.2M) in state tax exemptions & credits available thru DCED & DOR for high-tech & other companies located in designated Keystone Opportunity Zones (KOZs). In addition, economic activity occurring in KOZs is exempt from most local taxes for up to 15 yrs. Other terms & conditions apply. Several acts have added KOZs or otherwise amended the KOZ statute over the years including Act 16 of 2012.
- \$25.0M in state tax benefits available thru DCED for businesses located in Keystone Innovation Zones (KIZs), which foster growth in R&D-based and other high-tech biz. KIZs (28 currently) are defined parcels operated by a partnership of business groups and higher ed institutions. Qualified businesses in a KIZ receive priority consideration for assistance under certain CoPA programs, plus a tax credit. Companies must be < 8 -yrs-old and operate within one or more target industry sectors, including technology, bio- and life-sciences, info systems & technology, advanced manufacturing, defense, energy, agriculture and food processing. Other term & conditions apply. A KIZ company may apply to DCED for a tax credit equal to 50% of the increase in its gross revenues from the previous year attributable to its activities in a KIZ, up to \$100,000 in tax credits/year. 175+/- businesses benefit from this program annually. Also, if a KIZ company does not have a PA tax liability for a year in which they qualify for the credit, the company can sell the tax credit (by itself or through a third-party). Apple Inc. acquired 32 approved tax credits worth \$2.33M in 2012.
- \$100.0M in Opportunity Scholarship Tax Credit (OSTC) program (previously Educational Improvement Tax Credit program) available thru DCED for businesses that contribute to a qualified non-profit organization equal to 75% of the total amount contributed during the taxable year (or 90%, if the business contributes the same amount for two consecutive tax years). Annual limits to the tax credit per taxpayer, and other terms & conditions, apply. OSTCs are one way tech firms can support Science, Technology, Engineering, and Math (STEM) education. About 2,260 companies, 1,720 individuals, and 910 qualified organizations benefit from this tax program. In 2013 DCED announced a simplified online application process for OSTC.
- Act 85 of 2012 created the PA Resource (aka Marcellus Shale) Manufacturing Tax Credit available thru DOR & DCED for encouraging development of ethane processing industry in PA. The credit is available to an entity purchasing ethane for use in an ethylene manufacturing facility in PA that has made a capital investment of $\geq \$1B$ and created $\geq 2,500$ f.t. jobs, e.g., Royal Dutch Shell, for its multi-billion dollar "cracker" plant. The tax credit is assignable or can be sold to another taxpayer. Other terms & conditions apply.
- Act 206 of 2012 created the Promoting Employment Across PA (PEP) program for businesses located in PA that create 250 new jobs within 5 years from entering into the program. PEP allows qualified businesses to retain 95% of the qualified company's withholding taxes for individuals employed in the new jobs. Certain

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non-tech industries are specifically excluded from participating in the program. Other terms & conditions apply. DCED is charged with administering the program, which has an annual cap of \$5M.

- Net Operating Loss (NOL) Carry Forward: Corporations may deduct from current taxable income the net losses from previous years to arrive at their tax liability. Several acts have changed the NOL statute, including increasing the carry forward period and the annual cap on deductions. Tech companies in particular, because they typically lose money in their early years, make use of this deduction. Gov proposes to raise the cap on NOL deductions from \$3M/20% of taxable income to \$4M/25% of taxable income in 2014 and to \$5M/30% in 2015 to attract technology, bioscience and research, and large manufacturers. In FY14 an 20,700+/- corporations will deduct a total of \$339M in NOLs from their current PA taxable income.
- Keystone Innovation Network (KIN, www.innovationtransfernet.org), supported by BFTDA, provides competitive matching grants to KIZs and higher ed tech transfer programs to “create an integrated approach to local & regional innovation based e/d strategies.” In 2012 KIN was allocated \$2M, which funded 10-12 projects.
- \$740,000 in state & federal funds to Dept of Conservation & Natural Resources (DCNR, www.dcnr.state.pa.us) for tech-related uses allocated as follows: \$500,000 (FY13 = \$2.05M) in federal funds to GO for Topographic & Geological Survey Grants; \$240,000 to GO for Internet Record Imaging System; and \$0 (FY13 = \$300,000) in federal funds to State Park Operations for PAMAP Geospatial Imaging (www.pamap.dcnr.state.pa.us/pamap). DCNR’s 2 main tech-related units are Bureau of IT Services, lead by DCNR CIO, and Bureau of Topographic & Geologic Survey. Also, Bureau of Facility Design & Construction is pursuing LEED (“Google” it) Green Building Rating System certification or standards for structures. This effort includes site development, water savings, energy efficiency, materials selection and indoor environmental quality. Per DCNR, PA state parks have the largest number of LEED-rated buildings of any state park system in the U.S. In FY13 DCNR has pursued efforts to operate with greater efficiency, looking for ways to find cost savings w/o sacrificing public services and quality. To this end, it has introduced a pilot teleworking program, a joint effort with DEP to combine some IT functions, and a collaborative effort w/ DOT to use their excess capacity to automate ATV & snowmobile registrations. In FY14 DCNR will continue to seek innovative solutions to save money and find greater efficiencies.
 - DCNR 2009-13 Comprehensive Outdoor Recreation Plan (www.paoutdoorrecreplan.com), at 116 pgs, contains several multi-year tech-related initiatives. Ask about the 2014-18 plan, and offer your input.
 - ExplorePATrails (www.explorepatrails.com) allows users to search for and update info about PA hiking trails.
 - PA Wilds (www.pawildsresources.org) is an e/d effort in response to decline of traditional industries in Northern PA. Efforts include: small business assistance, PA Wilds Artisan Development Initiative (www.pawildsartisans.com), branding, merchandising, and cooperative marketing thru www.pawilds.com.
 - PA Natural Heritage Program (PNHP, www.naturalheritage.state.pa.us), a partnership between Western PA Conservancy, DCNR, FBC, PGC and US Fish & Wildlife Service, helps guide conservation work and land-use planning. PNHP conducts inventories and collects data re PA native biological diversity. Info is stored in an integrated data mgmt system consisting of maps, manuals, and computer files.
 - iConservePA (www.iconservepa.org) : helps users conserve PA's natural resources by showing them how to “plant smart, save energy, live local, and get involved.”
 - DCNR online services include: water well drillers can obtain a license for drilling & rigs and report water-well construction data through WebDriller; licenses for ATVs & snowmobiles; permits for camping in state forest lands; reservations for state parks (www.pa.reserveworld.com); and Environmental eGrants (www.grants.dcnr.state.pa.us) – one-stop shopping to the grantee community for all DEP & DCNR grants.
 - Videos: DCNR produces numerous videos to advance its mission. For example, Wild Resource Conservation Program videos produced by eMediaWorks rely on a flying river squirrel, Cosmo, and river otter, Terra, to introduce middle school-age viewers to water consumption and conservation.
- DCNR Bureau of Topographic & Geologic Survey (BTGS, www.dcnr.state.pa.us/topogeo) aka PA Geological Survey aka “the Survey” serves Pennsylvanians by collecting, preserving, and disseminating impartial info on PA’s geology, geologic resources, and topography.
 - Website Changes/Enhancements: BTGS is in the midst of an ongoing effort to add too and adapt the DCNR website due to growth of mapping technologies and resulting demands. Currently the main portal for DCNR Interactive Map Resources is www.dcnr.state.pa.us/learn/interactivemapresources.

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- Publications: Historically the Survey has printed & published hundreds of reports & maps, many in cooperation with USGS. In recent decades digital databases were compiled & maintained by the Survey for myriad purposes. In recent years the Survey started releasing GIS datasets with many of their geologic maps & reports. BTGS publications (maps, reports, bulletins, etc.) are now reproduced digitally and are available free or for a fee online. DCNR produces more maps than any other PA state agency. In addition to publications, digital resources available online are Digital Data (produced by BTGS) and Digital Mapping Resources (digital data that reside outside the Survey's website). BTGS-maintained Digital Data include: databases for water wells, oil & gas wells (includes Wells Info System database), coalbed methane wells, quarries, sinkholes, and earthquake epicenters.
- PA*IRIS/WIS: BTGS developed Wells Info System (WIS) database in mid-'90s to manage, track, interpret, and digitally archive data from all available oil & gas well records in PA. In 1999, PA Internet Record Imaging System (PA*IRIS) was developed to provide online access to, and archiving of, scanned images of oil & gas well records, geophysical logs, location plats, and plugging certificates in BTGS's files. These two systems were linked a few years later to provide online access to WIS as well as to improve efficiency of scanning & indexing records into PA*IRIS. PA*IRIS/WIS began as a partnership with 24+/- members of the oil & gas industry working in PA, and has since grown to 250+ public & private partners throughout the U.S. and other countries. Recent growth in membership has come mainly from parties who are exploring the Marcellus shale-gas play in PA. "BTGS is always receiving applications for new PA*IRIS/WIS members."
- Criminal Justice and Public Safety: CoPA's criminal justice and public safety agencies (PCCD, DOC, PSP and BPP) are increasing the priority of evidence-based guidance in public safety policy & planning to address crime prevention, safely reduce the prison population, and improve community reintegration methods. DOC & BPP continue to work together to improve docket mgmt and reduce the time it takes to release an approved offender on parole. Their research units have collaborated to produce more accurate and useful data. As a result, DOC's inmate population has stabilized and experienced the largest annual decrease since 1971. Simultaneously, BPP has experienced a population increase of parolees. FY14 budget provides funding for even greater integration of criminal justice research and collaborative, multi-agency best practices to lead to better and more reliable data and info analysis for managing this population while maintaining public safety.
 - Justice Reinvestment Initiative (JRI): In 2011 CoPA partnered with the Council of State Govts' Justice Center to launch JRI, a data-drive approach to reduce corrections spending and generate savings to reinvest in strategies & programs that increase public safety. Acts 122 & 196 of 2012 implemented recommendations of JRI. Act 122 bars low-risk offenders from being incarcerated in state prisons by requiring such offenders to be managed at community corrections centers. Act 196 creates a Justice Reinvestment Fund, which will provide funding **beginning FY15** for such initiatives as completing a mandated risk assessment instrument for use by judges at sentencing. Gov's goal is to reduce spending in DOC with 5-year savings projected at \$139M and a corresponding reduction of 1,260 in the inmate population. \$18.4M in savings is projected from JRI in FY14, which will be reinvested, in multiple agencies/programs. Acts 122 & 196 create a multi-year demand for tech products & services utilized by parole officers and parolees, such as integrated electronic tracking devices and reporting systems.
- \$32.4M (FY13 = \$29.7M) to Dept of Corrections (DOC, www.cor.state.pa.us) for GO, portion for tech-related uses. Plus \$8.35M *increase* to DOC state prisons for DOC & BPP Total Offender Repository system development. DOC has 3 tech-related units as follows: Bureau of IT, comprised of 3 divisions (Enterprise Systems, Apps, and Tech Infrastructure) provides project mgmt, apps systems development and support services, desktop services and infrastructure services & support to DOC, BPP, SOAB, Office of Victim Advocate and Firearm Education & Training Commission. Bureau of Planning, Research & Statistics directs all planning & research activities within DOC and provides data analysis to assist decision-making and planning efforts. Office of Population Mgmt and Sentence Computation oversees DOC's bed mgmt system and the computation and tracking of inmates sentences.
 - DOC uses JPAY (www.jpays.com) for processing all money orders sent to DOC inmates, as well as all incoming email. JPAY currently has > 111,000 "Likes" on Facebook.
 - PA Inmate Locator (<http://inmatelocator.cor.state.pa.us/inmatelocatorweb>) is a database that contains info about each inmate currently under the jurisdiction of DOC.
 - Virtual Visitation Program: provides inmates with the chance to visit via videoconferencing with their families.

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- Tech-related written policies available on DOC's website: Inmate Cable TV Service, Social Media, Videoconferences, IT, Computer Forensic Investigations, Tech Evaluation Committee, Educational Services, Records Office Operation, DNA Data & Testing, Automated Inmate Tel. System, and Correctional Industries.
- DOC miscellaneous revenue includes telephone commissions: FY14 estimate = \$7.4M.
- \$76.0M from Manufacturing Fund (MF) to DOC for GO. MF supports PA Correctional Industries (PCI, www.pci.state.pa.us), a self-sustaining enterprise that provides inmates an opportunity for vocational rehabilitation. MF receipts are derived from the sale of inmate-manufactured goods to govt agencies or govt-aided organizations. Expenditures are made for the purchase of raw materials, machinery replacement, inmate wages and other costs related to the sale & manufacture of PCI products. FY14 projected MF receipts = \$68.4M.
 - PCI is "a pioneer in prison labor across the U.S." Its inmate work program reduces institutional mgmt problems, provides inmates with vocational training and work experience, promotes public safety, and contributes to the economy. Today prison industry programs offer a portfolio of products & services that present a win-win to society. Potential opportunities exist with PCI for tech-related industries. Discuss.
- Inmate Programs, Re-entry and Technology: Legislative changes, and savings initiatives begun in 2012, are expected to produce significant population reductions starting in FY13. Preparation for re-entry begins when an offender enters one of DOC diagnostic & classification centers that involves a comprehensive, data-driven assessment of the individual's risk or probability of re-offense and needs or factors related to criminality. Education programs offer inmates the opportunity to obtain high school diplomas or adult basic education (ABE) skills. Vocational training is dedicated to development of marketable job skills, including electronics. FY14 DOC program measures include: 9,000+/- inmates enrolled in academic educational programs; 3,000+/- inmates enrolled in vocational programs; 24,900 inmates needing ABE or GED upon reception; 1,500 inmates receiving high school diplomas/GEDs; \$5.6M collected from inmates to pay for victim restitution and other fines, fees, costs, penalties or reparations; and 49,600 total inmates.
- \$8.35M in state & federal funds to Dept of Drug & Alcohol Programs (DDAP, www.ddap.pa.gov) for GO, portion for tech-related uses. Beginning FY13, DDAP, formerly under DOH, became a dept in its own right. Admin & Support Services Division collects, analyzes and disseminates data on d&a programs to satisfy decision-making and reporting requirements, maintains DDAP's website and several other systems designed to enhance communications and operations for county authorities statewide, and provides IT support services to the dept.
 - DDAP currently is transitioning legacy d&a Client Info System (CIS) to the more comprehensive Strengthening Treatment And Recovery (STAR) Data System, a web-based outcome measurement system that will bring PA into compliance with federal & state requirements and secure continued receipt of federal funding. The move to STAR is occurring in a staged rollout process with local d&a providers statewide.
- \$2.35M to PA Dept of Education (PDE, www.education.state.pa.us) GO for tech-related uses allocated as follows: \$0 (FY13 = \$36,000, FY12 = \$350,000) in federal funds for Education Technology (ET) - Admin; \$2.25M (FY13 = \$4.0M) in federal Title IV funds for 21st Century Community Learning Centers - Admin; and \$104,000 for National Center for Educational Statistics. PDE Licenses & Fees revenue includes estimated \$120,000 in FY14 from Fingerprint and FBI Background Check Fees.
- \$4.8M (FY13 = \$10.1M) in state & federal funds to PDE for Information & Technology Improvement allocated as follows: \$4.18M from GF; \$628,000 (FY13 = \$1.2M) in federal funds for Statewide Data Systems; and \$0 (FY13 = \$8.9M) in ARRA funds for Statewide Longitudinal Data Systems.
- PDE Office of Administration has three (3) tech-related organizational units as follows:
 - Center for Data Quality and IT - provides technical staffing to support internal PDE operations through 3 divisions: 1) Division of App Development - creates & maintains software and web-based data collection apps requested by various PDE offices; 2) Division of Data Quality manages PA Information Mgmt System (PIMS), which improves data capabilities by enhancing school districts' capacities to meet student-level data reporting requirements and provide robust decision support tools; and 3) Division of IT & Support - maintains and supports hardware & software used by all PDE staff.
 - Bureau of Budget and Fiscal Mgmt: directs the collection of various categories of data used in the

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- calculation of many CoPA subsidies and prepares data files for the PDE website.
- Bureau of Mgmt Services: assists with procurement, grants & payables management, facilities mgmt and logistical services, telecom services, mail & messenger services, and position and other records mgmt.
- Educational Technology (ET): Office of Elementary & Secondary Education's (OESE) ET team leads statewide initiatives to establish enterprise systems to provide stakeholders with tools & resources to improve student performance & achievement. ET activities include: PA Tech Inventory (<http://pati.metiri.com>), an annual survey completed by teachers, administrators and tech directors at PA's 3,000+ learning education agencies.
- Technology Education (TE): OESE's Bureau of Teaching & Learning's Division's of Curriculum (DC) supports TE, the means by which PA teaches technology. DC functions as a consultative & facilitative agency in selected curriculum, instruction strategies and compensatory education. Instructional Technology, on the other hand, deals specifically with use of computers and different software to solve problems and communicate effectively.
- \$71.96M in state & federal funds to PDE for PA Assessment allocated as follows: \$55.96M (FY13 = \$52.19M) from GF for supporting existing mandated tests; and \$16.0M in federal Title VI – Part A State Assessments funds. PA assessment system is composed of assessments and reporting of results of those assessments. The assessments include PA System of School Assessment (PSSA), PA Alternate System of Assessment (PASA), PA Accountability System (PAS), Keystone Exams (end-of-course), Classroom Diagnostic Tools (CDT), Value-Added Assessment System (PVAAS), and National Assessment of Educational Progress (NAEP).
- \$10.7M to PDE for State Library (SL) including: \$1.95M from GF; and \$8.4M in federal Library Services & Technology Act funds for library development. SL contains an extensive general & legal reference collection, comprehensive collections of PA newspapers, PA state and US govt publications, and 90 databases. SL is home to the Rare Collections Library, which is “the premier library environment in the US incorporating systems & techniques to preserve historic, paper-based collections.”
 - SL online resources include: SL of PA Catalog; VuFind – an alternative way to search SL's catalog; SL databases; Journal Search; Access PA Digital Repository (www.accesspadigital.org); digitized newspapers; and PA One Book (www.paonebook.org), which helps adults develop literacy in preschool children;
- \$56.6M in state & federal funds to PDE for Support for Public Schools tech-related uses allocated as follows: \$0 (FY13 = \$650,000) for Mobile Science Education Program; \$6.6M for Teacher Professional Development; \$0 (FY13 = \$900,000, FY12 = \$6.3M) in federal funds for ET - Local; and \$50.0M (FY13 = \$85.0M) in federal Title IV funds for 21st Century Community Learning Centers (CCLC, www.21stcclc.org) – Local.
 - Teacher Professional Development: In 2012 Guv signed into law Act 82, a new education evaluation system to provide educators with targeted resources, support and feedback for them to improve their instruction & leadership. FY14 budget provides \$6.6M for continued support of this initiative allocated as follows: \$3.9M for a teacher effectiveness tool that will be fully implemented in FY14 school year (s/y) by 3,150+/- schools - in FY13 s/y 1,000 schools are piloting this tool; and \$2.7M for continued development of specialist & principal evaluation tool that will be implemented in FY15 s/y - in FY13 s/y 845 schools are piloting this tool.
 - CCLC Program: provides funding via competitive application process for CLCs to provide academic, artistic and cultural enhancement activities to students and their families when school is not in session. Primary goal of CCLCs is to assist students to meet state & local standards for core subjects such as reading & mathematics. In addition to academics, CCLCs may offer participants a broad array of other services and programs, including technology education. No award will be issued for less than \$50,000.
- **Unhatched Chicken (First of 2):** Guv proposes \$1B over 4-years from privatization of CoPA's wine & spirit stores (also see LCB below) to PDE for K-12 education in the form of Passport for Learning Block Grants. School districts will share funds in 4 student-focused initiatives, including 2 that are tech-related: An initiative for self-paced, customized learning plans that would be based on a student's proficiency -- schools could use funds for startup costs; and Enhancing access to STEM course work and programs in grades 6-12, including career exploration activities, opportunities for technical skill attainment and partnerships with postsecondary education & training programs. “Districts will have maximum flexibility in determining which uses are most appropriate for their students & schools.” Grants will be announced spring 2014 and \$200M will be available beginning FY15 s/y.

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- \$85.17M to PDE for other tech-related uses allocated as follows: \$26.28M for Textbooks, Materials & Equipment for Nonpublic Schools; \$53.5M for Public Library Subsidy to 600+ local public libraries, including for public computers; \$2.82M for Library Access; and \$2.57M for Library Services for Visually Impaired & Disabled.
 - Library Access (LA) funds continue to support four programs: (1) Statewide Interlibrary Delivery Service; (2) PA Online World of Electronic Resources aka Power Library (www.powerlibrary.org), provides vetted online magazine & reference materials for PA residents to use in the library or remotely from home – PDE estimates that 28.4M items will be examined in FY14; (3) Electronic Library Catalog aka Access PA Database (www.accesspa.state.pa.us), gives PA residents online access to library holdings of 2,900+/- PA school, public, academic and special libraries; and (4) Access to professional reference librarians 24/7 via virtual reference service Ask Here PA (www.askherepa.org). In addition, PA has two libraries providing services to persons with visual & physical limitations. In partnership with National Library Service for Blind & Physically Handicapped, recorded and Braille materials are available by direct mail or downloaded to those who cannot use a traditional book, magazine or newspaper.
- PDE info systems and online services also include:
 - www.investinginpastudents.com, developed by PDE using Tableau Software, explains state taxpayer funding that local school districts will receive under proposed CoPA budgets.
 - PENN*LINK manages e-mail among Local Education Agencies (LEdAs): school districts, charter schools, intermediate units, and vocational technical schools/career and technology centers. PDE uses PENN*LINK to convey info and LEdAs use it to gather info and correspond w/ PDE and each other.
 - Child Nutrition Program Electronic Application and Reimbursement System (www.pears.ed.state.pa.us) : a web-based app and payment system for 7 federal Child Nutrition Programs implemented by PDE units.
 - PA Standards Aligned System (www.pdesas.org), a collaborative product of research and good practice that identifies 6 distinct elements which, if utilized together, provide schools & districts a common framework for continuous school & district enhancement & improvement.
 - PA Safe Schools Online Application (www.safeschools.state.pa.us) : a data collection vehicle and content distribution and report repository for PDE Office of Safe Schools.
 - <http://eGrants.ed.state.pa.us>: allows PA LEdAs and other programs online access to many PDE grants.
 - Professional Education Record Mgmt System (PERMS, <https://www.perms.ed.state.pa.us>) : used by professional educators to comply with continuing education requirements per Act 48 of 1999.
 - Education Names & Addresses (EdNA, www.edna.ed.state.pa.us) : used to find name, address, administrator, and related info about educational entities that PDE serves. In addition, detailed maps showing PA educational institutions around the state are available through various PDE offices.
 - Teacher Info Mgmt System (www.PA-TIMS.com) : allows exchange of data among several existing apps (PERMS, PIMS, EdNA, and Career & Technical Education Info System aka CATS) currently used by PDE to collect and manage data related to professional educators.
 - PA Truancy Toolkit (www.patruancytoolkit.info) : provides resources for educators, court personnel, and child welfare professionals to address truancy in their local community.
 - PennData Info (<http://penndata.hbg.psu.edu>) : PDE Special Education Reporting System, sponsored by Bureau of Special Education and developed by PSU's PA State Data Center and Applied Research Lab.
 - Comprehensive Planning web app (Comp Plan): serves as a single systematic, comprehensive planning process and plan mgmt system for LEdAs & schools in PA. Comp Plan will eventually replace the eStrategicPlanning (eSP) web app. The complete transition to Comp Plan will take several years.
 - PA Electronic Student Transcripts And Records System (PA eStars, www.paestars.com) : FY13 PDE announced PA eStars, a voluntary statewide initiative for the fast & secure exchange of student records and transcripts among PK-20 educational institutions developed in partnership with Parchment.com. A federal grant awarded to PDE is being used to underwrite initial implementation costs.
- \$23.9M to PDE for two post-secondary technology education institutions allocated as follows: and \$10.33M to Thaddeus Stevens College of Technology (www.stevenscollege.edu), which offers associate degrees & certificates in technical education programs to eligible PA residents; and \$13.58M to PA College of Technology (www.pct.edu), an affiliate of PSU, which offers associate & bachelor degree programs.
- \$296.2M to PDE for reimbursements to school districts for construction & renovation projects, which may include tech-related spending. Gov proposes to extend moratorium by one year on PDE's acceptance of new school

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reimbursement requests through the Planning & Construction Workbook (PlanCon) program and intends to continue to review current applications, and what role, if any, CoPA should have in these expenditures.

- Technology Transfer and State System of Higher Education (SSHE, www.passhe.edu) : FY13 Guv signed sweeping changes to SSHE to give the 14 state-supported universities the ability to raise more revenue -- new laws clear the way for the colleges to allow professors to "commercialize" their research or new products to financially benefit both themselves and their university. The laws also lift restrictions on employees being able to pursue funds for university foundations. And they permit the colleges to join bulk-purchasing agreements. FY14 total funding from GF to SSHE = \$412.75M, distributed on a formula-basis through the Office of the Chancellor.
- New Digital Learning Opportunities: FY14 Guv's budget proposes an Online Course Choice (OCC) program. PDE will accept & approve applications from providers that offer rigorous high-quality instruction through an online delivery system. PDE will establish a catalog of online courses. School districts will establish student eligibility requirements, and policies & procedures re their specific district OCC program. PA will focus on digital learning opportunities in STEM content areas during FY14 and will expand to other content areas in the future. Related legislation has been introduced requiring PDE to create a clearinghouse for online courses.
- Cyber Charter Schools: PDE is responsible for oversight of cyber charter schools in PA. A cyber charter school provides instruction through the Internet or other electronic/digital means. Charter Schools are self-managed public schools that are approved by local school districts. Q1-2013 PDE denied charters to 8 cyber charter school applications for FY14 s/y. Applicants have the option to address deficiencies or the decision.
- \$62M to PDE for Career & Technical Education (C&TE): 2013 PDE announced \$1.64M in grants in amounts ranging from \$4,000 to \$100,000 to 25 C&TE centers. The grants are used for purchase of "state-of-the-art equipment to better prepare students for the jobs of tomorrow."
- Guv's School for the Sciences (GSS): 2013 Guv announced reopening of GSS at CMU for the summer 2013. This 5-week, residential program emphasizes cooperative learning and hands-on lab research for 56 talented high school science & math students. Successful applicants receive a full scholarship to GSS with costs underwritten by a \$150,000 state grant and matching funds through donations from organizations like yours.
- Keystone Initiative for Network Based Education & Research (KINBER, www.kinber.org) : a public-private entity comprised of PA education (ed) and health care institutions, including PDE, established to build PA Research & Education Network (PennREN), a 1,600-mile high-speed fiber optic network across PA, using a \$99.6M ARRA grant received 2010 plus \$29M in matching support. K-12 ed is represented by <http://PAIUnet.org>, a high-speed ed network that connects PA's 29 Intermediate Units and their member school districts. PennREN construction was completed Feb 2013. See Strategic Plan 2013-2017 on KINBER website for goals and strategic initiatives.
- Guv's Advisory Commission on Postsecondary Education (GACPE, www.pahigheredcommission.com) : established by ExO 2012-01, 31-member GACPE was charged with making "recommendations in relation to establishment and maintenance of a robust and responsive postsecondary education system in PA for the 21st century" and so forth. *GACPE Report & Recommendations Nov 2012* (R&R) tech-related topics address: Internet-based education and hybrid models, web-based curriculum, open educational resources, open universities, maintenance of quality in light of technology, improving affordability through technology, and current PA tech initiatives (PA eStars and KINBER). R&R document provides general incite into tech-related priorities of PA's postsecondary institutions – at least those reliant on support from and under statutory control of CoPA.
- PA Educational Technology Expo and Conference (www.peteandc.org) aka "PETE&C" (go ahead, say it) is an annual statewide event that provides programs focused on technology in the educational field. Exhibitors showcase their latest technology products & services to the audience of teachers, administrators, tech directors, school board members and more. PETE&C is held over President's Day (when schools are out). Future PETE&C dates: Feb 9-12, 2014 and Feb 8-10, 2015. Sign-up to exhibit or simply attend. Bring business cards.
- \$5.2M total (FY13 = \$19.6M) to PA eHealth Partnership Authority (PAeH, www.paehealth.com) established by Act 121 of 2012, which took over the work of its predecessor, PA eHealth Collaborative, whose genesis was \$17.1M in previously awarded ARRA funds. PAeH's mission is to improve health care delivery & outcomes in PA by enabling secure exchange of health info. PAeH provides leadership and direction for public & private, and

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federal & state funded investments in health info technology (HIT) initiatives including health info exchange (HIE) capabilities and other related HIT efforts. In FY13 four PA health organizations received \$6M (\$1.5M each) from PAeH to create a regional & statewide HIE. The recipients will use the grants to connect hospitals, physicians, nurses and other healthcare providers to an HIE. The recipients will then connect to a technical platform that will enable interoperability among participating HIEs. This platform will also provide access to provider directory, patient index and record-locator services. Q1-2013 PAeH issued a Request for Info (RFI) as it prepared to release a lab pilot grant opportunity for state-certified Health Info Service Providers. See PAeH web site for updates as well as strategic & operational plans.

- PAeH's Plan: 1) develop policies & procedures to govern electronic exchange of HI within PA, develop & maintain standards to ensure interoperability, promote and govern security & privacy of such an HIE, and develop & conduct public info programs to educate & inform consumers & patients about HIE; 2) develop, establish and maintain an HIE infrastructure that complies with federal & state laws; 3) build & maintain a master index of patients and a record locator service that will allow all participants to match patient records and transmit them to and from proper locations; 4) build & maintain an OptOut Registry; 5) establish & collect fees and/or or donations to cover costs of the system, or for other services provided by PAeH (participation in the HIE is voluntary); 6) develop & maintain certified participant programs for HIE participation and require certification for any entity accessing the system; and 7) offer capacity building grants through leveraging of federal grants to help construct & bolster use of electronic technology. In addition, grants will support development of a PA internal HIE to facilitate sharing of HI across state agencies and between state & private sector entities.
- Q1-2013 PAeH released a survey of PA's 11 HIEs. Findings include: all responding HIEs have or plan to have the ability for their participants to communicate with one another and share discharge summaries by end of 2013; two HIEs intend to operate statewide, 9 intend to operate regionally; every type of healthcare provider type addressed in the survey will have some level of access to data from at least three HIEs by end of 2014; and majority of responding HIEs have a sustainability plan, which uses combination of hospital provider fees, payer fees and professional practice fees.
- \$151.1M in state & federal funds to PA Emergency Mgmt Agency (PEMA, www.pema.state.pa.us) for tech-related uses allocated as follows: \$934,000 for GO Info Systems Mgmt; \$2.0M to State Fire Commissioner (SFC), portion for PA Fire Info Reporting System (PennFIRS); \$16.7M (FY13 = \$14.0M) from VoIP Emergency Services Fund; \$17.5M for Volunteer Company Loans (including for communications equipment); and \$116M for Wireless E-911 Emergency Services Fund grants, including \$2.3M (FY13 = \$3.3M) for GO. PennFIRS is the state system that fire depts use to report & manage the flow of incidents into the National Fire Incident Reporting System. SFC also reviews & disseminates info re fire death data and fire prevention and control techniques. PEMA Strategic Plan 2010-2014 tech-related strategies include: 1) identify, develop, implement and evaluate innovative technologies & methodologies (it&m); 2) through gap analysis, research use of it&m; 3) establish best practices program to identify opportunities for it&m; 4) add an Employee Recognition Award category for most innovative idea; and 5) build partnerships that create positive impact on emergency mgmt.
 - Emergency Operations Center (EOC): An EOC is the 'nerve center' of the emergency mgmt system. CoPA's EOC is a technologically advanced facility staffed 24/7/365 by highly trained PEMA personnel. At county & local levels, EOCs also are the central coordination point for response & recovery efforts. These facilities range from large & highly sophisticated to small & simple.
 - PEMA continues to administer Public Safety Emergency Telephone Act (Act 78) as amended, which established Wireless E-911 Emergency Services Fund. This fund provides for collection of \$1/device/month surcharge on wireless telephone customers to support a statewide integrated wireless E-911 system. Funds are disbursed to public safety answering points to upgrade 911 technologies by providing 911 telecommunicators w/ location info for wireless 911 callers. Amendments to the Act include those enacted in 2008 & 2010 that added fees for VoIP and prepaid wireless phones. Legislative Budget & Finance Committee in 2012 issued a report entitled "PA's 911 Emergency Telephone System: Funding, Expenditures, and Future Challenges & Opportunities," available at LBFC website (see below). Local & state leaders are talking about changing the way county 911 operations are paid for. County leaders, et al. say that surcharges are not keeping up with the cost of these increasingly technological & expensive systems.
 - PEMA operates & manages the Integrated (Flash) Flood Observing and Warning System (IFLOWS) with the National Weather Service (NWS) in 30 flood-sensitive PA counties. IFLOWS relies on radio reporting rain & stream gauges that provide data via radio & satellite to local, state & federal govt offices. IFLOWS

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- computers alarm with an audible & visual signal when rainfall or stream levels reach levels that can lead to flash flooding. PEMA receives funds from NWS/NOAA for IFLOWS. These funds are limited to life-cycle replacement or upgrading of existing equipment.
- PEMA Emergency Mgmt Network (EMnet) is the primary delivery path for Emergency Alert System (EAS) distribution in PA. The secondary EAS path utilizes fiber optic backbone of PA Public TV Network direct to regional LP-1/LP-2 affiliate facilities-who then relay the backup EAS network to applicable areas. EMnet sends messages to individual stations, groups, or all terminals, and provides PEMA w/ delivery confirmation. In addition to EMnet, the Satellite Emergency Voice Alerting Network aka SEVAN and PaSTAR, its satellite-based data network, are part of the overall set of tools PEMA uses for warning & communications functions.
 - Hazard Mitigation: 2007 PEMA concluded a statewide study using HAZUS-MH loss estimation software that includes damage estimates for 10- to 500-year flood events. With these results, statewide GIS shapefiles for economic losses and damaged homes were created for each flood scenario using ArcMap. HAZUS-MH was developed for FEMA as a hazard identification and risk assessment (HIRA) tool for natural disasters of flood, earthquake and hurricane. PEMA uses HAZUS primarily for flood analysis. HAZUS software is free to counties and communities interested in using it to develop their own HIRAs for local mitigation planning.
 - PA Prepared Learning Mgmt System (www.paprepared.net) : a web-based delivery system of education programs and info-sharing related to public health and emergency preparedness, also supported by DOH.
 - <http://ReadyPA.org> was created to help Pennsylvanians to prepare for emergencies.
 - PEMA serves as the coordinating office and monitor for PA Voluntary Organizations Active in Disasters (<http://pavoad.communityos.org>). Member organizations provide assistance to PA citizens during disasters.
- \$1.5M to PEMA from Unconventional Gas Well Fund for development, delivery and sustainment of training & grant programs for responders and acquisition of specialized equipment for response to emergencies relating to natural gas production from unconventional wells, as per Act 13 of 2012.
 - \$65.47M to Dept of Environmental Protection (DEP, www.depweb.state.pa.us) for tech-related uses allocated as follows: \$8.47M (FY13 = \$8.9M) for GO reimbursement - EDP services; \$550,000 in federal funds for Environmental Program Mgmt (EPM) Diagnostic X-Ray Equipment Testing; \$15.0M in federal funds for EPM State Energy Program (SEP); \$0 (FY13 = \$35.0M) in ARRA funds for EPM-SEP; \$1.25M for Used Tire Pile Remediation; \$13.1M (FY13 = \$1.6M) for Alternative Fuels Incentive Grant Program, which provides rebates to consumers for purchase of new plug-in hybrid, plug-in electric, natural gas, propane and hydrogen fuel cell vehicles; \$7.5M (FY13 = \$10.0M) from M-LF for Natural Gas Energy Development Program; and \$19.6M from Recycling Fund for Municipal Recycling Grants.
 - Q1-2013 DEP announced that the Alternative Fuel Vehicle Rebate program will be extended once it reaches its milestone of awarding 500 \$3,500 rebates for large-battery system plug-in hybrid electric vehicles and battery-electric vehicles. DEP will offer \$3,000 rebates for the next 500 vehicles, which represents a total investment of \$3.35M toward electric vehicles since 2011. Rebates of lesser amounts are available for other AF vehicles, including smaller size vehicles all the way down to scooters.
 - FY13 DEP began accepting applications for first round of Natural Gas Vehicle Grant (NGVG) program, which will provide up to \$20M through FY15 to help pay for incremental purchase and conversion costs of heavy-duty natural gas fleet vehicles. NGVG program was created per Act 13 of 2012.
 - \$10.0M in state tax credits available thru DEP & DOR for businesses that develop/construct Alternative Energy (AE) Production projects in PA. Amount of the credit is ≤ 15% of the amount paid for development & construction (d&c) of the project but may not exceed \$1 million/taxpayer. Additionally, taxpayers may sell or assign unused portions of the tax credit upon approval. Other terms & conditions apply. Act 1 of Special Session of 2008 created this program; it expires in FY16.
 - Eligible AE Production projects include: 1) Energy Production & Distribution - those that produce/distribute waste coal, alternative fuels, biomass, solar/wind energy, geothermal technologies, clean coal technologies, waste energy technologies or other AE sources; 2) Manufacturing - d&c of new or expanded building or plant that manufactures or produces products, including component parts that provide AE or alternative fuels and/or improve energy efficiency or conserve energy; and 3) R&D – d&c of new or expanded facility, building or plant with focus on R&D of technology to provide AE sources or alternative fuels.

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- Sustainable Energy: DEP promotes renewable & advanced energy development (AED) through grants, loans and tech support for projects that both protect the environment and support PA's economy. DEP leads initiatives to support statewide net metering and interconnection, acquisition of credit energy efficiency and renewable energy in the State Implementation Plan and other outreach efforts to promote AED. DEP collaborates w/ PUC to implement AEPS Act of 2004 (see PUC section). Significant increases in natural gas production have occurred in PA since 2008 as a result of techniques that are now used throughout PA's Marcellus Shale region. DEP permits & inspects oil & gas sites and natural gas gathering pipelines, and provides tech support to thousands of entities each year for design & installation of technologies to promote energy conservation & efficiency. SEP program provides federal funding to promote energy efficiency and pollution prevention, including through deployment of new technology. DEP State Energy Office oversees energy development programs, including financial aid that emphasizes domestically available energy resources including clean alternative energy and energy efficiency.
- DEP Bureau of IT, lead by DEP CIO, is comprised of 5 divisions: Project Delivery, Architecture, Data Mgmt and Operations, Apps Support, and Enterprise Infrastructure. DEP info systems and online services include:
 - eNOTICE (www.ahs.dep.pa.gov/eNOTICEWeb) : DEP's electronic notification system.
 - EPA Data Exchange Initiatives: DEP partners w/ U.S. EPA to create data exchanges through the National Environmental Data Exchange Network (www.exchangenetwork.net).
 - Geographic Info Systems: PA Activity and Use Limitation (PA-AUL, www.depgis.state.pa.us/pa-aul) Registry provides public w/ info on PA properties that have some form of use restriction or ongoing obligation associated w/ a remediation; WAVE (www.wave.dep.state.pa.us) is a GIS based website for info re PA water & water-related resources; and eMapPA (www.emappa.dep.state.pa.us), a mapping tool that displays environmentally relevant data to DEP contractors and public. An external resource is the PA Mapping & Geographic Info Consortium (PAMAGIC, www.pamagic.org), devoted to furtherance of GIS in PA.
 - Drinking Water Systems (www.drinkingwater.state.pa.us) : 1) PA Drinking Water Reporting System - dynamic reports on inventory & sample info for water systems from the PA Drinking Water Info System (PADWIS); and 2) Consumer Confidence Reporting System - detection and violation info from PADWIS to assist community water systems with preparation of annual Consumer Confidence Reports.
 - Drinking Water Electronic Lab Reporting (DWELR) web app allows secure submittal of drinking water sample data over the Internet.
 - Environment Facility Application Compliance Tracking System (eFACTS) allows users to search for authorizations, clients, sites & facilities. Users can also search the database to find inspection and pollution prevention visits as well as inspection results data, including enforcement info when violations are noted.
 - DEP@Home: Quarterly webinars and exhibits created by DEP to educate residents about steps they can take in and around their homes to become more energy efficient and environmentally friendly. Current webinars include info about how to comply with the new Covered (Electronic) Device Recycling Act.
 - DEP GreenPort (www.depgreenport.state.pa.us) : allows users to report radon, submit Mine Subsidence Insurance applications, enter data for Chapter 110 Water Allocation & Mgmt Plan reporting, apply for Waste Transportation Safety Program, and submit Air Quality Request for Determination.
 - PA Source Test Information Mgmt System (PSIMS): a centralized document and data repository custom designed to meet requirements of DEP Bureau of Air Quality source testing program.
 - PA Recycling Markets Search Database (www.ahs.dep.pa.gov/Recycle_Markets) : assists users w/ locating outlets for various recyclable materials (r/m). It includes PA brokers, processors, material recovery facilities and end users of r/m. Companies complete an online form to be listed on the database.
 - Keystone Home Energy Loan Program (Keystone HELP, www.keystonehelp.com) : offers low-rate loans to help make affordable energy efficiency home improvements available to eligible PA homeowners. Keystone HELP is principally supported by TD, DEP and PHFA, and is administered by a PA energy efficiency lender.
 - eLibrary (www.elibrary.dep.state.pa.us) : official downloadable, public repository of key DEP documents.
- DEP other tech-related offices and programs:
 - **(Energy)** Division of Energy Policy and Technology Deployment (TechDev), within Bureau of Energy, Innovations & TechDev: addresses issues re innovative environmental technologies, e.g., verification, info exchange and incorporation of technologies into all aspects of environmental mgmt systems.
 - **(Water)** Division of Operations, Monitoring and Data Systems, within Bureau of Point & Non-Point Source Mgmt: develops surveillance strategies that direct field inspector activities at wastewater treatment facilities; directs development & operation of statewide National Pollutant Discharge Elimination System (NPDES)

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- wastewater facility inventory and compliance data systems; establishes/maintains electronic communication networks with DEP enterprise data systems, the regulated community and federal compliance tracking systems; administers annual fee program to generate revenue to cover admin, permitting and compliance monitoring costs of NPDES; and maintains NPDES electronic Discharge Monitoring Report system.
- **(Waste)** Recycling & Markets Section, within Bureau of Land Recycling and Waste Mgmt, within Division of Waste Minimization & Planning: Q1-2013 DEP announced \$17.8M in recycling grants to 131 municipalities & counties for recycling programs - the 53rd round of grants awarded since inception of Act 101 of 1988. Eligible projects include: developing web-based programs on recycling for consumers; installing data collection systems on recycling vehicles; and developing educational materials to encourage recycling.
 - **(Clean Air)** DEP provides multimedia aid to businesses to promote environmental mgmt systems and pollution prevention (p/p) and provides small businesses with grants to hire consultants to assess p/p opportunities and a loan program that small businesses can use for equipment that prevents pollution.
- 2013 DEP launched High-Definition (HD) Falcon Cam (www.dep.state.pa.us/dep/falcon), an annual live, 24-hr webcast of a nesting pair of peregrine falcons who live on a ledge on DEP's HQ building. 3 new HD cameras chronicle the falcons' activities while streaming the footage live on the Internet. The HD cameras include PC-operated zoom and pan and light/color balance capabilities. Follow the falcons on Twitter @FlaconChatter.
 - Electronics Recycling: Effective 1/24/13 PA consumers & businesses are no longer able to throw away their electronic devices with their trash as per the PA Covered Device Recycling Act 108 of 2010. Among the law's provisions: covered devices and their components must be properly recycled and may not be taken to, or accepted by, landfills or other solid waste disposal facilities for disposal; manufacturers of covered devices must provide for collection, transportation and recycling of these devices by establishing one-day events, permanent collection programs or mail-back programs for consumers -- offered to consumers at no cost; manufacturers must register their covered device brands with DEP and attach brand labels to those devices; and, retailers who sell electronic covered devices may only sell devices with a manufacturer's brand that is registered with DEP.
 - \$61.9M to Fish & Boat Commission (FBC, www.fishandboat.com) for GO, portion for Bureau of IT comprised of 2 offices: Infrastructure, Security & Operations; and Geospatial Technologies and Business Solutions. FY14 program measures include: 876,000 fish licenses issued and 335,000 boats registered.
 - Interactive Maps: FBC website offers interactive maps with a growing breadth of content & functionality such as County Guide - zoom in to a county to find boat accesses, trout stocked waters, special fishing regulation waters, wild trout streams, etc.; PA Lake - find publicly owned lakes, boat access points and fishing/boating regulations; Biologist Reports - lake & stream survey listing, waters can be located by name, county, year or region; Fisheries - find waters with good opportunities to catch specific species; Fishery rankings - stocking info, regulations; Fish Habitat Improvement Maps and Fishing Special Regulation Areas; Water Trails - locate PA water trails and zoom to trails to find access points and water gauge data; Ice/Winter Fishing - destinations, fish species present, winter trout-stocked waters, fishing regs; Steelhead - public fishing destinations for Lake Erie tributaries, regulations, stocking data; and FBC Directory and FBC Hatcheries.
 - In 2012 FBC continued to modernize its Microsoft Access-based core apps to a more technologically advanced intranet platform, as well as to incorporate GIS to improve data integrity. Most of the apps are scheduled for implementation in Dec 2013.
 - FBC Strategic Plan FY11-FY15 addresses 3 tech issues: escalating costs of traditional services and increasing demands for activities require development of alternative funding sources & methods; existing data are not well-integrated and therefore not optimally used to proactively manage PA's aquatic resources; and due to limitations of current communications systems, technologies and processes, FBC must improve its internal & external communication methods & systems. Goals include: by 12/31/13 complete migration of IT supported access apps used by Bureau of Fisheries to a new modernized platform; and by July 2014 complete redesign of FBC's website. FBC invites public feedback on any topic by submitting comments through "The Fishing Hole" web form.
 - Trout in the Classroom (www.patrouinthe classroom.org) : FBC-supported interdisciplinary program that introduces coldwater conservation education in PA schools by raising brook trout, from eggs to fingerlings.
 - FY13 FBC launched a fishing sweepstakes contest (www.gonefishingpa.com) to give away a series of fishing trips across the state for many of PA's popular gamefish.

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- \$79.5M to Game Commission (PGC, www.pgc.state.pa.us and mobile device site www.pgcoffsite.com) for GO, portion for two tech-related units: Bureau of Automated Tech Services (BATS) and Bureau of Info & Education, which includes social media, training, and marketing. BATS oversees automated computing needs of PGC, including its web site, app development, PCs, data communication networks, Computer Aided Dispatch system and PA Automated Licensing System. Online services are made available by FBC & PGC through The Outdoor Shop (www.pa.wildlifelicense.com) and include: apply for/purchase fishing & hunting licenses; report & view game harvests; renew/purchase boat registrations; and purchase gift vouchers, merchandise, and subscriptions.
 - PGC Strategic Plan 2009-14 tech-related objectives: Evaluate new technologies for potential enhancement of programs; and Decrease redundancy of work efforts through integrated hi-speed technological advances.
 - PGC Annual Legislative Report (ALR): PGC is required by law to submit an ALR to the G/A. Jan 2013 ALR includes tech-related accomplishments, needs & plans. Find ALRs under Resources tab on PGC website.
- PGC Multimedia:
 - PGC Wild Cam: Helps people connect with PA wildlife, e.g., eagles, at locations throughout PA. Partnering w/ Pix Controller, PGC stations remote video cameras at wildlife destinations that transmit a wireless cellular data signal to a video server that streams live footage on the PGC website. The system also uses 3 marine batteries, two solar panels, and a charge controller. The eagles are baited by road-kill deer (now you know).
 - PA State Game Lands App: Official PGC app @ \$9.99 is GPS enabled and provides users with access to all PA State Game Lands. Using a smartphone or tablet's built-in navigation features, it provides turn-by-turn directions to parking lots, shooting ranges and check stations and includes details on particular seasons & regulations for destinations selected as well as an internal map function.
 - Creature Features: PGC-produced, YouTube-hosted short videos on a range of subjects.
 - Hunter & Trapper Photo Scrapbook: Allows PA gaming enthusiasts to celebrate their harvests.
- \$36.9M to Gaming Control Board (GCB, www.gamingcontrolboard.pa.gov) for operations & admin, portion for tech-related uses led by GCB Office of IT. Several state agencies provide support to GCB, e.g., DOR manages Central Control Computer System (CCCS), which calculates CoPA's share of gross terminal revenue (GTR) and monitors operation of gaming machines. PA's dynamic gaming industry and policy environment will continue to create new and evolving tech-related demands within GCB. GCB tech-related bureaus & activities per its FY12 Annual Report (FY13 version due in FY14) include:
 - Bureau of Licensing certified 3 gaming service provider applicants that develop intellectual property innovations relating to table games; automated the casino employee credentialing process; implemented a web-based process for casinos to provide info re disbursements to gaming service providers; enhanced SLOTSlink online application system for employee applicants; printed & distributed 12,000+ credential badges for gaming industry workers; and scanned and catalogued 650,000+/- pages of applications and supplemental info for new and existing applicants into an electronic document storage system.
 - Bureau of Gaming Lab Operations (GLO) monitors day-to-day casino operations of casino, particularly re software & systems. GLO has 4 units: Statistical Review – evaluates theoretical return for each slot gaming theme and analyzes progressive reward payouts and random number generators; Slot & Table Game Device Certification – evaluates gaming devices for compliance with minimum design standards, reviewing modifications to gaming devices and ancillary equipment, and conducting investigations of regulatory violations; System & Kiosks – evaluates communication between thousands of slot machines and CCCS, the communication of each machine with a casino's in-house monitoring system, analysis of voucher redemption machines, and evaluation of count room equipment; and Technical Field Reps – monitor day-to-day operations of licensed casino operators, particularly re software & systems at all licensed facilities.
 - Bureau of Financial Mgmt & Admin's Office of IT (GOIT) supports & develops apps to assist GCB staff in licensing & enforcement functions and provides daily support of all technology for GCB employees including oversight & maintenance of computers, servers, networks, software, and telecom equipment. GOIT recently developed a facial recognition app for GCB's self-exclusion program and continues to evaluate & implement enhancements to GCB's website. (Live web-streaming GCB board meetings will continue in FY14.)
- \$102.2M from PA Gaming Economic Development and Tourism Fund (GEDTF) to DCED for e/d projects, which may include tech-related uses. Act 71 of 2004, as amended, established GEDTF to receive a daily assessment of 5% of each licensed gaming entity's GTR. Funds are distributed through enacted capital budgets.

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- In FY14, in addition to state gaming funds, local gaming funds likely will be distributed by local authorities. Example: Q1-2013 Erie County Gaming Revenue Authority (ECGRA) announced \$151,800 in Erie County tech upgrades & training. Erie Area Council of Govts will manage the funds, made up of 3 grants: \$13,000 for training municipal staff in Microsoft SharePoint and Office; \$38,800 for creating an Erie County portal offering electronic permits; and \$100,000 for an Erie County Broadband, eGovt, and Tech Implementation Project, which will enable county govt and 38 municipalities to have joint, state-of-the-art Internet and web-based networks. ECGRA's budget is funded by .5% of GTR of Presque Isle Downs & Casino.
- \$13.0M to Dept of General Services (DGS, www.dgs.state.pa.us) GO for tech-related uses allocated as follows: \$9.6M (FY13 = \$12.3M) for centralized procurement; \$2.1M for Capital Media Center (CMC) reimbursements; and \$1.3M (FY13 = \$1.07M) for COSTARS (www.dgs.state.pa.us/costars), PA's cooperative purchasing program administered by Bureau of Procurement. COSTARS provides several thousand registered local public procurement units and state-affiliated entities (together "members") and suppliers a tool to find and do business with each other through use of contracts established by DGS. DGS tech-related functions & units include:
 - PA eMarketplace portal (www.emarketplace.state.pa.us) : a one-stop shop for all CoPA tech and non-tech solicitations, procurements (upcoming, sole source, and emergency), awards and other contract info. ITQ process (www.itqrp.state.pa.us), described in OIT section above, is also used by DGS for non-tech multiple award contracts. ITQ contracts may be solicited by an Invitation for Bids or RFP. ITQ process has two steps: 1) Pre-qualification - used to qualify suppliers for specific services described in the ITQ and 2) Quoting - utilized by agencies when services are required. Again, qualification does not guarantee receipt of business by a supplier. Suppliers are encouraged to market their products & services to agencies. PA Supplier Portal (www.pasupplierportal.state.pa.us) enables suppliers to first register as a supplier, participate in e-bidding opportunities w/ CoPA, and manage user & company data.
 - Commonwealth Media Services (CMS, www.cms.state.pa.us) provides studio & remote broadcast TV services, fixed & remote satellite uplinking, electronic asset mgmt & archiving, web animation & graphics, website & app development, electronic signage and other services to all branches of CoPA. News conferencing facilities & services are provided both at the Capital Media Center and remotely. Additionally, CMS provides a range of creative services incorporated into production of documentaries, educational, promotional, training and public service programs. CMS is part of CoPA's emergency communications infrastructure, providing services during PA emergencies. CMS utilizes www.purposeNETWORK.com to provide visual marketing tools to CoPA agencies. PAcast (www.pacast.com) aka Commonwealth Media Hub serves as a repository of viewable CMS-produced videos, radio broadcasts, and photography.
 - Bureau of Supplies and Surplus Operations enables reutilization of federal & state property among state & local agencies for a nominal charge. Thereafter, goods are sold to the public through onsite auctions and Internet sales. Revenue generated from state surplus property in FY12 was nearly \$9M. Bidders can visit www.govdeals.com and search listings by typing "PA State Surplus" in the keyword search.
 - Bureau of Publications provides web graphics, graphic design, printing, signage services, annual reports, brochures, newsletters, variable data printing, mass mailings, and lithographic offset and digital printing services (to name a few). State Sign Shop provides signage, engraving and banner services. PAPublisher (www.papublisher.state.pa.us) is CoPA's system for state employees to place orders with the Bureau.
 - DGS Continuity of Operations (COOP) Office is responsible for maintaining the business operations of DGS following an emergency. DGS COOP program reports to OA's CoG Office, along with COOP programs of all other agencies. DGS COOP program however is unique in that its responsibilities, like its regular ones, extend to other agencies. DGS COOP plan includes measures to address interoperable communications and vital records. Current planning includes: National Incident Mgmt System (NIMS) implementation. State employees may access key COOP documents on the DGS Collaboration Portal.
 - 2012 DGS launched new website services to assist contractors, subcontractors and state & local govt bodies bidding public works projects in meeting requirements of the Public Works Employment Verification Act, which requires verification of eligibility of each new employee through federal govt's E-Verify® system.

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- \$2.05M in state & federal funds to Dept of Health (DOH, www.health.state.pa.us) GO for tech-related uses allocated as follows: \$1.1M in federal funds for environmental public health (p/h) tracking; \$863,000 (FY13 = \$763,000) in federal funds for strengthening p/h infrastructure; \$60,000 (FY13 = \$75,000) in federal funds for learning mgmt system; \$29,000 for data center services; and \$0 (FY13 = \$10.0M) in ARRA funds for HIE.
- \$12.6M in state & federal funds to DOH for Vital Statistics (VS) including: \$5.3M from VS fees; \$1.5M in federal funds for cooperative health statistics (HS); \$80,000 (FY13 = \$164,000) in federal funds for HS; \$712,000 (FY13 = \$674,000) in federal funds for behavioral risk factor surveillance system; \$0 (FY13 = \$600,000) in federal funds for birth certificate verification; \$64,000 for reimbursement for microfilming; \$891,000 for Vital-Chek surcharge; \$1.16M for county coroner/medical examiner distribution; and \$2.9M (FY13 = \$1.9M) for VS improvement admin.
 - Division of Vital Records (DVR) and Division of Statistical Registries (DSR) coordinate collection, analysis and appropriate dissemination of PA health statistics & info. DVR maintains a central repository for records of births & deaths that occur in PA. This system assists in detection of fraudulent record usage, child support and report of missing children. Birth & death records are stored, and retrievable, on microfilm. DSR oversees several statewide data collection systems & registries, such as Behavioral Risk Factor Surveillance System and PA Immunization & Cancer Registries. Publications & statistics available on DOH's website include an interactive health statistics tool: Epidemiologic Query and Mapping System (EpiQMS).
- \$37.9M in state & federal funds to DOH for Quality Assurance program, which conducts surveys & inspections of an array of health care facilities to determine compliance with state & federal laws, standards & regulations, and displays completed surveys on DOH's website.
- \$42.2M (FY13 = \$47.1M) to DOH for Health-related Research aka CURE program allocated as follows \$0 (FY13 = \$4.2M) for biotechnology research; \$39.1M (FY13 = \$39.8M) from TSF for health research - health priorities; and \$3.1M from TSF for health research - National Cancer Institute.
 - Commonwealth Universal Research Enhancement (CURE) program provides health research grants to PA-based research institutions for biomedical, clinical and health services research designed to improve PA citizens' health. Source of CURE \$ is Tobacco Master Settlement Agreement revenue. Since its inception in 2001, CURE program has awarded \$755M+ in grants and funded 1,700+ health research projects in PA.
- DOH online services and info systems include:
 - PA Electronic Disease Reporting project (PA-NEDSS, www.nedss.state.pa.us) is a way to report diseases and investigative findings to DOH via the Internet and is PA's response to NEDSS, a national initiative to improve timeliness, completeness, accuracy, and uniformity of surveillance data. The "NEDSS vision" includes use of the Internet for disease reporting, etc. as close to the source as possible, incorporation of electronic lab reporting and use of uniform coding schemes and data transmission protocols.
 - PA Environmental Public Health Tracking Program System (PA-EPHT, <http://dqs.health.state.pa.us/EPHT>) provides info from a statewide network of integrated environmental & health data to drive actions that improve public health. PA-EPHT data sets are available to users by exporting tables and charts in a range of file formats and also by viewing maps by topic.
 - Help In PA (www.helpinpa.state.pa.us) : DOH's one-stop online guide to health & human services, programs, agencies, and organizations in PA.
 - Text4baby: a free mobile service that provides pregnant women and new moms with health info. DOH is a partner in this national program. Funding is provided by wireless & mobile industry. Text **BABY** to **5114111**.
 - State Emergency Registry of Volunteers in PA (SERVPA, www.serv.pa.gov) : CoPA's online registry for medical & non-medical volunteers available for volunteering in case of an emergency.
 - PA Patient Safety Reporting System (PA-PSRS, www.papsrs.state.pa.us) : DOH is to receive reports of serious medical facility events and infrastructure failures within 24 hrs of the occurrence or discovery. In conjunction with the Patient Safety Authority (<http://patientsafetyauthority.org>), DOH has worked with EDS to create a one-stop electronic reporting system through which medical facilities can provide the required info.
 - DOH has implemented its redundant communication system as a subsystem of PA-STARnet. DOH's Radio Subsystem (RS) consists of a network of fixed radio control stations, mobile vehicular tactical network (VTAC) radios and portables, located at 66 DOH facilities, 16 Regional EMS Councils, 10 county & municipal health depts, 2 poison control centers and 198 hospitals.

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- 2013 DOH announced that a new partnership with Medscape.com medical news service will enhance communication efforts of urgent public health messages to PA's health care professionals. This partnership complements DOH's current subscription-based Health Alert Network (HAN) system.
- \$2.7M total to PA Health Care Cost Containment Council (PHC4, www.phc4.org), whose mission is to collect, analyze and report info that can be used to improve the quality and restrain the cost of health care in PA. PHC4 uses sophisticated statistical & research methodologies to produce reports on common illnesses that affect PA citizens. Data from nearly 4M inpatient & outpatient records from hospitals and ambulatory surgery centers is collected by PHC4 each year in PA. PHC4 also collects payment data from Medicare, Medicaid and commercial health insurance plans and is working on incorporating Medicare payment data on public reports, and updating & expanding an interactive consumer friendly online database of Medicare payments for common outpatient services and treatments. Near-term PHC4 will strive to 1) produce various customized reports on Hospital Performance, Healthcare Associated Infections, Facility Finances and Patient Safety; 2) create a value based payment system aiming to make health care organizations more accountable and integrate delivery systems and HIEs; and 3) optimize health system performance for chronic disease mgmt by applying a Triple Aim Approach, which includes improving patient experience of care, reducing cost of care and improving health of populations.
- PA Higher Education Assistance Agency (PHEAA, www.pheaa.org), created in 1963, has evolved into a national provider of student financial aid services, serving millions of students and thousands of schools through loan guarantee & servicing, financial aid processing, and other student aid programs. PHEAA earnings are used to pay its operating costs. PHEAA does business with vendors independently from CoPA -- see Doing Business w/ PHEAA tab on PHEAA website. Per FY12 PHEAA audited financial statement: IT related expenses = \$29.75M (FY11 = \$25.2M); professional services = \$55.5M (FY11 = \$51.8M), 76% of which for collection agency fees; and independent contractor fees = \$6.4M (FY11 = \$7.6M). PHEAA online services and info systems include:
 - PHEAA conducts student loan servicing activities nationally as American Education Services (AES, www.aesSuccess.org), for loans owned by commercial lenders, and FedLoan Servicing (www.MyFedLoan.org), for loans owned by U.S. Dept of Education. Borrowers may utilize these web sites as well as interactive voice response telephone service, mobile websites, and a call center.
 - Alec: financial aid processing product with dynamic dashboard that allows partner schools to complete certification tasks for alternative loans processed by AES.
 - eCourier File Mgmt System: AES product that allows partner schools to create & exchange compliant files to any guarantor, lender or servicer.
 - Education Planner (www.educationplanner.org) : comprehensive career and college planning.
 - You Can Deal With It (www.YouCanDealWithIt.com) : student aid and debt mgmt info.
 - Social Media: use of social media by PHEAA includes a Facebook site at <http://facebook.com/pheaa.aid>.
- \$5M to PHEAA for PA Targeted Industry Program (TIP), which is jointly administered with DLI. Created FY13, TIP provides grants to students enrolled in certificate programs for high-priority occupations: energy, advanced materials, and diversified manufacturing.
 - New Economy Technology Scholarship (NETS) program, comprised of the SciTech Scholarship and the Technology Scholarship, was created FY00 to train & maintain a technological workforce. Nearly \$50M in multi-year scholarships has been awarded through FY11. In recent years, only renewal students have received the \$3,000 and \$1,000 scholarships, respectively.
- \$18.5M (FY13 = \$17.8M) to PA Historical & Museum Commission (PHMC, www.phmc.state.pa.us) for GO, portion for tech-related uses. Plus \$585,000 (FY13 = \$530,000) to PHMC for State Records Center (SRC). PHMC functions include operation of State Archives (SA) and SRC. SA identifies, acquires, preserves and provides public access to permanently valuable & historical records created by govt. This responsibility extends to electronic records and to use of electronic and web technology to facilitate public access. SA maintains & preserves program files, maps, correspondence, reports, photos, minutes, case files, land records and more. SRC is official repository for inactive records that must be maintained by CoPA agencies for admin, fiscal or legal purposes. PHMC also administers state & local govt records mgmt programs. Services include preparation of records retention schedules, processing of records disposal requests, promulgation of standards for retention of records in different storage media, and training and technical assistance to records custodians. FY14 PHMC program measures include: 228M pages of archives and historical manuscripts and 240,000 boxes of records

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maintained by SRC; and 20,000 data requests from other state agencies made to the SRC.

- <http://PATrailsofHistory.com>: mobile-friendly website for finding & exploring nearby state-owned historic sites and museums along PA Trails of History® (PTH).
- Social Media: PHMC, in support of PTH, has set up a variety of social media options: the Trailheads blog, a Youtube channel for videos, photos on Flickr, and Twitter & Facebook pages.
- PA State Museum (www.statemuseumpa.org) : SciTech High School student docents interpret the museum's dynamic natural history dioramas and visitors traverse the state on a new giant map of PA.
- Cultural Resources GIS (CRGIS, <http://crgis.state.pa.us>) : a map-based inventory of historic & archaeological sites & surveys stored in files of Bureau for Historic Preservation (BHP). Currently there are 22,200+/- archaeological sites and 130,000 historic properties in paper files.
- 2012-17 Historic Preservation Plan action steps include: enhance traditional preservation tools by innovations in modern technology, which have opened up new ways to share info, rehab resources, and build public interest; use new forms of technology to improve access & interpretation of PA's history and make it relevant to a wider audience, such as improvements to www.explorepahistory.com, launched in 2003; and improve ease of use and content of BHP's website.
- Archives Records Info Access System (ARIAS, www.digitalarchives.state.pa.us) provides public access to archival records created by CoPA. Original paper records have been microfilmed then digitized for presentation online. 1.5M +/- records are accessible in ARIAS; SA plans to add more.
- <http://ShopPAHeritage.com> provides PA Heritage Foundation members and guests with online access to purchase PHMC's historical and cultural publications and more.
- PA Infrastructure Investment Authority (PENNVEST, www.pennvest.state.pa.us) provides grants & loans to sewer, and storm & drinking water projects throughout PA. PENNVEST operating costs are funded through investment earnings, repayment of loans, and federal funds. Annual admin expenses total \$13M+/-, a portion for tech-related unit lead by deputy director of IT. PENNVEST has implemented an office virtualization (OV) project whereby many staff now telecommute from home and its services are provided cost-effectively through its website. Peanut Gallery: This OV project could be adapted or duplicated in other state agencies.
- \$7.47M (FY13 = \$3.64M) to PA Insurance Dept (PID, www.insurance.pa.gov) for administration of PA's Children's Health Insurance Program (CHIP, <http://chipcoverspakids.com>), including \$3.76M increase to implement centralized eligibility determination process that will reduce admin costs to insurers, decrease enrollment errors and meet federal Affordable Care Act (ACA) info systems requirements. Plus \$15.7M (FY13 = \$7.9M) in federal funds for CHIP admin (portion possibly for above tech initiative). PID's mission is to license / regulate PA insurance industry and provide the public with insurance info, education and complaint resolution services. It undertakes on-site market conduct examinations of insurance co. records, files and operations. FY14 Guv proposes to create a dedicated funding source for admin of PID in order to provide increased flexibility in the regulation, mgmt, development and oversight of PA insurance industry. Q2-2013 PID launched <http://PAHealthOptions.com>, to help Pennsylvanians click through the complexities of health insurance.
 - Currently the Guv continues to abide by his announcement that PA will not create a HIE (which could have various IT components) as provided under ACA and instead allow the federal govt to implement a major part of the national health care reform law without state input.
 - PID online resources include: 1) For Consumers: find a licensed company, individual or agency; ask a Q or file complaint; and find continuing care retirement community and 2) For Insurance Professionals: apply for / renew a license; process appointments; verify continuing education credits; and print an insurance license.
- Dept of Labor & Industry (DLI, www.dli.state.pa.us) FY14 priority is to continue through various initiatives to strengthen & interlink CoPA's workforce development and job creation system, while eliminating & avoiding duplication. Numerous website, info systems, and communication challenges must be met to achieve this goal.
- DLI CIO oversees large Office of IT comprised of 4 bureaus (sample sub-units follow): 1) Business App Development - bureau of workers compensation app development (a/d), bureau of disability determination a/d, state workers insurance fund (SWIF) a/d, UC modernization project, and tax & benefits legacy system; 2) Enterprise Services – customer relations, help desk and customer services, enterprise software and info services, web team, project mgmt, and security; 3) Enterprise Architecture – database & info architecture, UC

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database operations, SWIF database operations, infrastructure technology architecture, enterprise architecture and tech standards, and architecture design; and 4) Infrastructure & Operations – infrastructure, network infrastructure, network security & data services, enterprise network architect, server farm operations, AIX, support services, NT support services, systems storage services, network support services, and mainframe outsourced operations. DLI features 26 online services: labor law compliance (7 services), UC (8 services), workers' compensation (5 services), workforce development (3 services) and workplace safety (3 services).

- DLI is the lead agency in administering interagency employment & training programs for PA's adult labor force and youth through Bureau of Workforce Development Partnership and Center for Workforce Info & Analysis (CWIA, www.paworkstats.state.pa.us), which generates workforce informational & analytical products & services that drive PA's investments in workforce education & training.
 - Strengthening connections with education include: 1) Workforce Data Quality Initiative - links workforce, welfare and education data to gauge whether the welfare, workforce development and education systems are succeeding in preparing and placing individuals in jobs, and determining the efficiency of the workforce system; and 2) PA Career Coach (www.pacareercoach.org) - an online career exploration tool, provides up-to-date local employment data, estimated earnings and occupations that match with a user's skills and knowledge, and educational programs that will prepare an individual for a given occupation.
- JobGateway: FY14 DLI budget continues to support JobGateway (www.jobgateway.pa.gov). FY13 DLI launched the first of 3 phases of this comprehensive job-matching system. "Through modernization & improvement of the existing system, cutting edge technologies will be introduced in phases to benefit job-seekers & employers."
- PA CareerLink (www.cwds.state.pa.us) is a one-stop delivery system for employment, training, and education services in PA. Primary delivery mechanism for services is an Internet system to promote self-service. In addition, staff-assisted services are available at PA CareerLink centers. PA CareerLink partner agencies (DLI, PDE, DPW and local WIBs) are co-located. Online services for individuals include job search & placement assistance, and assessment of skills & needs. Online services for businesses include assistance in matching qualified job seekers w/ job openings, identifying tax incentives businesses may be eligible for, and assessment for occupational & training needs. FY14 DLI budget continues to support integration of DPW Employment Advancement & Retention Network (EARN) centers and PA CareerLink in 5 phases, culminating in 2015.
- \$2.5M to DLI for Keystone Works (KW) grant program, launched in FY13 per Act 107 of 2012. KW facilitates rapid return to work for recently unemployed individuals. While they are participating in employer-driven, on-the-job-training, unemployed individuals remain eligible for their full UC benefits, and employers are offered an incentive if the participant completes the training and is hired in "high priority occupations" as determined by CWIA. Employers who ultimately hire participants are eligible to receive up to a \$1,500 state grant per claimant.
- PA Workforce Development (W/D) Website (www.paworkforce.state.pa.us) was established by ExO in 2000 in response to nationwide restructuring & consolidation of Byzantine state-federal w/d programs and funding streams. Concurrently, states created Workforce Investment Boards (WIBs) to inject private sector employer leadership into the w/d so-called system. WIBs have continued, even gained, relevancy as a result of the "Great Recession," and resulting ARRA act and funding streams. In 2012 PA Guv reappointed the PA WIB chair. Guv has instructed PA WIB to work with state agencies to develop a performance mgmt system.
- \$275.0M in federal funds to DLI for administering PA Unemployment Compensation (UC) Law and state system of public employment offices, portion for tech-related uses. UC admin (www.uc.pa.gov) includes: plan, organize and direct all activities for taking, processing, and payment of all UC claims filed by Internet or telephone; develop policies, standards and monitoring systems to ensure UC program is operated per federal & state laws; ensure the most efficient application of modern technology in provision of UC services; and integrate UC services with PA CareerLink®.
- \$643,000 to DLI Office of Vocational Rehabilitation (OVR) for assistive technology (AT) allocated as follows: \$244,000 for devices; and \$399,000 for demonstration & training. AT is any device that helps a person with a disability achieve a more independent & productive life. Proliferation of AT is achieved through 2 third-party programs that make AT financing available to people with disabilities and enable them to "test drive" AT.

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- AT devices include any item, piece of equipment, or product system that is used to increase, maintain or improve the functional capabilities of an individual with a disability. "High-end" AT includes communication devices, specialized computer access, customized mobility aids, work station designs, etc. OVR directly assists an individual in the selection, acquisition or use of any AT device, including through: evaluation & coordination; selection; designing & customizing devices; repair and/or replacement; training; and connecting with other info resources & providers of AT devices & services.
- \$11.1M to DLI Bureau of Occupational & Industrial Safety (BOIS), including \$1.2M in licenses & fees. BOIS functions include administering laws requiring PA employers to report info about hazardous chemicals located in their workplace or released into the environment and also to ensure availability of related info on site to emergency responders. BOIS collects Tier II Hazardous Chemical Inventory Report data and Material Safety Data Sheets and site plans, and manages them through an online reporting program called PA Tier II Systems (PATTS, www.lipatts.state.pa.us). Data sharing agreements exist with state, county & local emergency response. Online Hazardous Substance Survey Form (www.hazardoussurvey.state.pa.us) enables public sector employers to complete an annual survey and meet PA's reporting requirements as defined under state law.
- \$50,000 from PA One Call fees (www.pa1call.org) to DLI GO. PA One Call System, Inc., a non-profit PA corp., protects underground facilities of members thru communication with any person planning to disturb the earth.
- \$455.97M to Liquor Control Board (LCB, www.lcb.state.pa.us) for GO, portion for tech-related uses. LCB CIO oversees Office of IT Services comprised of 6 divisions: app development, enterprise infrastructure, business process, enterprise integration & QA, services & support, and security. CIO responsibilities include Oracle E-Business and ReTek suites, plus other systems for an organization with 5000+ people, 3 warehouses and 600+ retail locations. LCB uses Oracle, not SAP that the rest of CoPA uses. Office of Supply Chain plans, implements and controls flow of product from suppliers to LCB stores using a large, complex supply chain. Guv proposes that in 2013 CoPA will begin to divest itself from the sale of wine & spirits through auction of ≤1,200 W&S retail store licenses. New licensees such as W&S retail licensees, big-box retail stores, pharmacies, and grocery & convenience stores would be required to use an identification scanner device before the sale of alcohol can be made. If this effort proceeds, LCB's budget & operations would be turned on its head. LCB online services, IT systems and other tech-related info currently include:
 - Online Services for Consumers: Shop Online (www.FineWineandGoodSpirits.com) - allows consumers to place online orders that can be delivered to any non-PO Box PA address or picked-up at a PA Wine & Spirits (W&S) Store; Gift Services - includes gift cards, a gift card balance app, and personalized wine labels; and Product Search - database of thousands of different wines.
 - Online Services for Licensees: e-Licensing - for liquor license renewals & validation; License Search - includes clickable PA map to retrieve info about licensees by county; Licensee Ordering - allows licensees to submit merchandise orders; Malt/Brewed Beverage Search - searchable database of 5,000 types of beer.
 - Online Services for Industry: Become a Supplier in PA - some steps are more automated than others; Vendor Login - for approved suppliers to do business with LCB; and Bulk Alcohol Purchase Order Request System - used by certain types of licensees to make bulk purchases from suppliers.
 - Bureau of Alcohol Education's (BAE) Responsible Alcohol Mgmt Program (RAMP) Division offers responsible service training to PA licensees and their employees through such approved vendor websites as www.plcbramptrainer.com. BAE online resources include detailed tips on How to Spot a Fake ID.
 - Business Partner Research Opportunity is the chance for colleges, vendors or other industry research analysts to partner with LCB. Partners are expected to share all data collected at any PA W&S Shop.
 - LCB Board materials on the web include meeting minutes & agendas w/ reports on tech-related purchasing & contracting info such as recent purchases of computer products & services and professional services.
- \$28.7M to Dept of Military & Veterans Affairs (DMVA, www.dmva.state.pa.us) for GO, portion for tech-related uses - including \$300,000 increase for implementing software to streamline payroll processing of PA National Guard (PNG, <http://pa.ng.mil>) members. DMVA operates & maintains a statewide communications network utilized in the event of state or federal mobilization. DMVA & PNG are active users of social media. No word yet on whether PA Air National Guard will purchase the Virtual Reality Parachute Simulator featured in a PNG news release that we think is way-too-cool not to mention.
 - Federal Aviation Association has authorized ≥4 drones to fly in restricted airspace over Fort Indiantown Gap,

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a large military installation near Harrisburg. The drones are used for training and equipped with several cameras, including one with infrared capabilities. The entire system of 4 aircraft with trucks, launcher and other components costs \$15M+/- . State legislation has been introduced to ban law enforcement from using drones for surveillance purposes w/o a warrant from a judge. PSP currently does not use drone technology.

- \$2.8M total, derived solely from license fees and fines, to Milk Marketing Board (MMB, www.mmb.state.pa.us), portion for operating the Milk Accounting and Regulatory System (MARS) that values milk based on component pricing. Pricing info collected through MARS, and other factors such as price of milk in neighboring states and the ratio of the cost of etc., etc. are used by the board to establish minimum milk prices. 2013 MMB updated regulations concerning electronic methods for testing milk.
- \$63.1M (FY13 = \$60.4M) to Public Utility Commission (PUC, www.puc.pa.gov) for GO, portion for tech-related uses. PUC regulates public utilities operating in PA providing a range of products & services in five industries: electricity, natural gas, water/wastewater, transportation, and telecom. Technology is used 1) by PUC to fulfill its regulatory responsibilities; 2) by utilities to comply w/ regs and/or to adapt to the marketplace shaped by PUC; and 3) by utilities that are inherently tech-based (esp. telecom). PUC has jurisdiction over intrastate local, toll and access telephone services & providers. PUC does *not* regulate Bb, wireless, or cable TV companies (the FCC does). During the past 20 years PUC's role has expanded from its traditional role (ratemaking and service-regulating) to include enabling & facilitating competitive markets, including fostering new technologies. PUC review & approval of mergers & acquisitions within telecom industry is ongoing. PUC's internal tech-related goals for FY14 and future years include to continue improving internal efficiencies and enhancing public access to info maintained and produced by the commission. PUC online services, info systems, and tech-related activities:
 - New PUC Website: FY13 PUC launched new website. Highlights: Video-Playing capability allows visitors to watch video of public meetings, education videos and video news releases; Forms & Filings is where users can find PUC forms & applications; eFile documents – allows consumers, utilities and attorneys to electronically file and search for certain documents, serve documents on other parties, and receive service of documents from PUC; <http://PAGasSwitch.com>, a natural gas shopping comparison tool; and Additional transparency re pipeline safety matters and Act 13 Marcellus Shale impact fee records, reports and other data. PUC vendors for the website upgrade: Top Flight Media and MudBrick Creative.
 - Public Documents Search: contains documents associated with a case such as public meeting orders, motions & statements, judge decisions, secretarial letters, etc. Many PUC documents remain un-digitized.
 - Utility/Authority Search: provides up-to-date info re PUC-regulated public utilities by name or type of service.
 - Electric Shopping aka PA Power Switch (www.PAPowerSwitch.com) : 2013 PUC announced that 2M PA electric customers are using a competitive electric supplier, including a green/renewable energy supplier.
 - Social Media: FY13 PUC launched social networking initiatives via a Facebook page for PAPowerswitch.com and a Twitter account for regulatory news (@pa_puc). PUC has previously criticized electric utilities for insufficient social media outreach during several tropical storms.
 - "I Do More" Campaign (www.IDoMoreWithHighSpeedInternet.com) : FY13 PUC named 4 PA residents Internet All Stars as part of a PUC campaign promoting high speed Internet subscription in rural parts of PA.
- PUC Electronic Filing (eFiling): During FY13 PUC proposed and/or approved regulations (not much at the PUC *doesn't* require a regulation) to change or waive requirements re filing of paper copies of certain documents, the size limit of eFiled documents, use of compact discs, etc. due to recent reorganization of PUC, advances in technology, and the ability of many practitioners to make electronic filings. eFiling is part of PUC's implementation of a case & document mgmt system – InfoMAP (Info Mgmt & Access Project) begun in 2008 (as per, yes, a regulation). InfoMAP overhauled PUC's case mgmt system. It provides a single-entry point to submit & access info, initiate transactions and conduct business thus permitting eFilings and giving the public electronic access to info filed with/produced by the PUC. Today most filings are scanned then published to the website.
- PUC expends significant resources to implement evolving state & federal laws that affect tech-related industries. Act 213 of 2004 established Alternative Energy Portfolio Standards program (AEPS, <http://paaeps.com>) and is implemented by PUC w/ assistance from a private contractor. The Act requires electric distribution companies and generation suppliers to include a gradually increasing amount (for 15 years) of electricity generated from AE resources in their sales to retail customers. Act 183 of 2004 addressed obligations of telecom public utilities by continuing existing network modernization plans and providing incentives for accelerating high-speed Internet service deployment by 2015, while reducing filing & reporting requirements for incumbent local exchange carriers

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(ILECs). Act 129 of 2008 requires certain larger distribution companies to install smart meter technology with electronic data interchange capability no later than 2024. Act 13 of 2012 gave PUC oversight of collection & distribution of natural gas (Marcellus Shale) well impact fees and review of zoning restrictions.

- Universal Bb Deployment: Act 183 requires 100% deployment of Bb service by ILECs to every access line in PA - even the most rural & remote areas - no later than 2015. CenturyLink and Windstream will complete their build-outs by 2013. Verizon will finish by 2015. All other ILECs were completed by 2008. The law also required all ILECs to provide universal Bb deployment for schools, industrial parks, and health care facilities no later than 2006. ARRA investments complement & augment Act 183 efforts. Act 183 includes 4 programs designed to accelerate Bb deployment: 1) Bona Fide Retail Request Program - creates a mechanism for customers who do not currently have access to Bb to apply for it through their ILEC; 2) Business Attraction or Retention Program - permits CoPA to aggregate customer demand and facilitate deployment of advanced or Bb services to qualifying businesses that CoPA is seeking to attract or retain; 3) Education Technology Program - concluded 6/30/11; and 4) Bb Outreach & Aggregation Fund (see DCED section above). Act 183 also requires CoPA to compile, update, and publish (www.bakerbb.com/pabroadbandmapping) a listing of advanced and Bb services, by general location, available from all advanced and Bb service providers operating in PA irrespective of the technology used. All providers of Bb service are required to cooperate.
- PA Universal Service Fund was established to reduce access charges and intraLATA (within the same region) toll rates for PA telephone customers. The Fund, initially set at \$32M annually, is meant to encourage greater toll competition while enabling carriers to preserve affordability of local service rates in PA. 300+/- telecom service providers contribute to the Fund and payments are disbursed monthly to 32 qualified recipients. Currently, wireless carriers are not required to contribute to the Fund. Solix.com administers the Fund.
- PA Telecom Relay Service (TRS), currently approved through FY13, is paid for via a monthly surcharge on each residential & business access line. TRS consists of 4 programs: Traditional - if you are a person who wants to communicate by phone with persons who are deaf, hard of hearing or are speech disabled (provided through AT&T Relay Service); Captioned telephone aka CapTel - see your telephone conversation, word by word, on screen as you talk (provided by Hamilton Relay); Telecom Device Distribution (TDD) Program - provides specialized telecom devices, such as text telephones and amplifiers, at no charge to qualifying persons (administered by a program of Temple U plus PUC and DLI's OVR); and Print Media Access System (PMAS) Program - provides access to National Federation of the Blind reading service (operated by OVR). TDD Program FY13 budget = \$260,000, including \$108,500 for equipment. PMAS Program FY13 budget = \$154,600.
- **Mother-of-All PA State Agency IT Budgets:** FY14 Dept of Public Welfare (DPW, www.dpw.state.pa.us) Information Systems (IS) budget and initiative supplemental details, including vendor & contractor info, can be found in the annual elephantine DPW budget document (FY14's weighs-in at 388 pgs - start w/ pgs 21-27) downloadable at DPW's website under "Publications." *Highlights...*
- \$304.5M (FY13 = \$173.5M) to DPW Bureau of Info Systems allocated as follows: \$57.3M (FY13 = \$45.5M) from GF, including \$13.5M increase for implementing changes needed to meet federally mandated ACA info systems requirements ("Mandate" here is used as a pejorative. Discuss); \$206.4M (FY13 = \$91.9M) in federal MA funds; \$1.36M in federal Child Welfare (C/W) Title IV-E funds; \$9.3M in federal Temporary Assistance to Needy Families Block Grant funds; \$17.8M (FY13 = \$13.9M) in federal Food Stamp funds; \$12.1M (FY13 = \$10.6M) in federal Child Support Enforcement funds (DPW Bgt, p54); \$0 (FY13 = \$879,000) in ARRA funds for PELICAN ELN System Support; \$50,000 for MA data exchange; and \$50,000 for PID - COMPASS Support - CHIP & Adult Basic. Per DPW Bgt, most of the proposed increase from FY13 to FY14 (\$15.8M-state and \$135.2M-federal) is for updating the existing integrated eligibility system to support implementation of certain ACA mandates. The \$304.5M amount above can be reallocated as follows:
 - \$266.0M (FY13 = \$144.05M) for Operating Expenses (OE). This amount includes funding *decreases* of \$28.1M, including -\$1.65M for contracted costs associated w/ Data Powerhouse, -\$23.0M re Program Integrity project that focused on data exchanges, enhancements and modifications linked to the ACA-required HIE, and -\$673,000 re decreases in PELICAN maintenance. OE provides ongoing IT support of DPW benefit delivery systems, network infrastructure, enterprise data warehouse, and DPW mainframe operations provided by PA's Powerhouse Project. Also, OE provides ongoing maintenance & enhancements of specific IT projects, including Client Info System (CIS) - Medical Eligibility Determination Automation

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- (MEDA) project, CoPA Access to Social Services (COMPASS) project, Home & Community-Based Services Info System (HCSIS) project, Child Care Mgmt Info System (CCMIS), and Title IV-E systems.
 - \$31.4M (FY13 = \$28.0M) for Personnel: provides for 313 authorized positions, with 285 of them filled.
 - \$5.4M (FY13 = \$0) in federal funds for Budgetary Reserve: provides MA reserve for potential changes in base revenues used to support CIS & HCSIS.
 - \$1.2M for Nonexpense items: includes \$879,000 *decrease* in ARRA - State Longitudinal Data System funds.
 - \$350,000 for Fixed Assets.
- \$198.26M in additional state & federal funds to DPW for tech-related uses allocated as follows:
 - \$3.4M (FY13 = \$15.1M) in ARRA Health IT (HIT) funds for County Admin - Statewide.
 - \$145,000 in federal funds to Mental Health (MH) Services program for MH data infrastructure.
 - \$9.8M in state & federal funds to Cash Grants program for EBT contract (DPW Bgt, p86).
 - \$35.25M in state & federal funds to MA-Outpatient program for tech-related contracts (operating) allocated as follows: \$33.5M for HP enterprise services (claims processing); \$385,000 for MA IT architecture (MITA) contract; \$414,300 for HIT contracts; and \$950,000 for case mgmt system (HCSIS), including \$870,000 increase for new contractor to provide case mgmt review system software. (DPW Bgt, p105+111)
 - \$98.71M in state & federal funds to MA-Inpatient program for tech-related contracts allocated as follows: \$92.8M (FY13 = \$135.8M) in ARRA funds to MA-Inpatient program for HIT - provider & hospital incentives (DPW Bgt, p117); \$452,000 for HP claims processing and PROMISe contract costs; \$5,000 for MITA contract; \$552,000 for McKesson Drug - maintenance of InterQual decision support tool; \$1.4M for Infotech dba Avysion-clinical consultant; \$1.4M for Liberty - clinical consultants; \$600,000 for Navigant litigation consulting; and \$1.5M for CGI-AMS, Inc. claim validation & recoupment initiative. (DPW Bgt, p127)
 - \$9.37M in state & federal funds to MA-Capitation program for tech-related contract costs allocated as follows: \$8.37M for HP claims processing and PROMISe contract costs; \$100,000 for MITA contract; and \$900,000 for third party liability (TPL) data exchange. (DPW Bgt, p139)
 - \$10,800 for Special Pharmaceutical Services Program (SPSP) MH claims processing automation allocated as follows: \$8,000 for regular claims processing; and \$2,800 for ad-hoc reporting (DPW Bgt, p175). SPSP claims processing functions are performed by the contractor for DOA's PACE Program (DPW Bgt 171).
 - \$11.18M in state & federal funds to MA-Long Term Care for continuation of tech-related contracts including: \$3.66M for Avysion - RN contract staff; \$1.1M for Deloitte-HCSIS; \$3,600 for Harmony Info Systems - enterprise incident mgmt in SAMS; \$640,000 for HP Enterprise Services-claims processing & NP; \$3.9M for MAXIMUS-waiver related enrollment; \$1.77M for Myers & Stauffer-NH rate setting case mix tech/system support; and \$108,000 for Navigant-waiver global CAP support & litigation support. (DPW Bgt, p216+221)
 - \$15.03M in state & federal funds to Intellectual Disabilities-Community Base Program for tech-related OE allocated as follows: \$1.8M for administrative financial services provider; \$2.97M for rate development, budget analysis, and other services; \$2.05M for establishment of overarching fiscal governance process and component parts; \$7.02M for HCSIS and PELICAN system enhancements to meet CMS assurances; \$1.15M for collection of quality initiative info from individuals receiving supports through Office of Developmental Programs, and analyze and report findings; and \$44,000 for use of copyrighted software materials for standardized assessments of Waiver participants. (DPW Bgt, p255)
 - \$15.36M to County C/W Services program for tech-related uses allocated as follows: \$457,000 special grant for Child & Family Services Review data analysis; and \$14.9M for IT grants to counties. (DPW Bgt, p301)
 - DPW's CIO oversees Bureau of Info Systems (BIS), responsible for IT needs of DPW, DOA & PID. DPW provides dept-wide direction & coordination of IT plans, research, engineering, standards, policy, apps development, infrastructure mgmt, customer support, program & project mgmt, technical training and info resource mgmt. BIS staff plan, analyze, design, implement, maintain and operate large, complex, integrated info & office systems in support of all DPW offices. DPW's automated systems provide for determination of eligibility for benefits; disbursement of cash, food, and other benefits; and mgmt of home & community-based services. Most of DPW's info systems are partially funded by the federal govt and must comply with federal guidelines, laws and regs. These systems are critical in providing benefits to about 2.7M eligible recipients in PA. BIS is comprised of 320+ state staff and organized into the Fiscal & Employee Services Section and 4 divisions and sub-units summarized as follows (see DPW website for more detail):
 - Division of Enterprise Program and Portfolio Mgmt, with two sections: 1) Program Process and Performance; and 2) Home & Community Services IS Operations.

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- Division of Infrastructure Mgmt & Operations, with two sections: 1) Infrastructure Operations - customer services, and app processing; and 2) Enterprise Desktop Mgmt.
 - Division of Technology Engineering, with five sections: 1) Enterprise Knowledge Mgmt - data warehouse development, data analysis, enterprise content mgmt, and business intelligence; 2) Systems Engineering - enterprise server admin, mainframe & performance monitoring, and enterprise operating systems; 3) Enterprise Network & Security - network architecture and telecom mgmt, and technical & architecture development; 4) Database Mgmt - design, admin, and integrity; 5) Security Architecture – IT security-audit-monitoring-and-compliance, identity access mgmt, and IT security infrastructure & policy.
 - Division of Enterprise Apps (includes software quality assurance & control unit) with three sections: 1) Business & Eligibility Systems – eligibility clearinghouse, benefit delivery & recovery, admin apps, and office automation services; 2) Healthcare, Children & Family Systems - healthcare provider & payment assessment systems, healthcare business systems, and family & youth support services; and 3) Enterprise Services – web services, middleware services, and centers of excellence.
- DPW FY14 IS Initiatives:
 - Client Info System (CIS) provides automated welfare data processing for Cash Assistance, MA and Supplemental Nutrition Assistance Programs recipients. It supports 7,000+/- County Assistance Office (CAO) workers statewide, with a total caseload of 2.7M+/- clients. CIS is a mainframe legacy system first implemented in 1978 and has had numerous additions & updates on various generations of technology. One way DPW has identified to accomplish this is by migrating components of CIS to newer, web-enabled solutions. In FY14 DPW will continue incremental renewal of CIS by moving more components of CIS from the mainframe platform to the web-based system - eCIS. Mainframe-based code will be replaced with web-based code that is compliant with state & federal requirements. Expensive mainframe processing will be replaced with less expensive server technology.
 - Home & Community-Based Services Info System (HCSIS, www.hcsis.state.pa.us) is a centralized web-enabled consumer case mgmt system that provides data collection and state-level program mgmt. It also functions as the daily operating system for certain county entities. Major HCSIS functional areas include client mgmt and eligibility determination, supports coordination mgmt, provider mgmt, financial mgmt, claims pricing, and quality mgmt & reporting. It also provides additional functionality for other DPW offices, services & programs, plus DOA. FY14 HCSIS project activities include: ongoing system maintenance, HCSIS helpdesk, ongoing support for claims processing with PROMISE, new report development, and continued tech upgrades to current Microsoft tech frameworks. HCSIS project will build on existing functionality to improve mgmt & monitoring of other H&C-B programs, facilitate consumer involvement and broaden access to info. HCSIS will also be enhanced for multiple initiatives to support compliance with federal CMS.
 - Child Welfare Info System: In FY13 DPW concluded a feasibility study and alternatives analysis for design, development and implementation of an IT solution to support PA's c/w programs, and has now formalized a strategic implementation plan for component parts of this initiative. One first step is to provide a centralized, unduplicated repository of individuals by bringing c/w constituents into DPW's Master Client Index. Other FY14 activities include: develop data dictionary; planning activities, e.g., validating requirements and development of General System Design and Data Model document; and begin to plan & create a statewide database that includes a near-time data Adoption and Foster Care Analysis and Reporting System in 2013.
 - PA Enterprise to Link Info for Children Across Networks (PELICAN) is an integrated mgmt system that supports multiple Child Care programs serving 220,000+ children and 20,000+ c/c providers – supports include provider certification and online info for citizens about early learning opportunities & providers. PELICAN provides CoPA a means to assess accountability & monitoring across the early learning continuum to ensure program integrity. PELICAN FY14 project activities include: ongoing system maintenance; providing correspondence to citizens in their preferred language; reducing c/c IS operational costs while improving efficiency; tracking projected spending and claim amounts against allocated amounts; and making available the ability to authorize additional services for payments and payment processing.
 - ACA Initiatives; DPW is outlining the systems changes needed to fulfill requirements of ACA with a phased-implementation approach. The existing integrated eligibility system will be updated to support implementation of ACA mandates and admin of MA and other federally funded public assistance programs. DPW's existing systems provide a foundation on which to build the needed enhancements to address ACA requirements. Four phases are planned for implementation over the next 3 state FYs to accommodate ACA.

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- DPW online services and info systems include:
 - CoPA Access to Social Services [(COMPASS, www.compass.state.pa.us) allows individuals and community organizations to screen, apply for and renew a range of social services. COMPASS serves as single access point for health care/MA coverage, food stamps benefits, cash assistance, subsidized child care, long term care, home & community based services, and seasonal home heating assistance aka LIHEAP. In FY14, 883,000+/- online applications will be submitted through COMPASS.
 - Provider Reimbursement and Operations Mgmt Info System (PROMISE, <http://promise.dpw.state.pa.us>) : a HIPAA-compliant, web-based app for registered providers that processes human services claims and manages info for numerous PA human services programs, including some claims for DOA.
 - MA Provider Incentive Repository Resources aka MAPIR is a system app that is being added to PROMISE. The app is the state-level info system for the electronic health record incentive program. MAPIR will track and act as a repository for info related to payment, applications, attestations, oversight functions, and interface with CMS' National Level Repository.
- "Welfare" Legislation: A House bill currently under consideration would change the name of DPW to Dept of Human Services. Opponents include legislators with concerns about costs of printing new stationery and signs, as well as name changes that would be needed in the dept's computer system.
- \$21.1M to Dept of Revenue (DOR, www.revenue.state.pa.us) GO for tech-related uses allocated as follows: \$6.6M (FY15 = \$6.5 million) for EDP and staff support; and \$14.5M (FY13 = \$20.45M) for technology & process modernization. \$10.0M increase to DOR for GO is offset by a roughly equal amount of decreases, including \$4.08M in decreases resulting from Electronic Efficiencies Initiative. During 2013 DOR is transitioning the first state taxes – corporation taxes – into its new integrated tax system (ITS), a system that will eventually improve tax processing across all state taxes through greater automation, improved data accessibility and enhanced process uniformity. Tax Day 2013 (April 15) DOR granted PA taxpayers an extra day to file their personal income-tax returns because the DOR website - as well as the websites of 40 other depts, commissions, and boards - went dark for several hours due to a technical breakdown. DOR's two tech-related units are as follows:
 - Bureau of Information Systems (BIS), lead by DOR CIO, is responsible for operation & development of highly complex, large-scale computer systems; the design, reproduction, and distribution of forms; and telecom technology support. BIS divisions include: ITS tech support; ITS functional process support; legacy tech support; submissions & support technologies; planning, security & admin; infrastructure & operations; and lottery & casino gaming tech support.
 - Bureau of Imaging and Document Mgmt: receives, sorts, preps, controls and banks all remittances submitted to DOR, and creates archival images of all tax returns, attachments and checks received by DOR.
- DOR Revenue Collection & Administration: DOR continues to expand use of automated procedures assisting taxpayers in filing accurately and more efficiently and permitting quicker deposit of funds and review of tax return accuracy. These automated procedures include web-based systems with increasing functionality for filing & payment of business taxes and the personal income tax. There is also an extensive delinquent tax collection system that includes automation. In addition to tax admin, DOR is responsible for admin of the PA Lottery.
- \$35.0M (FY12 = \$32.9M) from Lottery Fund (LF) for online vendor commissions. Plus \$38.0M from LF for expenses associated with proposed Lottery privatization allocated as follows: \$29.0M (FY13 = \$0) for admin resources for operational costs of a private manager (PM); and \$9.0M (FY13 = \$0) for mgmt expenses of a PM. The privatization funds are derived primarily from a reduction in LF funding used for GO.
 - **Unhatched Chicken (Second of 2):** FY14 marks the first FY in which the Guv is budgeting for a PM to oversee day-to-day operations of the PA Lottery (www.palottery.com) under a private mgmt agreement (PMA). The Guv currently is moving forward with this effort (e.g., a PMA has been executed), but PA's AG, among others, has called this effort unconstitutional & illegal. See DOR website for evolving details, including the proposed PM's business plan, which commits to look for long term opportunities to allow it to invest in people, brand and technology; develop Internet play, e.g., add electronic games; and use technology to improve efficiency.
- DOR eServices Center (www.doreservices.state.pa.us) is the web portal for all of the dept's electronic filing services. Individuals, businesses, and tax professionals can file returns and reports, make payments, view filing

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history, register businesses and file appeals electronically for certain taxes. DOR eServices include:

- PA Personal Income Tax Electronic Filing is available by one of three methods: eFiling (<http://padirectfile.state.pa.us>); telephone (TeleFile); and PA/IRS electronic filing, which allows taxpayers to file federal & state income tax returns together.
- Board of Appeals (BOA) Online Petition Center (www.boardofappeals.state.pa.us) : used by taxpayers to electronically file a tax- or rebate-related adjudication appeal with DOR.
- Electronic Tax & Data Exchange System (E-TIDES, www.etides.state.pa.us) : DOR's electronic system for filing business taxes. In addition, online registration and electronic funds transfer services are available to businesses. DOR provides online a list of software developers & products approved to electronically prepare & file documents. Developers & products are added to the list as vendors are approved.
- Other DOR e-Services allow county govt access to submit & obtain info electronically, provide answers to questions in a searchable database and allow users to submit a question to the Online Customer Service Center (<http://revenue-pa.custhelp.com>), allow financial institutions to access a list of decedent listings (from data it receives from DOH Bureau of Vital Statistics), provide info needed by software vendors/transmitters to enable electronic filing with DOR, and allow tax professionals access to client data and filing history.
- DOR Tax Incentive Programs: DOR offers a variety of tax incentives, refund/rebate opportunities, credits and other e/d programs (some in conjunction with DCED) to eligible PA tech businesses, as well as individuals. For more info on DOR-administered programs or to see if you qualify, explore DOR's web page on these topics.
- E-Commerce Taxes: Effective 9/1/12, remote sellers w/ physical presence in PA must become licensed and collect state sales tax. Consequently, Amazon.com, which has 6 fulfillment centers in PA, started collecting sales tax on orders that are shipped to the state. Amazon had previously declined to register to collect PA's 6% levy.
- Computer Services (CS) Taxes: Expenditures for services are not taxable under PA's sales & use tax except when specifically taxed by law. A 1991 act imposed the tax on charges for a few selected business services. Act 7 of 1997 removed CSs from the list of taxable services. Estimated benefit of this exemption to CS providers is \$317M in FY14. Business consulting services are also exempt (estimated FY14 benefit = \$316M).
- \$1.77M to State Ethics Commission (PSEC, www.ethics.state.pa.us), portion for administering PA Lobbying Disclosure (PLD) Act and Employee Ethics Act and for operating PSEC eLibrary (www.ethicsrulings.state.pa.us), an online public gateway to PSEC rulings, statements of financial interest, and Gaming Act-related lists. Complaints re lobbying disclosure and ethics matters may be filed by filling-out downloadable paper forms.
- \$33.53M to Dept of State (DOS, www.dos.state.pa.us) for tech-related uses allocated as follows: \$29.27M (FY13 = \$34.8M) in federal funds for GO Federal Election Reform; and \$4.26M for Statewide Uniform Registry of Electors (SURE). Bureau of Information Systems manages all activities of DOS IT projects & services.
 - Bureau of Corporations and Charitable Orgs maintains 2.6M corporate entities, 11,000 charities and 500 professional fundraisers (FR) in a database, and processes 120,000 corporate filings, 12,400 charity registrations, 470 FR registrations, 2,500 FR contract filings and registers 124,000+/- UCC filings per year.
 - Bureau of Professional & Occupational Affairs operates MyLicense (www.mylicense.state.pa.us), which offers prospective & current licensees, employers and the public various online licensing services.
 - PA Biz Online (www.pabizonline.com), managed by DOS in coordination with DLI & DOR, is the portal for assistance with establishing a business in PA. In FY14, DCED and Interagency Coordination Advisory Group for Economic Development will launch an initiative to upgrade this portal.
 - Campaign Finance Online Filing (www.campaignfinanceonline.state.pa.us); receives & posts campaign finance reports filed by candidates for statewide, legislative and judicial offices, plus PA political committees.
- DOS's extensive use of technology is driven by its role as administrator of various laws including: PA Election Code, PA & National Voter Registration (VR) Acts, and PLD Act. DOS tabulates, publishes and disseminates stats for VR & elections; it also serves as repository of maps & descriptions of PA election precincts. Act 61 of 2001 amended PA VR Act and requires DOS to create SURE (www.pavoterservices.state.pa.us), an integrated voter registration database containing all PA electors. Act 134 of 2006 requires DOS to receive filings & reports from lobbyists and make this info available to the public on the web (www.palobbyingservices.state.pa.us). DOS also maintains a record of legislation passed by the G/A by docketing the bills and assigning act numbers.

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- Act 18 of 2012 Voter ID Law (www.votespa.com) amended PA's electoral process to require voters to show a photo ID before voting at a polling place beginning in Nov 2012. However the law remains under court challenge and therefore has not gone into effect.
- Jan 2013 a state senator introduced legislation to provide for online voter registration in PA.
- \$41.36M (FY13 = \$44.14M) to Public School Employees' Retirement System (PSERS, www.psers.state.pa.us) for admin, including \$2.0M increase to upgrade computer & phone systems. PSERS CTO oversees IT Office, which manages large IT contracts & projects and is comprised of three units: 1) Bureau of IT (includes three divisions – Network, Sever, and Database; Business Apps; and Document Archive and Data Capture); 2) Business Architecture Center; and 3) Bureau of Info Mgmt (BIM) - responsible for maintaining, documenting, and cleansing PSERS' member and employer data, and managing PSERS' electronic data records, imaged records, paper and film/fiche records. BIM also includes Data Stewardship Division, which houses PSERS' records mgmt program, and the Data Integrity and Member Accounting section.
 - FY14 PSERS \$5.66M tech-related operating budget: telecom recurring = \$397,000 (FY13 = \$545,000); telecom voice HW (<\$5,000) = \$2,000; consulting services (vendor hosted SW) = \$10,000 (FY13= \$30,000); consulting - maint. & support (post implementation) = \$82,000 (FY13 = \$122,000); consulting (outsourced info security services) = \$12,000; consulting - general IT support = \$30,000 (FY13 = \$127,900); consulting - outsourced infrastructure services (DPH) = \$2.08M; SW licensing (maintenance) = \$1.07M; HW network maintenance = \$4,000 (FY13 = \$15,000); HW desktop maintenance = \$21,000; telecom data services = \$48,000 (FY13 = \$120,000); office equip. rental = \$278,000; SW licenses non-recurring (<\$5,000) = \$46,000 (FY13 = \$169,900); HW desktop (<\$5,000) = \$114,000 (FY13 = \$55,000); postage = \$1.15M; printing = \$315,000 (FY13 = \$412,000); and graphic services = \$0. FY14 tech-related fixed asset budget: SW license nonrecurring (>\$5,000) = \$10,000 (FY13 = \$69,000); and SW license recurring (>\$5,000) = \$6.05M (FY13 = \$4.13M). FY12 professional fees (≥\$50,000) included: \$5.42M to ViTech Systems Group for pension admin system services; and \$648,000 to Financial Control Systems Inc for investment accounting app services.
- PSERS Private Market Investments (PMI): PSERS, guided by state law, continues to invest a portion of its assets in PA-based companies where investment characteristics, incl. yield, risk, and liquidity, are equivalent. PSERS is a lead investor in many funds in which it invests (this draws in additional out-of-state capital). Tech-related companies are represented in many of these funds - computer, medical, communication, and energy represent 23.9% by number of companies in each industry for total PA & non-PA PMI. FY12 investment manager fees paid to external firms managing PSERS' assets from offices located in PA = \$23.9M, or 5.1% of the total external investment manager fees. Selected metrics re PSERS 3 tech-related fund asset classes:
 - Private equity (PE) program has committed a total of \$16.3B to 104 partnerships (8 located in PA). As of 12/31/12, PSERS PE partnerships invested in 1,194 PA locations employing 37,632 employees. Market value of these PA investments is \$18.5B, PSERS' share is \$977.1M.
 - Venture capital (VC) program consists of 37 partnerships (16 located in PA) with committed capital totaling \$2.3B. As of 12/31/12, PSERS VC partnerships invested in 156 PA locations employing 4,270 employees. Market value of these PA investments is \$636.6M, PSERS' share is \$182.5M.
 - Private debt (PD) program (i.e., mezzanine, distressed, and structured products) has committed \$4.1B to 26 partnerships (3 located in PA). As of 12/31/12, PSERS PD partnerships invested in 179 PA locations employing 4,798 employees. Market value of these PA investments is \$614.8M, PSERS' share is \$86.1M.
- \$2.61M to State Employees' Retirement System (SERS, www.sers.state.pa.us) for tech-related uses allocated as follows: \$738,000 (FY13 = \$948,000) for IT consulting; \$1.33M (FY13 = \$1.08M) for hardware/software maintenance; \$353,500 (FY13 = \$378,500) for communication services; \$116,600 (FY13 = \$226,200) for printing; and \$75,500 (FY12 = \$68,000) for office equipment. SERS Office of IT, lead by SERS CIO, provides all computer & tech support for SERS operations, including a WAN linking 7 regional retirement counseling centers.
 - Alternative Investments (AI): SERS' AI program, guided by state law, includes investing with VC managers located in PA or with managers whom have a PA investment mandate. The program has grown to include national & international based PE & VC managers. Since inception through 2012, SERS' AI program has committed \$1.1B to 57 PA-based limited partnerships. As of 12/31/12, SERS' active AI managers held 103 PA-based companies (as of 9/30/11 = 120). SERS' pro-rata investment value in these companies is about

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\$167M (as of 9/30/11 = \$208M). This equates to 2.7% (as of 9/30/11= 3.3%) of the AI program fair value and does not include investments HQ'd outside of PA that may have impactful operations PA.

- \$94.72M to PA State Police (PSP, www.psp.state.pa.us) for tech-related uses allocated as follows:
 - \$16.85M for GO allocated as follows: \$8.2M in federal funds for area computer crime; \$6.4M (FY13 = \$7.0M) for criminal history record checks; \$2.05M for fingerprint records checks; \$150,000 (FY13 = \$130,000) for registry of protection; \$40,000 for electronic surveillance; and \$10,000 for photo. services.
 - \$1.86M in ARRA-Justice Assistance Grant funds for GO allocated as follows: \$1.0M (FY13 = \$1.46M) for Megan's Law Modernization; \$850,000 for PA Instant Check System Rewrite (FY13 = \$1.36M); and \$10,000 (FY13 = \$174,000) for Protection from Abuse Database.
 - \$40.96M in state & federal funds for Statewide Public Safety Radio System (SPSRS) allocated as follows: \$18.18M in ARRA funds for Bb project for northern PA; \$15.72M (FY13 = \$14.88M) from MLF; and \$7.06M (FY13 = \$6.7M) from GF. Effective FY13, SPSRS funding and oversight were transferred from EO to PSP.
 - \$25.5M (\$6.4M GF and \$19.1M MLF) for Law Enforcement IT (LEIT).
 - \$946,000 (\$861,000 GF and \$85,000 MLF) for Automated Fingerprint Identification System (AFIS).
 - \$6.7M (FY13 = \$6.03M) for Gun Checks via PA Instant Check System aka PICS, including \$4.52M in revenue from firearm records checks.
 - \$1.9M from DNA Detection Fund for DNA detection of offenders.
- PSP has three primary tech-related bureaus (sub-units follow): 1) IT - IT services, and project & contract mgmt; 2) Records & ID - operational records, criminal records & ID, and firearms; and 3) Communications & Info Services - SPSRS aka PA-STARNet, VHF systems, CLEAN admin, and records mgmt.
 - Commonwealth Law Enforcement Assistance Network (CLEAN), implemented statewide 2012. is used by PA criminal justice agencies to access driver license and motor vehicle info, state & federal criminal history record info, PFA orders, stolen items, wanted persons files, and other services. CLEAN is PA's conduit to FBI National Crime Info Center (NCIC) and International Justice and Public Safety Network. PSP is also finalizing an upgrade to AFIS to increase capacity and meet needs for fingerprint-based ID across PA. PA Criminal Intelligence Center (PCIC) provides analytical assistance to PA law enforcement agencies (LEAs), et al. Intelligence analysts supply LEAs with intel/info products needed for tactical & strategic planning and offer archived public & investigative info from various databases. PSP operational resources are coordinated thru Problem Specific Policing, an incident analysis and police mgmt tool that utilizes case data mapping. New "Business Tip" program encourages reporting (via phone, email, text) of suspicious activity for follow-up investigation. Computer Crime Unit (CCU) provides investigative assistance to LEAs in cases where a computer has been used for a crime. CCU technology includes central forensic server that allows forensics to be conducted from remote locations. CCU also provides educational info for LEAs and prosecutors.
- PSP info systems, online services, and other tech-related activities:
 - PA Instant Check System (PICS) provides instant access to background records on an individual to determine if the person is eligible to acquire a firearm or a license to carry a firearm. Instant Check Unit is a call center conducting the background check requests. This responsibility requires ensuring accurate ID of the subject of the check; evaluation & research of federal, state and local records; comprehensive documentation; and maintaining positive communication with firearms dealers and county sheriffs.
 - Online services for LEAs include PA Uniform Crime Reports at www.paucrs.pa.gov and PA Access to Criminal History aka PATCH (<http://epatch.state.pa.us>).
 - PA Amber Alert (PAA, www.amber.state.pa.us) is a child abduction alert notification system that includes an occasionally updated website. A missing endangered person (for any age) system has been added to PAA.
 - "Alert-PA" (<http://alert.pa.gov>) : a software app used to send emergency alerts, notifications and updates to a cell phone, pager, BlackBerry, PDA and/or e-mail account.
 - "See Something, Send Something" Smartphone App: launched 2013 to help PSP receive reports re suspicious activity that may be linked to terrorism. The app allows suspicious activity to be captured as a photo or written note and sent to PCIC. The app, developed by My Mobile Witness, is available at no cost and includes info on what to look for and when to report suspicious activity, along with how to receive alerts.
 - Municipal Police Officers' Education & Training Commission (www.mpoetc.state.pa.us), established per Act 120 of 1974, sets certification & training standards for PA municipal police officers. Regulations guide the

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- process for eligibility and the training curriculum, which includes computer training.
- PA Crime Stoppers (www.crimewatchpa.com) : a social media website and network for crime prevention.
- PSP Emergency Assistance: PSP Watch Center is a 24/7 operation that works with PCIC to provide accurate, timely situational awareness and common operating picture of civil disorders and emergency mgmt situations throughout PA. SPSRS Division develops & manages SPSRS used by PSP and 18 other agencies, incl. DOT, DOH, DCNR, AG & PEMA. SPSRS is one of the largest statewide public safety communications systems in the US, connected by an extensive microwave network, carrying voice & data communications for public safety and emergency response to >97% of PA's land area. Domestic Security Division's mission includes emergency planning & preparedness, COOP, NIMS implementation, liaison to PEMA, security for PSP facilities, risk & vulnerability assessments for facilities and critical infrastructures, and mgmt of federal homeland security grants.
- FY14 PSP tech-related program measures include: 17,400 requests for info from PCIC, 29,700 intelligence products disseminated by PCIC, 12,400 Megan's Law registered sex offenders, 84,800 CLEAN/NCIC confirmed responses (i.e. computer checks resulting in the ID of wanted persons, stolen property, etc.), 21,500 convicted offender DNA submissions, 2,400 DNA evidence submissions, 1,070 criminal suspects ID'd through DNA evidence submission, 745,900 fingerprint card submissions, 4,280 criminal suspects ID'd through fingerprint evidence, 877,600 PICS firearms purchase background checks and 10,380 initial denials, 480 drug hotline tips, 640 terrorism hotline tips, 4,150 WC immediate reports, and 4.7M average monthly transmissions on SPSRS.
- Texting-While-Driving Ban: 1,300+ motorists received tickets for texting while driving during year-one of PA's ban on the practice, which went into effect 3/8/12. PA's law allows a police officer to stop a driver solely for texting.
- \$5.43M (FY13 = \$5.16) to Board of Probation & Parole (BPP, www.pbpp.state.pa.us) for Sexual Offenders Assessment Board (SOAB, www.soab.state.pa.us), including \$300,000 increase to provide for Global Positioning System 24/7 monitoring capability for 195 offenders. Act 24 1995 aka Megan's Law established SOAB, which conducts court-ordered assessments of convicted sex offenders. The Act also required establishment of a sex offender registry and community search & notification system, operated by PSP, and available to the public at www.pameganslaw.state.pa.us. Amendments to Megan's Law have resulted in the need for registry & system updates. Acts 111 of 2011 and 91 of 2012 expanded SOAB's role by adding additional sex offenses that require registration & verification effective Dec 2012. Bureau of IT supports BPP IT functions. Office of Admin Services responsibilities include communication equipment. Bureau of Central Services supervises 24/7 Operations Monitoring Center and electronic monitoring of parolees, and other BPP business processes.
 - Office of Statistical Reporting and Evidence-Based Program Evaluation: conducts research, performance reporting, statistical analysis, population projections, and program & process evaluation. The office analyzes requests and proposals from both internal and external sources to improve public safety.
 - Division of Case Mgmt fulfills BPP's role as custodian of all BPP records including parole files from creation & maintenance to shipment, distribution and archiving of records.
 - FY14 BPP program measures include: state supervision fees collected = \$3.6M; # of adult offenders projected to be under BPP supervision by June 2018 is 41,700; total # of registrations & notifications to registered crime victims by June 2018 is 29,915; total # of sex offender assessments completed by June 2018 is 3,290; probationers & parolees supervised by county probation depts by June 2018 is 236,600.
- \$144.61M to Dept of Transportation (DOT, www.dot.state.pa.us) for tech-related uses allocated as follows:
 - \$105.0M for transportation (transpo) tech uses allocated as follows: \$30.0M in Federal Transit Admin funds for hybrid mass transit vehicles; and \$75M in ARRA funds for high speed rail.
 - \$1.4M for voter technology allocated as follows: \$504,000 (FY13 = \$422,000) for voter registration; and \$896,000 (FY12 = \$1.0M) for photo ID cards per Act 18 of 2012.
 - \$33.1M for Safety Admin & Licensing Program tech-related uses allocated as follows: \$4.8M in federal funds for REAL ID; \$28.0M for photo ID program; and \$300,000 from data line charge reimbursements.
 - \$5.0M from MLF for red light photo enforcement, and \$114,000 from MLF to GO for duplicating services.
- Driver & Vehicle Services (DMV, www.dmv.state.pa.us) features 20+ online services. DOT has 97 offices statewide that offer driver exam and/or photo licensing services and continues to work with businesses to further decentralize these services. A computerized online messenger program, which connects businesses with DOT,

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has been the cornerstone of the decentralization effort. There are 252 messenger sites, processing 1.1M d/l and motor vehicle transactions/year. Other efforts to improve service include more efficient linkage between DOT and auto dealers, leasing & rental agencies and fleet owners for immediate processing of registration & titling transactions. In FY14 Guv proposes to move vehicle registration renewals to a biennial cycle rather than the current annual cycle, and move d/l renewals to a six-year cycle rather than the current four-year cycle.

- \$56.6M (portion of which may be included in the above amounts) from MLF to DOT for Transportation Support Services, which include budgetary, accounting, personnel, procurement, and information systems.
 - Bureau of Business Solutions & Services (BBSS), DOT's IT office, includes four Divisions: 1) Highway/ Engineering Apps - hwy assets mgmt, e-permitting, hwy contract/ engineering, and engineering software; 2) Driver/Vehicle Apps - app evaluation & issuance, safety, sanctions & control, and customer/partner mgmt; 3) Data Admin / Quality Assurance - data admin & warehouse, and quality assurance; and 4) Shared Services - enterprise architecture, imaging/workflow, and .NET/SQL). Division employees evaluate alternative design options, including COTS products, assist w/ development of RFPs, participate on evaluation & selection committees, and contribute to cross-agency technical & advisory teams. See DOT website for BBSS details.
- DOT Online Services and Software include: APRAS-Automated Permit Routing & Analysis System, allows motor carriers to apply for over-size/-weight hauling permits; CEES-Categorical Exclusion/Environmental Assessment Expert System (ES), uses smart-form technology for managing environmental documents for projects w/ govt funding; CDS NeXtGen Certified Operators; CRASH Reporting System; ECMS--Engineering & Construction Mgmt System (MS), provides online way to conduct business re design & construction of transpo projects; Rail Freight Ports and Waterways System (ECMS-like system for conducting business re rail freight grant applications); EPS-ePermitting System (Hwy Occupancy Permits); GCEDMS Grade Crossing Electronic Document (ED) MS; JPA-Joint Permit Application ES, helps users prepare & submit waterway permit applications for hwy & bridge projects; MPMS-Multi-Modal Project MS, planning tools to administer mandated transpo programs; PAMS-Photogrammetry Assets MS (www.penndotpams.org); DOT's Technical Training Calendar; Utility Relocation ED MS; dotGrants (www.dotgrants.state.pa.us), DOT's online grant MS: Vehicle Emissions Inspection & Maintenance (www.drivecleanpa.state.pa.us); BRADD--Bridge Automated Design & Drafting Software (<http://bradd.engrprograms.com>); LRFD-Load & Resistance Factor Design & Engineering Software (<http://penndot.engrprograms.com>); New Products Eval. & Research; CADD-Computer Aided Drafting & Design Resource Files; and Geographic Info Division resources, including Online VideoLog - hwy inventory, Internet Traffic Monitoring System, and maps in various formats. (whew!)
- DOT Next Generation (NG, www.moderndot.pa.gov) is a combination of five distinct initiatives to review & enhance DOT's operations to create improved efficiencies and make the agency a better business partner employer. The initiatives include: 1) DOT NG Projects - engage mgmt & staff to refresh & advance business practices and technology; 2) Mapping the Future - coordinating among DOT, PA PA Turnpike Commission (PTC), DCNR, and other state agencies to save resources and avoid duplicating efforts; 3) Modernization Projects - delivering on Transportation Funding Advisory Commission's and DOT's modernization recommendations; 4) State Transportation Innovation Council - a multi-stakeholder approach to adopt and cultivate innovative technologies to expedite project delivery; and 5) Idealink - internal online system that enables DOT employees to submit innovative ideas to improve workplace safety and enhance operations.
 - Mapping the Future (MTF): An extension of NG initiatives is an ongoing effort called Mapping the Future. Its objective is to coordinate among DOT, PTC, DCNR, and other agencies to conserve resources and avoid duplicative efforts. Between NG and MTF, DOT expects to realize \$50-75M in ongoing annual savings.
- Emerging Technology Trends & Plans at DOT: 1) **Safety** - Technology has created safety challenges due to distracted driving, however, automakers and others are developing new technologies that will improve safety, such as collision warning systems, lane departure warning systems, blind spot detection, and adaptive headlights; 2) **Safety** - Govt agencies, researchers, and private sector are working together to develop connected vehicle technologies such that vehicles can communicate to each other and the roadway to improve safety...these advances will eventually lead to autonomous vehicles; 2) **Enforcement** - Additional tools need to be considered, including a ban on handheld cell phones, and automated speed enforcement in work zones; 3) **Mobility** can be enhanced through improving traffic signal systems, providing better traveler info, and implementing intelligent transpo system technology; 4) **Traveler Info** - DOT is soliciting private sector proposals

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to operate 511PA (see below); and 5) **Preservation & Renewal** - Tools & technologies will support more effective mgmt of assets including monitoring & inspection of infrastructure elements.

- Guv's FY14 Transpo Plan includes: 1) Create permanent DOT NG Office to continually develop & analyze new business practices; 2) Create Public Private Partnership (P3) office to oversee the new P3 law; and 3) Implement a pilot for automated speed enforcement of work zones to test & assess technology for safety & compliance costs and prove the potential safety benefit for motorists and highway workers.
- Public Private Partnership (P3) Act 88 of 2012 authorizes public-private funded transportation projects in PA. This tool allows DOT and other transportation providers to enter into agreements with the private sector to participate in delivery, maintenance, and financing of new or existing transpo-related projects that otherwise could not be advanced. During May & Oct 2013 (plus future dates TBD) unsolicited proposals will be accepted by DOT's P3 Office and the P3 Transportation Board for PA projects.
 - Q1-2013 P3 Board approved a project soliciting private sector proposals to manage & operate DOT's 511 system, <http://511PA.com>, as well as PTC's Roadway Info Program (TRIP). In operation since 2009, 511PA provides traffic-delay warnings, weather forecasts, average traffic speeds on urban interstates and access to 670+ traffic cameras. The 511 site also provides color-coded winter road conditions for all interstates and other routes. Regional Twitter alerts are also available on the 511PA website.
- Other DOT tech-related activities and online services:
 - YellowDot Program (www.YellowDot.pa.gov) : a cooperative effort among DOT, DOH, DOH, PSP, PTC, first responders (FRs), and local law enforcement. Placing a yellow dot in your vehicle's rear window alerts FRs to check your glove compartment for vital info to ensure you receive emergency medical attention you need.
 - Local Technical Assistance Program (<https://www.dot7.state.pa.us/LTAP>) : managed by Bureau of Planning & Research, is one of 58 LTAP centers nationwide. These centers are dedicated to transferring transpo technology through training, technical assistance, and other services to municipal elected officials and staff.
 - PA Trips By Train (www.patripsbytrain.com) : a partnership between DOT & AMTRAK begun FY13 to increase interest in the Keystone train service between Harrisburg & Phila. by tourists and other travelers.
 - Highway Advisory Radio (HAR) at 1630 AM: Winter 2012-13 DOT began to broadcast a message reminding drivers that elk – weighing in at 500 lbs or more (yikes) – can be on the roadway. HAR system joins portable message boards that have been along the road.
 - Social Media: DOT has a Facebook page, Twitter feed (@PennDOTnews), and 8 regional Twitter accounts allowing followers to get updated traffic alerts from the 511PA system and local DOT news.
 - PA Commutes (www.pacommuter.com) promotes alternative modes of transpo in PA and includes a tool to compare the cost of driving alone to using alternative transpo for your commute.
 - Just Drive PA (www.justdrivepa.org) : website dedicated to making sure that PA motorists are safe drivers.
- Red-Light Cameras (RLC): Q2-2013 DOT announced that \$4.7M from last year's RLC fines statewide will go to 43 municipalities, including \$1.5M for Philadelphia. In 2012, G/A changed PA's RLC law to allow an 8-member panel to award money to applicants from around the state, based not on the previous 50-50 split with Philadelphia but on perceived benefits and effectiveness, costs, local and regional impacts and cost sharing.
- The storied PA Turnpike (Turnpike, www.paturnpike.com) is a toll highway operated by the PTC. PA's Auditor General Jan 2013 released a performance audit on PTC. PTC agreed with some of the audit's findings & recommendations. The audit's tech-related findings & recommendations include:
 - There is a lack of safety devices including tunnels that do not have video cameras. AdG recommends that PTC install video cameras in tunnels that do not already have video monitoring capability asap.
 - The Turnpike is moving towards an all-electronic tolling system. PTC selected a program mgmt firm to lead the future implementation of a cashless, all-electronic (AET) toll collection system. The AET system would be much different from the combined electronic and cash collection system now used on the Turnpike.
 - Greater oversight of contractors is needed by project managers, existing procedures & technology are lacking in this area, and a new monitoring system is planned.
 - Oversight of the E-ZPass system includes a test lane facility where the Turnpike can model & test possible new technologies to ensure the system operates as intended.

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- PTC did not perform consistently in its dissemination of roadway & traffic info and to address this deficiency PTC could ensure that its website is organized in a more user-friendly manner, routinely review its website to ensure accuracy & availability of listed links, monitor its HAR system (www.theradiosource.com) continuously for accuracy & clarity, and use available technology to ensure that the HAR is fully operational.
- PTC CEO March 2013, in the wake of the AdG's audit and charges filed by the AG, announced the following reforms: Launch a thorough review of every professional-services contract that was cited in the AG's presentment; Draft an information and instructional memo to each of the Turnpike's professional service providers; and Ensure that every member of the Turnpike's workforce has read and signed its employee code of conduct and agreed to abide by all of its provisions. In addition PTC is establishing a special advisory group to review & critique current Turnpike policies & procedures re contracting and other business practices to see where continued improvements can be made and to research best-practices at comparable agencies to learn from their experiences & protocols. The Guv later cancelled a DOT contract with an IT firm implicated in the AG's PTC investigation. The Turnpike's contract with the IT firm was terminated in 2011.
- \$16.8M to General Assembly (G/A, www.legis.state.pa.us) for Legislative Printing & Expenses allocated as follows: \$6.7M to Senate (www.pasen.gov) and \$10.1M to House of Representatives (www.house.state.pa.us). Permissible uses of these funds include tech improvements, security enhancements, building modernization, equipment and other expenses. Refer to G/A's web site for copies of PA laws (acts) and proposed laws (bills) referred to in this document. G/A's mobile-friendly website is www.palegis.us.
 - Majority Leader of PA Senate since 2008 has introduced legislation that would require state & local agencies to notify residents of any data breach within a week. The Senate unanimously passed some version of the bill in three separate sessions, most recently in 2011. But the House has never taken it up.
- \$29.48M to tech-related G/A support agencies allocated as follows:
 - \$17.37M for Legislative Data Processing Center (LDPC, www.paldpc.us), which establishes & operates computer systems for storing & retrieving financial, factual, procedural and legal info necessary to serve committees, officers and agencies of the G/A.
 - \$6.7M for salaries & expenses of Legislative Reference Bureau (LRB, www.palrb.net), which prepares requested bills & resolutions for introduction in the G/A and advises legislators on related matters. LRB has undertaken a long-term preservation and public access project to digitize CoPA laws enacted since 1682.
 - \$1.32M for Legislative Budget & Finance Committee (LBFC, <http://lbfc.legis.state.pa.us>) : conducts studies and makes recommendations aimed at eliminating unnecessary expenditures, promoting PA's economy, and assuring that state funds are being expended per legislative intent & law. A study released FY13: "Feasibility of Using Biometric Smart Cards or Photo ID Cards to Dispense Public Assistance Benefits."
 - \$2.89M for Mail Processing Center, which screens & dispatches correspondences, packages and parcels.
 - \$1.2M for the 2010 Legislative Reapportionment Commission (www.redistricting.state.pa.us). Hmmm.
- Other G/A-supported Websites: PA State Capitol (www.pacapitol.com), Capitol Preservation Committee (www.cpc.state.pa.us), Center for Rural PA (www.ruralpa.org), Independent Regulatory Review Commission (www.irrc.state.pa.us), Joint Conservation Committee (<http://jcc.legis.state.pa.us>), Joint State Govt Commission (<http://jsq.legis.state.pa.us>), PA Commission on Sentencing (PCS, <http://pcs.la.psu.edu>), Local Govt Commission (www.lgc.state.pa.us), Independent Fiscal Office (www.ifo.state.pa.us), PA Code Online (www.pacode.com), and PA Bulletin (www.pabulletin.com).
- IT and Lawmaking: "Although many...studies produced for the legislature...rely on sophisticated computer technology and modeling, legislators rarely have, or even want, direct access to the underlying technology... studies have shown that when legislators are deciding how to vote on bills, they rely most heavily on information conveyed orally by colleagues whom they trust and whom they regard as particularly well-informed, such as bill sponsors and committee chairs. More sophisticated information probably influences legislative voting through the medium of these well-informed legislators more than through direct access by individual legislators to technological tools. Nonetheless it seems likely that sophisticated computer models will be increasingly used by staff to analyze complex policy decisions and the results made available to the legislature either by state agencies with programmatic responsibilities or interest groups." Source: *The Temple Papers on the PA G/A, Vol. IV*, pp 41-42, J. P. McLaughlin, Jr., et al., Institute for Public Affairs, Temple U., 2012 (www.cla.temple.edu/ipa).

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- \$1.4M to PA Office of Open Records (OOR, <http://openrecords.state.pa.us>), which enforces PA's Right-to-Know Law (RTKL) and serves as a resource for citizens, public officials, the news media, et al. in obtaining public records of their govt. RTKL requires OOR to establish a fee structure for state & local agencies. Fees charged to requesters may cover the cost of paper copies, certification of a record, specialized documents e.g. blueprints, fax/audio/video/other media, conversion to paper, and enhanced electronic access. These fees are reflected in agency budgets, not OOR's. OOR has asked lawmakers to increase its FY14 appropriation to \$1.8M.
 - Bright Idea: Citing PA's RTKL make a request to one or more PA state or local agencies for specific, detailed information that could be utilized as the basis for future automation initiatives.
- \$61.37M to PA Court System (www.pacourts.us) aka Unified Judicial System (UJS) for tech-related uses allocated as follows: \$57.05M from Judicial Computer System (JCS) Augmentation Account (revenues generated by Judiciary); \$2.3M from GF for Integrated Criminal Justice System (JNET); \$1.95M from GF for Unified Judicial Security System; and \$73,000 (FY13 = \$450,000) in ARRA funds for specialty courts IT project. NOTE: Take care below to distinguish between UJS (the organization) and JCS (the computer system).
 - Various laws provide funding streams to support Judiciary operations, including tech activities, e.g., Act 64 of 1987. While the Judiciary collects more in fines, fees and restitution than it receives from CoPA budget, most collections do not fund the state court system, but go to state & local govts for general operating or program costs. In 2012, Courts throughout PA collected and disbursed to govts & victims a total of \$469M in fees, fines, costs and restitution. >\$211M, or 45%, of the total collected was distributed to the state into specific funds. A comparatively small portion of the funds collected is deposited into the JCS Account to support court statewide automation. The JCS Account was created to fund development & maintenance of the statewide system used by the courts, criminal justice agencies and others. Due to decreased collections, JCS Account has seen a steep drop-off in recent years. In addition, borrowings from this account have been used to fill budget gaps for general operations. Per the Chief Justice of the Supreme Court of PA (SCP): 1) Together, this loss of resources impacts the long-term financial stability of JCS, and 2) A fund balance and sustainable revenues need to be maintained to enable JCS to undertake multi-year projects. Perennially, the Judiciary pleads with the Guv and G/A for more CoPA funding and more funding authority.
- Administrative Office of PA Courts (AOPC) is the administrative arm of the SCP, assisting the court in its oversight responsibility of the statewide UJS. AOPC provides services for 2,100+/- members of the Judiciary and staff, including budgeting, accounting, benefits & retirement counseling, technical advice, education, research, communications, and judicial automation.
- Judicial Automation Dept (JAD), AOPC's IT dept, develops & maintains the JCS, the ultimate goal of which is to computerize the entire Judiciary. At UJS web portal (<http://ujportal.pacourts.us>), eligible users vary depending on the court level, system, function, etc. Eligible users can: search, view and print (sv&p) court docket sheets; sv&p case events scheduled in the associated system; construct "criminal informations" and submit them online; view counties' calendars; pay fines, costs and restitution; and eFile case documents. Successful stages of JCS development include: Magisterial Judge System (MDJS) - serves existing 535 MDs; PA Appellate Courts Case Mgmt System (PACMS) – an integrated system serves 3 appellate courts and a related eFiling system, PACFile, which is currently being piloted in SCP; Common Pleas Criminal Case Mgmt System (CPCMS) which automated criminal courts statewide; and Admin Services Application System (ASAP) - serves admin functions of accounting, budgeting, payroll and HR. ASAP was released in its current form in 2003. ASAP's primary activities are assisting AOPC users with IT requests and improving their ability to interface with several state depts.
 - Q1-2013 the Judiciary launched a new web site developed by AOPC in partnership w/ the firm Culture.com.
 - Ongoing Judiciary tech-related programs include: 1) Development of "dependency dashboards" by Office of Children & Families in the Courts and AOPC automation staff - the dashboards present complex data in formats that allow users to make quick, visual comparisons of related data; 2) A collaborative test program re matching JCS data on uncollected fines, fees, costs and restitution with unclaimed property held by TD; 3) Extensive data exchange initiatives with PSP, DOR, DOT, DOC, DOH, DPW, AG, AdG, PGC, JCJC, PCS, and County Commissioners Association of PA; and 4) collaboration as a charter member of JNET.
 - PACFile is a new app on the UJS web portal that provides a way for lawyers to file & track SCP cases electronically. Decreasing the time & cost of lawsuits is: A) Good, B) Bad or C) Time & Cost to Whom?

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- Office of Judicial Security (OJS) develops & supports initiatives to help make PA court facilities safe for all parties. Initiatives include an electronic incident reporting system; workshops & training for local court security committees; and funds to reimburse counties for purchase of courthouse security equipment such as duress alarms, access control systems, magnetometers, package screening devices, and security cameras. OJS has provided video conferencing systems to judges (courts) to enable them to conduct authorized proceedings.
- \$12.3M distributed in amounts ranging from \$9,000 (Milk Marketing Board) to \$1.9M (DEP) to 30 Executive Branch agencies for activities to provide public notification & info to PA's public, news media, businesses, legislators and citizens re bidding of contracts, issuance of rules & regulations, announcement of public hearings and availability of services and financial aid. These amounts exclude items that are strictly educational and materials that are offered for public sale, e.g., "PA Angler and Boater." Additionally, PA expects to spend \$48M (FY13 = \$37M) for Lottery sales promotion, which is used for advertising campaigns and to disseminate info on various lottery-funded programs. \$5.8M (FY13 = \$3M) is budgeted to promote tourism and e/d per DCED above.
- Guv proposes a FY14 capital budget of \$1.61B for state & local govt capital projects. Capital projects are associated with physical assets (buildings, roads, furniture, etc.) and must have an estimated useful life > 5 years and an estimated cost ≥ \$100,000 if bond funds are used and ≥ \$300,000 if current revenues are used. Technology projects may be eligible for state capital budget funding, and capital projects can spawn additional tech-related operating expenditures. In PA, capital budgets and operating budgets (the latter being the focus of this document) are approved in separate legislation. The Guv can choose not to fund capital projects enacted into law (subject to potential override by the G/A). Sample proposed FY14 tech-related capital projects include:
 - \$24.0M to PDE for construction of a new data center at Milton S. Hershey Medical Center. Plus \$2.4M for original furniture & equipment for the data center.
 - \$5.0M (includes \$600,000 for design & contingencies [d&c]) to PDE for upgrade of IT distribution at Thaddeus Stevens College of Technology, including electrical wiring throughout the campus.
 - \$22.0M to DGS for furniture & equipment associated with construction of the family court building in Phila.
 - \$1.5M to PHMC for purchase of equipment for new visitors' center at Landis Valley Museum, Lancaster Co.
 - \$3.0M to DOT for Butler Transit Authority purchase of new and/or used compressed natural gas buses.
 - \$400,000 to DOT for Cambria Co. Transit Authority for replacement of fare collection system.
 - Future capital projects (FY15–FY18) include unspecified \$ to DCNR for radio communications systems.
- \$125.0M+/- for the Redevelopment Assistance Capital Program (RACP), a CoPA grant program administered by GBO for acquisition & construction of regional economic, cultural, civic and historical improvement projects, including projects owned by private entities. To be eligible for a RACP grant, the project must be authorized in a Capital Budget Project Itemization Act. These Acts enumerate projects that are authorized to *potentially* receive RACP funding. The project should be "shovel ready," must be at least \$1M, and must have a minimum 50% match. Currently there are some 20 Acts dating from 1986 to 2010 with 6,000+ itemizations with unused authorization dollars. The Guv's priority is to pursue jobs-focused projects including in such tech-related areas as: biotechnology/pharmaceutical/life sciences; high tech & advanced manufacturing and materials; energy extraction & mining; and healthcare/medical research Example: \$3.25M grant announced Q2-2013 for construction of hospital data center. Visit GBO website for RACP details.
- **Chart 1** on **Page 45** summarizes the financial status of 12 tech-related special state funds. The vast majority of CoPA day-to-day activities are financed from the GF; however, >100 other funds have been created (to date) to more closely relate specific revenue sources to specific programs. This chart supplements info from other sections of this forecast. FY14 dollar amounts are "best estimates," as the methods and time frames for receipt and disbursement of funds vary from fund to fund. Two new funds presented this year are Justice Reinvestment Fund and eHealth Partnership Fund. Education Technology Fund was terminated effective June 30, 2011.
- PA Govt Technology Advocacy: Be sure to check out the following avowed PA govt technology education, networking, and advocacy organizations: Technology Council of PA (www.tccp.org); Pittsburgh Technology Council (www.pghtech.org); and PA Bio (www.pabio.org). Membership/sponsorship opportunities are available.

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Chart 1 (Dollar Amounts in Thousands)
2013-14 CoPA Tech-Related Special State Funds

Special Fund	Cash Bal. Begin.	Re-ceipts	Funds Avail.	Dis-burse-ments	Cash Bal. End
Ben Franklin Technology Development Authority Fund: Act 38 of 2001 created BFTDA Fund which merged activities of the Ben Franklin Partnership and PA Technology Development Authority under one authority. Fund revenues include annual transfers from the GF, loan repayments and interest.	\$4,736	17,150	21,886	19,000	2,886
Broadband Outreach and Aggregation Fund: Act 183 of 2004 established the BOAF to fund grants and outreach programs with the ultimate purpose of increasing broadband access in unserved or underserved areas. Deposits to the fund include assessments levied and collected by the PUC on certain local exchange telecomm companies. Up to 3% of annual proceeds can be used by the agency for administrative costs. The total amount of the fund shall not exceed \$5M annually.	\$1,391	115	1,506	1,500	6
DNA Detection Fund: Created by Act 14 of Special Session 1 of 1995, as amended, to account for collection & processing of DNA samples by PSP. Revenues are derived from mandatory fees that are assessed on sexual offenders. Expenditures are made to establish & maintain the State DNA Data Base and State DNA Data Bank.	\$10,088	2,024	12,112	1,891	10,221
Energy Development Fund: Created by Act 280 of 1982 and serves as the vehicle to accomplish purposes of the PA Energy Development Authority, which is now closed. Fund activities included preparing energy development plan, paying admin costs, and making grants & loans for such energy efficient improvements as: heat recovery, solar thermal electric, photovoltaic, landfill gas, geothermal heat pumps, CHP/cogeneration, coal-mine methane, waste coal, anaerobic digestion, small hydroelectric, and other distributed generation technologies (wind, biomass, and fuel cells).	\$5,447	307	5,754	0	5,754
Justice Reinvestment Fund: Created by Act 196 of 2012 to support programs & activities that will improve delivery of criminal justice services in PA. Receipts are derived from savings to DOC through implementation of Act 122 of 2012, which establishes JRI. Disbursements are made as per Act 196 and include fixed amounts in FY14 & FY15 to PCCD & PCS plus formula-based distributions. Disbursements fund state & county programs, e.g., offender risk assessment modeling, county innovative policing, and streamlining state parole processes.	\$0	761	761	761	0
Machinery & Equipment Loan Fund: Created by Act 120 of 1988 to provide low-interest machinery & equipment (including tech-related) financing for PA businesses in order to facilitate their growth, competitiveness and value-added capacity. MELF is funded from loan repayments, transfers from GF and interest earnings. Act 22 of 2004 required CFA to transfer \$75M in bond proceeds to DCED for deposit in MELF. Act 53 of 2008 stipulated transfer of moneys from MELF to an account within TSF to support biotech commercialization.	\$86,352	25,400	111,752	25,778	85,974
Patient Safety Trust Fund: Act 13 of 2002, aka the Medical Care Availability and Reduction of Error Act, established PSTF for purpose of independent review of medical facilities, which will result in ensuring patient safety and reducing medical errors. Fund revenues include surcharges on medical facility licensing fees. These fees are assessed by DOH, deposited in the GF and transferred to PSTF. Patient Safety Authority (PSA) established by Act 13 contracts with entities who collect, analyze and evaluate data re reports of serious events and incidents at medical facilities and identify patterns in frequency or severity at individual medical facilities or in certain regions.	\$6,422	6,389	12,811	7,500	5,311
PA eHealth Partnership Fund: Created by Act 121 of 2012. The fund is administered by PA eHealth Partnership Authority (PePA). PePA will develop, establish and maintain a health info exchange that complies with federal & state law. PePA will expire 7/5/17.	\$2,100	7,542	9,642	9,642	0
PA Gaming Economic Development and Tourism Fund: Act 71 of 2004, PA Race Horse Development and Gaming Act, established this fund to receive a daily assessment of 5% of each licensed gaming entity's gross terminal revenue. The fund, administered by DCED, is distributed thru specific enacted capital budgets. Tech-related projects may be eligible.	\$68,367	139,391	207,758	164,584	43,174
Small Business First Fund: Created by Act 67 of 1996, as amended. SBF program provides low-interest loans for small businesses of ≤ 100 employees. Eligible projects include land & building acquisition/construction; machinery & equipment purchases; working capital; compliance w/ environmental regulations and municipal or commercial recycling. Tech-related companies are eligible.	\$68,900	19,405	88,305	25,458	62,847
Treasury Initiative Support Fund: Created in 2009 as vehicle to account for funding received in support of TD initiatives, e.g., Keystone HELP, an affordable energy efficiency loan program for homeowners, including a geothermal energy component. TD has also received foundation grants to develop a nationwide market to support the sale of energy efficiency loans (aka Campus Energy Efficiency Fund) and to make investments that promote energy efficiency improvements on college & university campuses in PA.	\$14,678	1,354	16,032	3,337	12,695
Wireless E-911 Emergency Services Fund: Created by Act 56 of 2003, the Public Safety Emergency Telephone Act, to support statewide integrated wireless E-911 plan. The fund is used to collect & deposit a surcharge collected by wireless service providers monthly. Up to 2% of annual surcharge proceeds can be used by PEPA for admin costs with the remaining available balance being used for approved county grants.	\$2,883	115,014	117,897	116,000	1,897