PERFORMANCE AUDIT REPORT

Economic Development: Determining Which Economic Development Tools are Most Important and Effective in Promoting Job Creation and Economic Growth in Kansas, Part 3

A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
State of Kansas
December 2014

R-14-011

Legislative Division of Post Audit

The **Legislative Division of Post Audit** is the audit arm of the Kansas Legislature. Created in 1971, the division's mission is to conduct audits that provide the Legislature with accurate, unbiased information on the performance of state and local government. The division's audits typically examine whether agencies and programs are effective in carrying out their duties, efficient with their resources, or in compliance with relevant laws, regulations and other requirements.

The division's audits are performed at the direction of the **Legislative Post Audit Committee**, a bipartisan committee comprising five senators and five representatives. By law, individual legislators, legislative committees, or the Governor may request a performance audit, but the Legislative Post Audit Committee determines which audits will be conducted.

Although the Legislative Post Audit Committee determines the areas of government that will be audited, the audits themselves are conducted independently by the division's professional staff. The division's reports are issued without any input from the committee or other legislators. As a result, the findings, conclusions, and recommendations included in the division's audits do not necessarily reflect the views of the Legislative Post Audit Committee or any of its members.

The division conducts its audit work in accordance with applicable government auditing standards set forth by the U.S. Government Accountability Office. These standards pertain to the auditor's professional qualifications, the quality of the audit, and the characteristics of professional and meaningful reports. The standards also have been endorsed by the American Institute of Certified Public Accountants (AICPA) and adopted by the Legislative Post Audit Committee.

LEGISLATIVE POST AUDIT COMMITTEE

Senator Jeff Longbine, Chair
Senator Anthony Hensley
Senator Laura Kelly
Senator Julia Lynn
Senator Michael O'Donnell

Representative John Barker, Vice-Chair
Representative Tom Burroughs
Representative Peggy Mast
Representative Virgil Peck, Jr.
Representative Ed Trimmer

LEGISLATIVE DIVISION OF POST AUDIT

800 SW Jackson
Suite 1200
Topeka, Kansas 66612-2212
Telephone: (785) 296-3792
Fax: (785) 296-4482
Website: **http://www.kslpa.org**

Scott Frank, Legislative Post Auditor

HOW DO I REQUEST AN AUDIT?

By law, individual legislators, legislative committees, or the Governor may request an audit, but any audit work conducted by the division must be directed by the Legislative Post Audit Committee. Any legislator who would like to request an audit should contact the division directly at (785) 296-3792.

The Legislative Division of Post Audit supports full access to the services of state government for all citizens. Upon request, the division can provide its audit reports in an appropriate alternative format to accommodate persons with visual impairments. Persons with hearing or speech disabilities may reach the division through the Kansas Relay Center at 1-800-766-3777. The division's office hours are 8:00 a.m. to 5:00 p.m., Monday through Friday.

LEGISLATURE OF KANSAS

LEGISLATIVE DIVISION OF POST AUDIT

800 SOUTHWEST JACKSON STREET, SUITE 1200
TOPEKA, KANSAS 66612-2212
TELEPHONE (785) 296-3792
FAX (785) 296-4482
WWW.KSLPA.ORG

December 18, 2014

To: Members, Legislative Post Audit Committee

Senator Jeff Longbine, Chair	Representative John Barker, Vice-Chair
Senator Anthony Hensley	Representative Tom Burroughs
Senator Laura Kelly	Representative Peggy Mast
Senator Julia Lynn	Representative Virgil Peck, Jr.
Senator Michael O'Donnell	Representative Ed Trimmer

This report contains the findings, conclusions, and recommendations from our completed performance audit, *Economic Development: Determining Which Economic Development Tools are Most Important and Effective in Promoting Job Creation and Economic Growth in Kansas, Part 3*. The report does not contain any recommendations. The question answered in this audit report was added to the original scope statement on May 10, 2013. We would be happy to discuss the findings or any other items presented in this report with any legislative committees, individual legislators, or other state officials.

Sincerely,

Scott Frank
Legislative Post Auditor

This audit was conducted by Kristen Rottinghaus, Matt Etzel, Joe Lawhon, and Clyde-Emmanuel Meador. Chris Clarke was the audit manager. Dr. Kenneth Kriz, Kansas Regents Distinguished Professor of Public Finance at Wichita State University, was our economic consultant. If you need any additional information about the audit's findings, please contact Kristen Rottinghaus at the Division's offices.

Legislative Division of Post Audit
800 SW Jackson Street, Suite 1200
Topeka, Kansas 66612

(785) 296-3792
Website: www.kslpa.org

Table of Contents

List of Figures

List of Appendices

Economic Development: Determining Which Economic Development Tools are Most Important and Effective in Promoting Job Creation and Economic Growth in Kansas, Part 3

Kansas offers a variety of economic development programs that are intended to incentivize job creation, job retention, and the growth of commerce and industry in the state. State and local governments incentivize economic development through grant programs, loan programs, tax credits, and tax exemptions.

In Kansas, most state economic development programs and incentives are administered by the Department of Commerce, the Kansas Bioscience Authority, and the Department of Revenue. Economic development programs are funded through several sources including federal moneys, state Lottery and casino proceeds, and state wage tax withholdings for certain employees. Additionally, state and local governments pay for economic development through forgone revenues including tax abatements, credits, and exemptions.

Our 2008 audit evaluating the impact of economic development programs identified a number of problems related to assessing the effectiveness of these programs. Those problems included unavailable and unreliable data, difficulties in measuring economic growth, and difficulties linking business outcomes with specific economic development assistance. Nonetheless, academic literature suggested that governmental entities must offer economic development incentives to remain competitive with other jurisdictions. That audit also identified a measurable, although small, relationship between economic development spending and job and business growth in various counties.

Legislators have expressed interest in knowing which Kansas economic development programs are most helpful to participating businesses.

This performance audit answers the following question:

1. **Has the implementation of major Kansas economic development programs been successful?**

A copy of the scope statement for this audit approved by the Legislative Post Audit Committee is included in ***Appendix A***. The scope statement includes five questions. For reporting purposes, we separated this audit into three parts. Part 1 was released in

September 2013 and addressed questions one and two of the scope statement pertaining to the Promoting Employment Across Kansas (PEAK) program, the High Performance Incentive Program (HPIP), and performance clauses. Part 2 was released in February 2014 and addressed questions three and four related to whether Kansas has the appropriate programs and incentives to enhance the state's economic development. This audit—Part 3—answers question five related to program success.

To answer this question, we collected and analyzed data on companies' past and future performance for selected economic development projects. We collected job, capital investment, and incentive information for a sample of projects between fiscal year 2006 and fiscal year 2011 for the Department of Commerce's major programs. (All Job Creation Program Fund (JCF) and some PEAK projects were selected for a more recent time period due to the newness of those programs.) Based on information in the department's files and from department officials, we estimated a range of future jobs, capital investments, and incentives for those projects. We then provided that information to an economic consultant who used economic modeling software (IMPLAN) to model the effects of jobs and investments. We used those effects to conduct a cost-benefit analysis for each project. We then attributed the effects of the sample projects back to the state programs and local incentives used to support them. Our methodology is summarized in the Overview beginning on page 9 and described in more detail in ***Appendix C***. We did not perform any work on internal controls because such work was unnecessary to answer the audit question.

We conducted this performance audit in accordance with generally accepted government auditing standards with some exceptions. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. The most critical limitations of our analysis are listed below.

- Job and capital investment data from the Department of Commerce and Department of Revenue are based on company-reported information that is largely unaudited.

- Most projects do not have records for the entire time period we included in our analysis, therefore jobs, capital investments, and incentives are based, at least in part, on estimates. Although we took steps to ensure our estimates were reasonable, we do not know how far the estimated jobs, investments, and incentives shown in this report may vary from the actual jobs and investments that will ultimately be created and incentives that will be provided.

- We did not determine if companies received state and local incentives directly preceding or following the particular incentive package included in our analyses. Because we forecasted jobs, investments, and incentives into the future, business activities and tax revenues may be inflated. That is because we potentially attributed jobs and capital investments to one incentive package when they should have been attributed to multiple incentive packages.

- Part 2 of this series of economic development audits revealed that factors such as the timing of incentives (upfront or over time) or form of the incentive (cash payment or a tax credit) may ultimately have a large influence on a company's decision to locate, expand, retain, or train jobs in Kansas. Our analysis in Part 3 does not account for these factors. However, we did estimate the probability a company created jobs and investments in Kansas because of state and local incentives and the probability they occurred due to factors unrelated to the incentive (e.g. recovery from economic recession, level of skilled workforce, proximity of railroad and major interstates, quality of schools, etc.).

- Our results may be somewhat overstated because of the way the software we used to model business activities and tax revenue (IMPLAN) accounts for competition between businesses in the same industry. When a business locates in an area, it competes with other similar businesses for customers and employees. IMPLAN assumes the business will be able to hire employees, purchase resources, and sell all its output at existing prices and without affecting other businesses. In reality, some of the jobs a company creates may come from its competitors, which would overstate the economic impact in the area. We measured the effect this might have on our results and determined the differences were not significant enough to warrant adjustments to our work.

- We did not incorporate the personnel costs of the Department of Commerce or Revenue in administering the major programs. That is because the primary focus of this evaluation is on the results created by state incentives. Also, personnel costs were likely very small compared to the amount of program incentives.

- Our analysis is based on a sample of 42 economic development projects, which we selected judgmentally to ensure it included all six major programs and companies from a variety of counties and industries. The results of our work are not projectable because the sample is not representative of the population. Although not statistically representative, we think the characteristics of our sample provide a reasonable basis to evaluate the success of the major Kansas economic development programs.

Although much of the data included in our analysis is self-reported, we did not audit it due to time constraints and, in some cases, a lack of verifiable information. We think it is unlikely that our analysis is so grossly or systematically wrong as to affect our

findings and conclusions, but the information in this report should be viewed as an indicator and not as absolute fact. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our findings begin on page 15, following a brief overview of economic development initiatives in Kansas and the methodology used in this audit.

Three State Agencies Have a Role in Implementing the State's Economic Development Incentive Programs

Each state has economic development programs that are designed to grow the state's economy. Incentives can include upfront assistance such as grants, loans, or cash payments, or more indirect tax-based options, such as tax credits, abatements, and exemptions.

The Department of Commerce, the Kansas Bioscience Authority, and the Department of Revenue administer the state's main economic development programs. Their duties are briefly summarized below.

- **The Department of Commerce is charged with helping grow, diversify, and expand existing businesses as well as creating new businesses.** To accomplish this, the department provides financial incentives and other assistance to businesses to help create and retain jobs and increase capital investment. It also provides services to help ensure the state's workforce can meet industry needs.

- **The Kansas Bioscience Authority works to advance the state's bioscience sector.** The bioscience industry draws on research in the life sciences to create marketable products and services. Among other things, bioscience companies study animal health, develop pharmaceuticals and medical devices, create fuel from plant matter, and advance new agricultural technologies. The Kansas Bioscience Authority was created in 2004 and offers investment programs that provide capital to bioscience companies and helps them reduce business risk.

- **The Department of Revenue administers tax credits and refunds for withholding taxes related to economic development incentives.** The department also issues sales tax exemption certificates to qualified companies. Although the department has no oversight responsibilities for economic development programs, it coordinates and shares certain reporting requirements with the Department of Commerce.

Our analysis does not include programs offered through the Kansas Bioscience Authority. During Part 2 of this series of economic development audits, we learned the authority had recently changed the focus of their program offerings to concentrate mostly on equity investments. We excluded Kansas Bioscience Authority programs from the present analysis due to the newness of these changes and the lack of any measurable outcomes.

We Evaluated the State's Six Main Economic Development Incentive Programs

The Department of Commerce administers a variety of economic development programs intended to grow jobs and enhance capital investments in the state. The following section summarizes the six programs that are central to this audit question.

The state's six major economic development incentive programs are used to promote capital investment and encourage job creation and retention in Kansas. Department of Commerce officials identified the state's main programs which are summarized in ***Figure OV-1*** on page 7. Although there are other economic development programs in the state, we did not evaluate them in our work. As the figure shows, we combined our analysis of Kansas Industrial Training (KIT) and Kansas Industrial Retraining (KIR) because the programs are very similar. ***Figure OV-1*** also shows that the Investments in Major Projects and Comprehensive Training (IMPACT) and Kansas Economic Opportunity Initiatives Fund (KEOIF) are no longer available. However, those programs are included in our analysis because they were two of the state's main programs from fiscal year 2006 to fiscal year 2011.

Generally, these main programs are administered by the Department of Commerce, although the Promoting Employment Across Kansas (PEAK) program and High Performance Incentive Program (HPIP) are also jointly administered by the Department of Revenue. The Department of Revenue is responsible for ensuring that companies in the PEAK program retain or are refunded the correct incentive amount, and issuing sales tax certificates and processing income tax credits for eligible HPIP companies.

In all, companies earned roughly $977 million in incentives through the state's main economic development programs from fiscal year 2006 through fiscal year 2011. Incentives can include grants, cash payments, tax credits, and tax exemptions. ***Figure OV-1*** on the next page shows the amount of incentives companies earned by program for the timespan we examined. The amount of incentives companies actually received through the state's main programs may be less than the amount earned depending on a company's performance and state tax liability. For example, the Department of Commerce may award a company $1 million in PEAK incentives to create 50 jobs. However, if the company only creates 10 jobs, the department may limit the company to retaining a lesser amount as a result of its underperformance. The figure does not contain the amount of local incentives awarded because that information does not exist at a statewide level.

Figure OV-1
Summary of Major Kansas Economic Development Programs
Administered by the Department of Commerce
FY 2006 - FY 2011

Economic Development Program	Description	Funding Mechanism	Total Incentives Earned (in millions)	Number of Agreements
High Performance Incentive Program (HPIP)	Provides income tax credits to companies that make capital investments and training expenditures, as well as a sales tax exemption that a company can use in conjunction with its capital investment.	Income tax credit and sales tax exemption	$698.8 (a)	1,552 (a)
Investments in Major Projects and Comprehensive Training (IMPACT)	Provides funding to companies that create or retain large numbers of jobs and that pay higher-than-average wages. Funding can be used to pay for major capital improvements and to help cover training expenses. Existing projects are ongoing, but the program was discontinued and no new projects were funded after fiscal year 2012.	Grant	$173.1	80
Promoting Employment Across Kansas (PEAK)	Encourages businesses to create or retain jobs by locating, relocating, expanding, or retaining operations in Kansas. In return, companies can retain or be refunded 95% of state withholding taxes from the created or retained positions that are paid the county median or average wage or more.	Retention or refund of state withholding taxes	$62.9	14 (b)
Kansas Industrial Retraining (KIR) and Kansas Industrial Training (KIT)	Provides funding to help companies create and retain jobs by paying for pre-employment training, on-the-job training, and retraining. The program covers several types of training expenses, including instructor salaries, curriculum planning and development, travel, materials, supplies, textbooks, and training equipment.	Grant	$16.2	644
Kansas Economic Opportunity Initiatives Fund (KEOIF)	Provides funding in the form of a five-year forgivable loan. Companies can use the funds to help pay for capital improvements or to help with relocation to Kansas. If the company creates or retains the jobs promised, then the loan is forgiven. Existing projects are ongoing, but no new projects were funded after fiscal year 2012.	Forgivable loan or grant	$15.4	119
Job Creation Program Fund (JCF)	Created by combining the IMPACT and KEOIF economic development programs. The resulting JCF program can be used to help fund expansions of existing Kansas companies, cover the cost of upgrades to a company's current facilities, or encourage a company to relocate to Kansas.	Forgivable loan or grant	$10.9 (c)	18 (c)

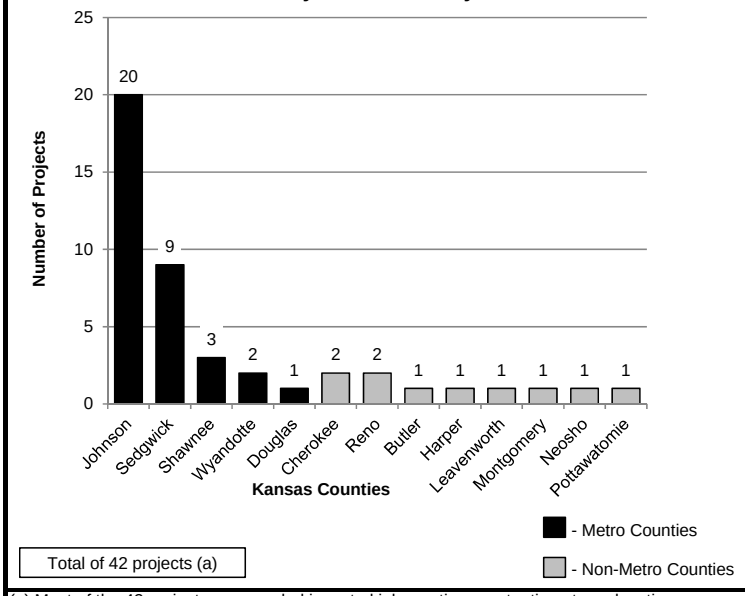
(a) Data reflect certifications and recertifications for HPIP investment and training tax credits earned from CY 2005 - CY 2011. The data do not include estimated sales tax exemptions.
(b) The number of PEAK agreements is small because the program was still new during the time period we selected.
(c) Data reflect FY 2013 and FY 2014 information because JCF is a relatively new program.
Source: LPA summary of program descriptions and unaudited incentive data provided by the Kansas Department of Commerce and Kansas Department of Revenue.

The state's economic development programs may be bundled together or combined with local government incentives to encourage companies to locate, expand, or remain in Kansas. The Department of Commerce can combine various state programs to create an incentive package tailored to meet a company's needs. They can also work with local governments to develop a package of state and local incentives. We included local incentives in our analyses to ensure we did not overstate the business activities attributable to state incentives.

We Analyzed a Sample of 42 State Economic Development Projects Initiated Between Fiscal Year 2006 and Fiscal Year 2011

Due to time constraints, it was not feasible for us to study all companies that received incentives through the state's major economic development programs. Instead, we used a judgmental sample to ensure we analyzed agreements from all major programs and included companies from a variety of counties and industries. Our sample included agreements the Department of Commerce made between fiscal year 2006 and fiscal year 2011 that included at least $150,000 in state incentives. (We selected all Job Creation Program Fund (JCF) and some PEAK agreements for a more recent time period because those programs are relatively new.) The results of our work are not projectable because the sample is not representative of the population. Although not statistically representative, we think the characteristics of our sample provide a reasonable basis to evaluate the success of the major Kansas economic development programs. ***Appendix C*** describes our sample in more detail.

Figure OV-2
Summary of Projects in LPA Sample by Kansas County



(a) Most of the 42 projects we sampled incented job creation or retention at one location. However, two projects incented activity at multiple locations, which resulted in the 45 projects shown in the figure.
Source: LPA sample of Kansas Department of Commerce economic development data.

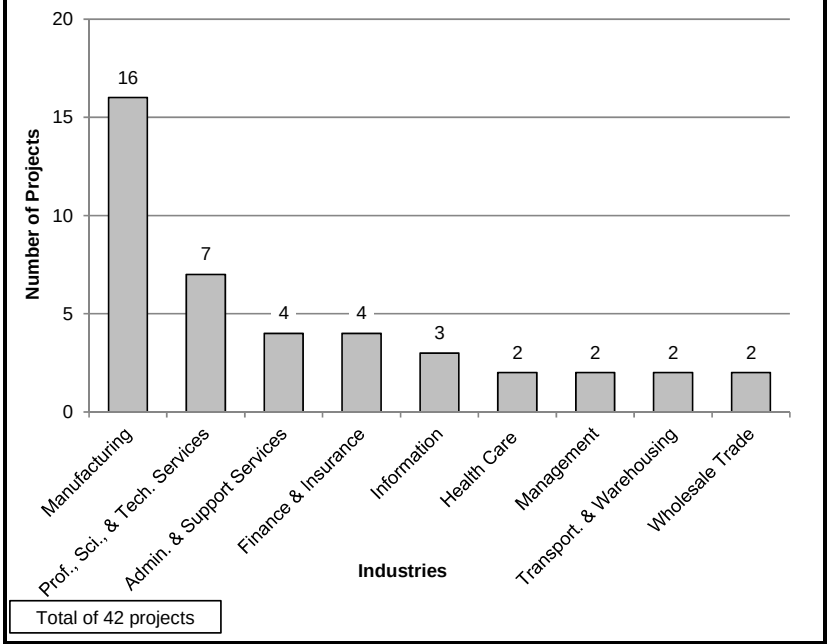
Once we selected a sample of agreements, department staff helped us identify other incentives that were tied to those same agreements. Those additional agreements could be worth more or less than $150,000. Agreements are often combined to form packages of incentives or "projects." Overall, we identified and evaluated 42 projects which are described below.

- **The 42 projects in our sample included 10 or more agreements from each of the state's six major economic development programs.** Projects can have multiple incentives from various programs. The 42 projects we sampled included 98 state agreements—23 PEAK, 21 HPIP, 16 IMPACT, 14 KEOIF, 14 KIT/KIR, and 10 JCF agreements.

- **Most of the projects were located in metropolitan counties—primarily Johnson County.** Of the 42 projects in our sample, 35 were located in one of the state's five metropolitan counties (Douglas, Johnson, Sedgwick, Shawnee, and Wyandotte). Of those 35 projects, 20 were located in Johnson County. ***Figure OV-2*** above shows the composition of our sample by county. As the figure shows, the sample also included projects in eight of the state's non-metropolitan counties.

- **Many projects involved manufacturing companies, although the projects also included companies from eight other industries.** ***Figure OV-3*** below shows the composition of our sample by industry. As the figure shows, the projects contained providers of professional services as well as management, finance, and health care facilities.

Figure OV-3
Summary of Projects in LPA Sample by Industry



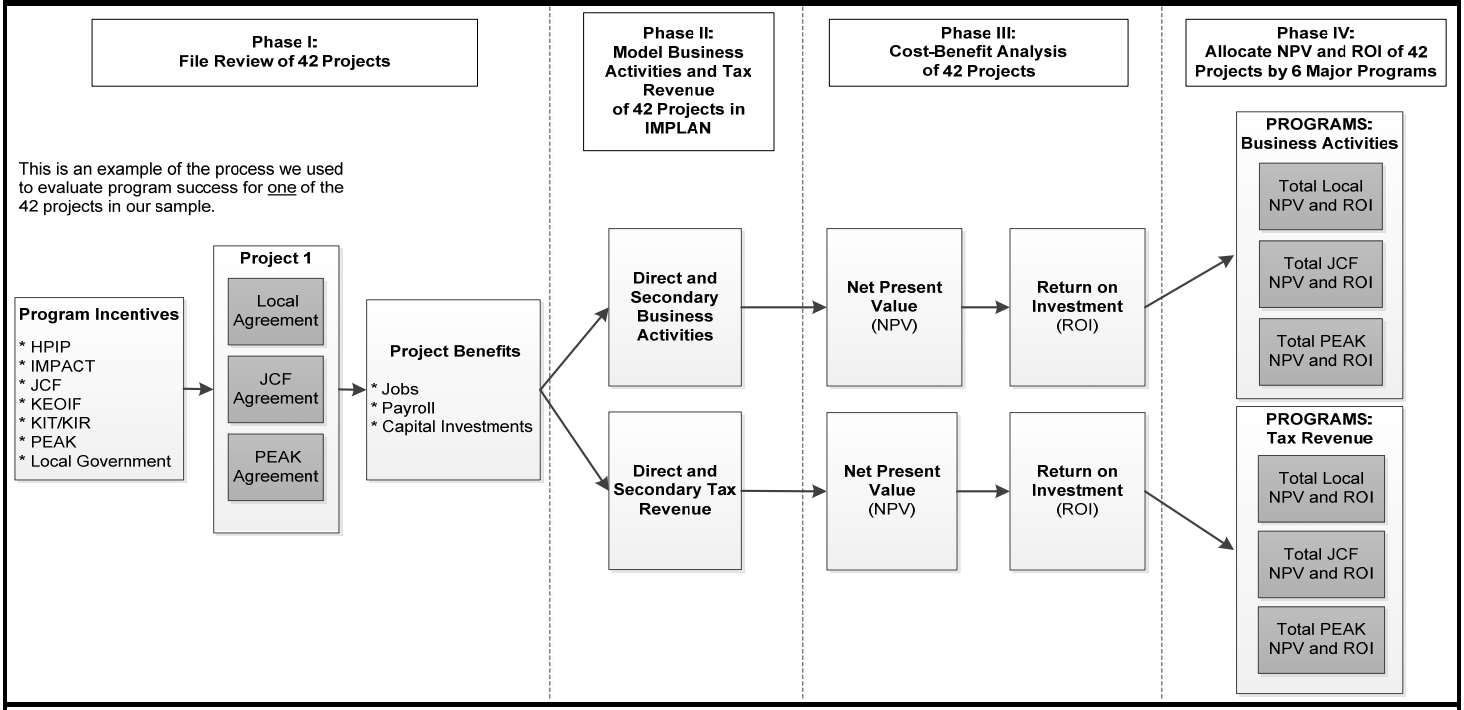
Source: LPA sample of Kansas Department of Commerce economic development data.

We Estimated the Business Activities and Tax Revenue the Sample Projects Generated Using Several Established Economic Modeling Techniques and Tools

As numerous academic studies and professional evaluations have shown, it is difficult to evaluate the effectiveness of economic development programs. That is because program goals may be unclear, the data needed to make such an assessment are either incomplete or inaccurate, or cause and effect cannot be determined with certainty. To help mitigate some of these issues, we used economic modeling techniques to estimate the business activities and tax revenue created by the 42 projects in our sample.

Figure OV-4 on the next page illustrates the process we used to evaluate program success. As the figure shows, there are four main phases of our evaluation. Each phase is described in more detail below. ***Appendix B*** also defines several of the terms important for understanding the economic modeling process and ***Appendix C*** describes our methodology in greater detail including important assumptions used in our analysis.

Figure OV-4
Overview of Main Phases in LPA Evaluation of Kansas' Six Major Economic Development Programs



Source: LPA illustration of audit methodology.

We collected company-reported job and investment data to measure past performance and we used company projections to estimate future performance. This step of the process is illustrated in Phase I of ***Figure OV-4.*** The jobs, payroll, and capital investments that companies create are benefits to state and local governments. Conversely, the incentives the Department of Commerce or local government award to companies are a cost to state and local governments.

- **To quantify jobs, investments, and economic development incentives in <u>past years</u>, we generally relied on data from Department of Commerce or Department of Revenue files.** We gathered job, payroll, and capital investment data that companies reported from the start of each agreement through the time of our file review. We also collected data on the incentives the state contributed to the project to date. Finally, we called local government officials to identify local incentives that were also provided for these projects.

- **To estimate jobs, investments, and incentives in <u>future years</u>, we generally relied on company projections, program agreements, and other supplemental information from Department of Commerce files.** We also made a number of important methodological decisions regarding data in future years. For instance, we estimated jobs, investments, and economic development incentives through 2023 for all projects, except those

where it did not make sense (e.g. a company that moved out of Kansas). We also estimated a range of possible jobs, investments, and incentives in future years or years beyond a company's contract period. The range we developed included a low, high, and most likely estimate.

- **Our estimates tried to account for uncertainty in past and future years.** We developed the following factors because we do not know how far the jobs, investments, and incentives we estimated may vary from actual jobs, capital investments, and incentives.

  - For each project and each year, we estimated the likelihood that the jobs and investments a company created occurred in Kansas *within our projected range* (called a confidence rate).

  - We also estimated the likelihood that the jobs and investments a company created occurred in Kansas *because of the incentives provided by* the state government or local government (called an attribution rate).

  We assigned these rates based on correspondence in companies' files, publicly available information about each company (e.g. number of locations in Kansas, the Midwest, and United States), and in some cases, additional information from Department of Commerce staff.

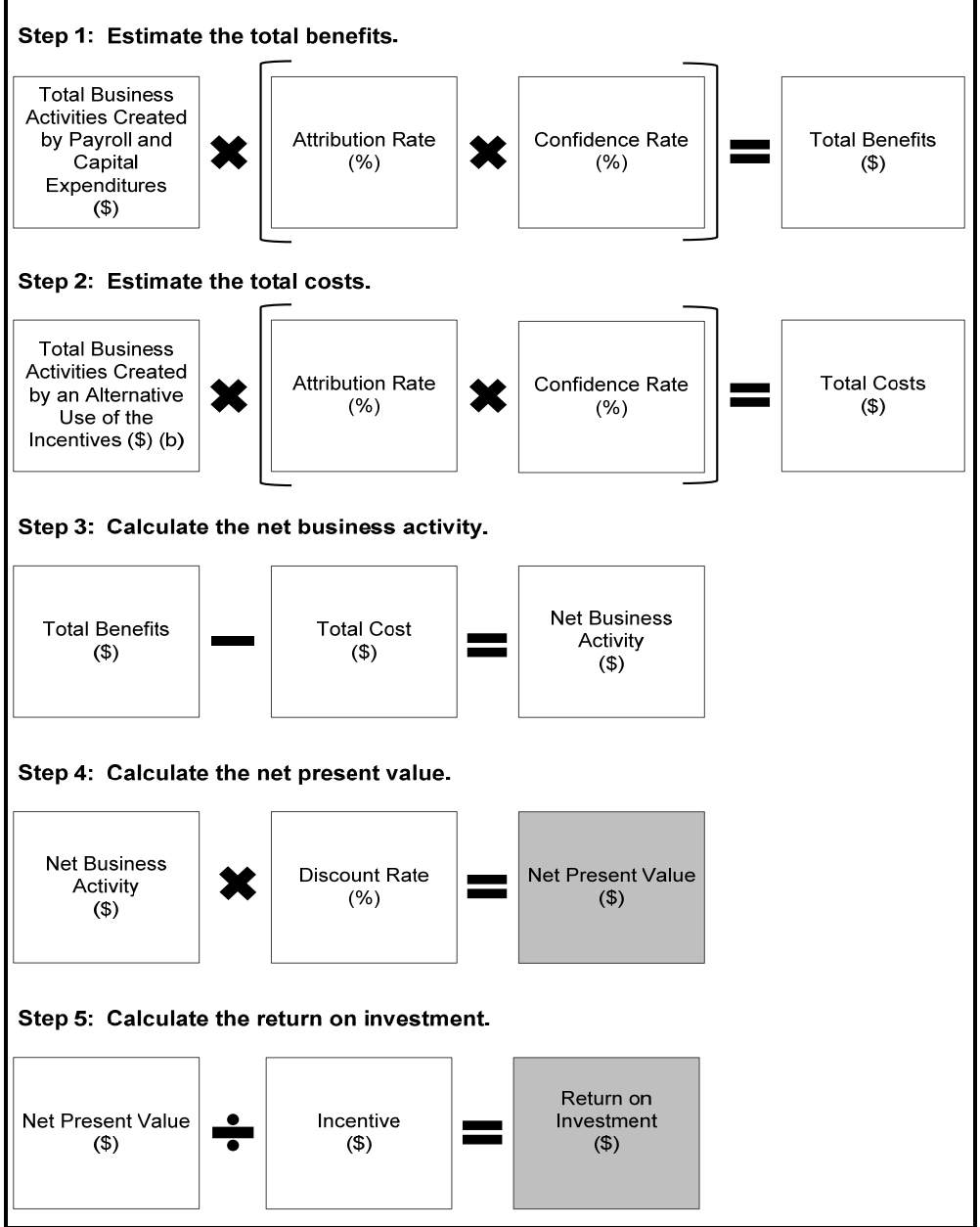
Our economic consultant used IMPLAN to model the direct and secondary effects of the job and capital investment data we collected. We hired an economic consultant from Wichita State University to model the above data in IMPLAN (called IMpact analysis for PLANning). IMPLAN is an economic modeling software package that is commonly used to study economic effects. As shown in Phase II of ***Figure OV-4***, the consultant modeled the direct and secondary effects of jobs and capital investments on an annual basis according to two units of analysis—economic effects (or business activities) and tax revenue. Business activities and tax revenue are separate measures that cannot be combined.

- Economic effects measure the economic activity a business creates by increasing its production of goods and services (direct effect), the production of its suppliers (secondary effect), and the spending power of its employees (also a secondary effect). These economic effects measure the business activities that occurred within Kansas and contribute to the state's gross domestic product. We refer to economic effects as business activities throughout the report.

- Tax revenue measures the state and local tax revenue (direct and secondary) from taxes on employee compensation, production, households, and corporations. Our analysis compared the tax revenues generated that were attributable to economic development programs to the tax dollars the state invested in program incentives as a way of evaluating the ability of each program to pay for itself.

We used a cost-benefit model to simulate the business activities and tax revenue of each project in our sample. Phase III of ***Figure OV-4*** on page 10 illustrates this step in relation to the overall process. As the figure shows, the cost-benefit model resulted in two metrics we used to evaluate program success—net present value and return on investment. These metrics are shown in more detail in ***Figure OV-5*** below.

Figure OV-5
Calculations Used to Determine the Return on Investment for our Sample of 42 Economic Development Projects (a)



(a) These steps were also used to calculate projects' net present value and return on investment with regard to state and local tax revenue.
(b) The alternative use of incentives captures the business activities that would have been generated had the government funds been used as a statewide or county tax cut.
Source: LPA illustration of cost-benefit analysis.

The cost-benefit analysis involved five steps. First, we entered the direct and secondary business activities and tax revenue from IMPLAN into a cost-benefit model through 2023. Second, we simulated 100,000 different combinations of jobs, capital investments, and incentives within the ranges we identified. Third, we subtracted project costs from company-generated benefits to calculate the net effect of each project. Fourth, we calculated the present value of the net effect in 2013 (called net present value) to put all effects in a common year value. The resulting net present value is a range that accounts for the different outcomes of the simulation process. Finally, we divided those results by state and local incentives to calculate the return on investment for each project.

The return on investment is the primary measure we used to evaluate projects' (and ultimately programs') success in generating business activities and tax revenue for the Kansas economy. It is also a range and measures how much net business activities or tax revenue programs created for every $1 the state provided in incentives.

We allocated the business activities and tax revenue our sample projects generated to the main economic development programs to determine their overall success. To convert our project-level results to program-level results, we allocated the present value of each project's net effects across the state programs and local incentives that comprised the project. This is shown in Phase IV of ***Figure OV-4*** on page 10. Our method for allocating these effects was based on the proportion of incentives given to the project from each program. It gave more weight to the programs that contributed larger incentives, and less weight to the programs that contributed smaller incentives.

Question 1: Has the Implementation of Major Kansas Economic Development Programs Been Successful?

The implementation of major Kansas economic development programs appears to have been successful based on our evaluation of the returns generated from 42 economic development projects (p. 15). According to our analysis, all six major programs appeared to create significant returns on investment with regard to business activities (p. 16) and tax revenue for state and local governments (p. 18). However, return on investment is an indicator of program success and should not be interpreted as an absolute value (p. 19). Additionally, a couple of factors significantly influenced the return on investment of the 42 projects we evaluated such as the jobs the project created and the likelihood the project occurred in Kansas because of the state and local incentives provided (p. 20).

We also found that the High Performance Incentive Program (HPIP) is fundamentally different than the other major economic development programs because of its entitlement nature, structure, and lack of documentation (p. 22).

The Economic Development Programs We Evaluated Appeared to Generate Significant Returns on the State's Investments

The process we used to evaluate the state's six major economic development programs was long and complex as summarized in the Overview. Although meaningful for understanding the work we did, the two metrics that result from that process are ultimately most important for evaluating program success—net present value and return on investment. Specifically, this report emphasizes each program's return on investment with regard to the business activities they created and the tax revenue they produced.

We identified the business activities and tax revenue generated by the state's major economic development programs based on 42 economic development projects. To evaluate the major Kansas programs, we estimated the business activities (or economic effects) and tax revenue from a sample of economic development projects, and then allocated them by program. We evaluated the success of the programs and projects from two perspectives—economic effects and tax revenue. Economic effects, which we refer to as business activities through the report, measure the economic activity a business creates by increasing its production of goods and services, the production of its suppliers, and the spending power of its employees. Tax revenue measures the state and local tax revenue a business creates through the same activities. The business activities and tax revenue presented in this report cannot be combined; rather, they are two separate ways of evaluating success.

The state's six major programs appeared to generate significant returns on investment with regard to business activities and tax revenue. We calculated the return on investment of the state's major programs from the perspective of business activities and tax revenue. Based on that work, we concluded:

- The major programs appeared to create significant returns on investment for Kansas with regard to business activities. (page 16)
- The programs also appeared to yield positive returns on investment in terms of tax revenue for state and local governments. (page 18)
- Return on investment is an indicator of program success, but should not be interpreted as an absolute value. (page 19)
- A couple of factors significantly influenced the return on investment of the 42 projects we evaluated. (page 20)

These findings are discussed further in the following sections.

PROGRAM-LEVEL FINDINGS

According to Our Analysis, the Major Programs Created Significant Returns on Investment for Kansas with Regard to Business Activities

The following section explains the return on investment for each of the state's major programs using business activities as the unit of analysis. There is no benchmark for the amount of business activities a program needs to create to be successful. Despite the lack of any benchmarks, we considered the state's programs to be successful because of the significant returns they generated.

All programs appeared to generate significant returns on investment, which means the business activities programs generated greatly exceeded the incentives they contributed. We used return on investment as the primary indicator of program success. It weighs the business activities a program created against the amount of incentives necessary to generate them. ***Figure 1-1*** on page 17 summarizes the return on investment for each of the major Kansas programs. Because of the uncertainty involved in these estimates, the results for each program are actually a range of values. The figure presents the midpoint of that range only. As the table shows in the right-hand column, each of the programs generated a return on investment greater than zero, meaning the business activities a program created exceeded the state and local costs in terms of incentives provided.

Figure 1-1 also shows that IMPACT appeared to create a much higher return on investment than the other programs. This disparity is likely the result of changes in how the Department of Commerce packaged incentives over time. IMPACT made up the vast majority of incentives in the projects it supported whereas incentives through the state's other programs were generally more evenly distributed. Because we allocated business activities to programs based on the composition of incentives in a project, IMPACT typically was credited with a larger share of the business activities a company generated.

Figure 1-1
Business Activities Created by the Six Major Kansas Economic Development Programs and Local Incentives (in millions) (a)

Program	Incentives Contributed	Measures of Success	
		Net Present Value	Return on Investment (b)
IMPACT	$133.7	$17,206.5	**$128.7**
PEAK	$51.2	$2,916.5	**$57.0**
HPIP	$60.3	$3,387.8	**$56.2**
KIT/KIR	$0.6	$24.6	**$44.6**
JCF	$8.5	$334.8	**$39.6**
KEOIF	$12.1	$353.8	**$29.1**
Local	$113.7	$5,321.6	**$46.8**

(a) The values above are based on our full sample of 42 projects and reflect the midpoint of our estimates. The high and low estimates are +/- 9% of the midpoint.
(b) Values are per $1 of investment.
Source: LPA analysis of unaudited Kansas Department of Commerce and Kansas Department of Revenue economic development data.

The programs also appeared to generate more business activities in Kansas than an across-the-board tax cut equal to the incentive. The net present value (calculated as part of the computation for return on investment) is also an indicator of program success. It measures the business activities each program created minus the cost of an alternative use of those program incentives, or opportunity cost. This opportunity cost, called a counterfactual, accounts for the lost business activities that would have been generated had the state or local government chosen to use the incentive differently. Our analysis assumes one possible alternative use of program incentives—an across-the-board statewide tax cut equal to the amount of program incentives. When applicable, the counterfactual also included a local tax cut equal to incentives from the local government. This is an alternative use, not necessarily the next best use, of program incentives.

Figure 1-1 on the previous page summarizes the midpoint of the net present value range created by the major programs. As the figure shows, the net present value for all programs was greater than zero, meaning the business activities each program created exceeded the opportunity cost. It also illustrates that a program can have a low net present value, but a high return on investment and vice versa. That is because the net present value measures business activities while the return on investment weighs those activities against the amount of incentives necessary to generate them. For example, the state invested $12.1 million in KEOIF incentives, which created $353.8 million in net business activities for the Kansas economy, a return on investment of $29. KIT and KIR created $24.6 million in net business activities, but through fewer than $1 million in incentives, a return on investment of $45.

All Major Programs Also Appeared to Yield Positive Returns on Investment in Terms of Tax Revenue Generated for State and Local Governments

This section describes the return on investment for the state's major programs, but from the perspective of state and local government tax revenue. Tax revenue is another way of evaluating the success of the state's main economic development programs based on the ability of each program to pay for itself. Specifically, it compares the taxes a program generated to the taxes the state devoted to the program. IMPLAN calculated state and local tax revenue as a single value, but we used information from the software and the U.S. Census Bureau to divide that revenue between state and local governments. Based on this information, we estimated $0.80 of every $1 was state tax revenue and $0.20 was local tax revenue. We analyzed tax revenue for 19 of the 42 projects in our sample.

All programs appeared to generate a positive return on investment, which means that the tax revenue programs generated exceeded the incentives they contributed. ***Figure 1-2*** on page 19 summarizes the return on investment for each of the state's six main programs. Because of the uncertainty involved in these estimates, the results for each program are actually a range of values. The figure presents the midpoint of that range only. As the figure shows in the right-hand column, all programs generated a positive return on investment meaning the tax revenue a program created exceeded the state and local costs in terms of incentives provided.

IMPACT again appeared to create a substantially higher return on investment than the other programs. As mentioned in the previous section, this difference is likely the result of changes in how the Department of Commerce packaged incentives over time, as well as our method of allocating effects to programs.

The programs also appeared to generate more tax revenue in Kansas than an across-the-board tax cut equal to the incentive. The net present value is also an indicator of program success. In this section, it measures the state and local tax revenue each program created minus the cost of an alternative use of those program incentives, or an opportunity cost. The opportunity cost, called a counterfactual, accounts for the state and local tax revenue that would have been generated had the state or local government chosen to use the incentive as an across-the-board tax cut. Additional information about counterfactuals can be found in ***Appendix C***.

Figure 1-2 below summarizes the midpoint of the net present value range created by the state's major economic development programs with regard to tax revenue. As the figure shows, the net present value for all programs was greater than zero. This indicates the tax revenue each program created exceeded the opportunity cost. The figure also shows that local incentives can generate state tax revenue, and state incentives can generate local tax revenue.

Figure 1-2
State and Local Tax Revenue Created by the Six Major Kansas Economic Development Programs and Local Incentives (in millions) (a)

Program	Incentives Contributed	Measures of Success			
		State Tax Net Present Value	Local Tax Net Present Value	Total Tax Net Present Value	Return on Investment (b)
IMPACT	$13.2	$287.4	$71.9	$359.3	**$27.2**
JCF	$2.8	$14.2	$3.5	$17.7	**$6.3**
PEAK	$29.4	$102.2	$25.5	$127.7	**$4.4**
KIT/KIR	$0.4	$1.1	$0.3	$1.4	**$3.9**
HPIP	$49.4	$135.9	$34.0	$169.9	**$3.4**
KEOIF	$6.8	$7.4	$1.8	$9.2	**$1.4**
Local	$71.9	$83.6	$20.9	$104.6	**$1.5**

(a) The values above are based on 19 projects from our full sample of 42 projects. The values reflect the midpoint of our estimates. The high and low estimates are +/- 12% of the midpoint.
(b) Values are per $1 of investment.
Source: LPA analysis of unaudited Kansas Department of Commerce and Kansas Department of Revenue economic development data.

Return on Investment is an Indicator of Program Success, But Should Not Be Interpreted as an Absolute Value

Our analysis showed that all six major economic development programs created significant returns on investment for Kansas. However, that measure is only an indicator and is not a precise measure of the business activities and tax revenue that programs created. Although our estimates are based on reasonable assumptions and methodologies, the actual business activities and tax revenue could vary from our estimates for a number of reasons. These include:

- Our analysis of business activities is primarily based on self-reported data from the companies we sampled. Therefore, actual jobs and investments may vary from reported jobs and investments. That data generally is unaudited, but there is no other source of information to analyze.

- In general, we projected jobs through 2023 to measure the full business activities programs created. We employed several economic tools to account for uncertainty, but it is likely actual jobs and payroll will vary from those we estimated.

- We projected economic development incentives and capital investments through the end of a company's contract period. It is likely actual incentive and capital investments made in future years (if applicable) will vary from our projections.

- Because we only looked at a sample of projects, the business activities and tax revenue of one large project could significantly influence the business activities and tax revenue we estimated for an entire program. A sample of different projects could result in different program returns than those described above.

Although different methodologies and assumptions could produce different results, any variations likely would not change the overall results from positive to negative.

PROJECT-LEVEL FINDINGS

A Couple of Factors Significantly Influenced the Return on Investment of the 42 Projects We Evaluated

As mentioned previously, we evaluated the success of the state's six main economic development programs by analyzing a sample of 42 incentive projects. The returns on the state's investment for those individual projects were generally positive, but varied greatly. This section summarizes some of the major factors that influenced projects' returns.

The number of jobs a project created or retained had a more significant effect on return on investment than a project's capital investments. Capital investments created some business activities and tax revenue for state and local governments, but jobs created larger activities and revenue. For example, we analyzed a handful of projects and found that jobs generated nearly 10 times as much business activity as capital investments. In general, this is because capital investments are a one-time event and have only a short-term impact on the economy, whereas jobs have an ongoing impact.

Although capital investments did not have a significant influence on return on investment in our analysis, Department of Commerce officials told us they disagree because investments can indicate a company's longer-term commitment to remain in Kansas.

The likelihood a project occurred as a direct result of state and local incentives had a significant influence on our return-on-investment estimates. We assigned an attribution rate to each project in order to estimate the probability a company located or remained in Kansas because of the state and local incentives it received. The attribution rate ensured business activities and tax revenue were scaled appropriately given the influence we thought incentives had on the project. We assigned a low attribution rate to projects when we thought incentives were not influential in a company's decision to locate, expand, or remain in Kansas and vice versa. We estimated the attribution rate based on publicly available information, insight from Department of Commerce officials, and information in companies' agreements, annual reports, and correspondence with the department.

Figure 1-3
Our Analysis Found Companies that Left Kansas Still Generated Positive Returns on the State's Investment

A few projects in our sample involved companies that either closed or left the state. Below are two examples of companies in our sample that left the state. Although these companies were located in Kansas for a limited amount of time, the two projects still resulted in a positive net present value and return on investment.

- **Example A.** In 2005, the Department of Commerce offered an existing Sedgwick County company more than $1 million in state economic development incentives to retain more than 300 existing jobs and create more than 600 new jobs in Kansas by January 2015. The company was acquired by a different company in 2006, and by 2009 had created just 50 new jobs. It then moved out of state and eliminated the jobs in Kansas. In total, the company only received about $200,000 in state incentives. Despite leaving the state, the projected generated positive returns with regard to business activities (net present value of $114.6 million and a return on investment of $308) and tax revenue (net present value of $6.4 million and a return on investment of $17).

- **Example B.** In 2006, the Department of Commerce offered an existing Johnson County company about $900,000 in state economic development incentives to retain about 400 existing jobs and create about 250 new jobs by 2011. When the company's agreement with the Department of Commerce concluded at the end of 2011, it employed about 900 jobs (500 new and 400 existing) and had spent about $18 million in capital expenditures. By 2013, the company relocated to Kansas City, Missouri. Despite leaving the state, the project generated positive returns with regard to business activities (net present value of about $510.0 million and a return on investment of about $460). We did not calculate the tax revenue the project generated.

As a result, projects we thought had a high attribution rate generally had a higher return on investment than projects we thought had a low attribution rate. For example, a project that created $125 million in payroll and $16 million in capital investments would have generated a return on investment of $59 assuming an attribution rate of 90%, but a return on investment of just $5 assuming an attribution rate of 10%.

A few projects involved companies that either closed or left the state, but the return to Kansas was still positive. ***Figure 1-3*** above provides two examples of sample projects that left the state. As the figure describes, the projects created jobs for a limited number of years due to the companies' departures from Kansas. However, the business activities and tax revenue the projects created during that limited time, coupled with the incentives the Department of Commerce recouped, still resulted in a positive return on investment.

OTHER FINDINGS

HPIP is Fundamentally Different than the Other Major Economic Development Programs We Evaluated

The High Performance Incentive Program (HPIP) encourages companies to make capital investments and train employees. It does that by allowing eligible companies to receive income tax credits for qualified investments and training expenditures, and sales tax exemptions for investments. A company can qualify for HPIP and other programs as part of an incentive package or it can qualify and receive only HPIP incentives.

Because HPIP is more like an economic development entitlement program, its incentives may be given to companies for investments that would have been made anyway. Most programs we analyzed allow the Department of Commerce to exercise considerable discretion in approving applications and setting incentive amounts. For HPIP, the department has no discretion in determining which companies qualify for the program or the amount of the incentive. Instead, the department must approve a company's application to receive HPIP incentives if it meets statutory requirements regardless of whether the incentive is necessary. This entitlement increases the risk that companies receive incentives for investments they would have made without HPIP incentives. In fact, several companies in our sample reported to the Department of Commerce that HPIP incentives did not significantly influence the scope of their investment project, but they received the incentives anyway.

We were not able to analyze projects that only included HPIP incentives because of the program's structure and lack of documentation. Unlike the other major Kansas programs, companies qualify for HPIP by worksite rather than by project. As a result, the documentation for standalone HPIP agreements can span multiple projects and is not conducive for an evaluation of a single project. Additionally, companies do not have to report jobs and payroll associated with HPIP investments to receive HPIP income tax credits. Some companies in our sample projects did not complete this information or reported that no jobs were created or retained. If no job data was given, we could not model the true business activities or tax revenue of standalone projects because the economic modeling software we used (IMPLAN) captured productivity through jobs.

Conclusion

The subject of economic development incentives can be controversial. Studies of these incentives often produced mixed results, but many have argued that states need to offer them to remain competitive with other states. In conducting this audit, we did not attempt to address any controversy about the need for

economic development incentives. Rather, this audit sought to evaluate the success of Kansas' major economic development programs given that state incentive programs do exist. The results of that evaluation would indicate that the major economic development programs in Kansas have been successful, as all of the major programs appeared to generate significant returns on the state's investments.

Recommendations None

APPENDIX A
Scope Statement

This appendix contains the revised scope statement approved by the Legislative Post Audit Committee for this audit. On July 10, 2012, the committee approved an audit requested by Senator Kultala and Senator Owens with three questions relating to economic development policies in Kansas. On May 10, 2013, the Legislative Post Audit Committee modified the original scope statement by eliminating the third question, designed to determine whether economic development contracts were written to address significant changes in company circumstances. The committee also added three additional questions, which are listed below as questions three, four, and five. Finally, on March 5, 2014, the committee eliminated the Kansas Bioscience Authority from the scope statement for question five.

Economic Development: Determining Which Economic Development Tools are Most Important and Effective in Promoting Job Creation and Economic Growth in Kansas

Economic development activities in Kansas are incentivized in a variety of ways including state programs, tax credits, and tax exemptions. Economic development assistance is intended to result in outcomes such as job creation, job retention, and the growth of commerce and industry in the state.

In Kansas, most economic development programs and incentives are administered by the Department of Commerce and the Kansas Bioscience Authority. Economic development programs are funded through several sources including federal moneys, state Lottery and casino proceeds, and wage tax withholdings for certain employees. Additionally, state and local governments also incentivize economic development through forgone revenues including tax abatements, credits, and exemptions.

Our 2008 audit evaluating the impact of economic development programs identified a number of problems related to assessing the effectiveness of these programs and activities. Those problems included unavailable and unreliable data, difficulties in measuring economic growth, and linking business outcomes with specific economic development assistance. Nonetheless, academic literature suggests that economic development incentives must be offered to remain competitive with other states. Our audit also identified a measurable, although small, relationship between economic development spending and job and business growth in various counties.

Legislators have expressed interest in knowing which economic development programs and incentives are most helpful to participating businesses.

A performance audit in this area would address the following questions:

1. **What economic benefits has Kansas realized as a result of the PEAK and HPIP tax incentive programs?** To answer this question, we would collect data on the PEAK and HPIP programs since 2009, including which companies have participated and how much they've claimed in tax credits through these programs. For both programs, we would select a sample of participating companies to evaluate the effects of the programs on either job creation, or capital and employee education expenditures. For a sample of

companies participating in the PEAK program, we would determine how many jobs the program has created, where those jobs have come from, and how much state revenue has been forfeited to create those jobs. In addition, we would determine how the recent statutory changes are likely to affect the PEAK program, both in terms of forecasted jobs and costs. For a sample of companies participating in the HPIP program, we would compare capital and employee education expenditures before and after receiving HPIP tax credits and exemptions to determine the program's likely effect. We would perform additional work in this area as needed.

2. **Does the Department of Commerce adequately enforce performance clauses for economic development incentive programs?** To answer this question, we would create an inventory of programs administered by the department intended to create and retain jobs or enhance capital investments in Kansas. We would determine whether those programs have specific requirements for creating or retaining a certain number of jobs in return for financial assistance. We would review department policies and procedures and interview department staff to determine how they determine whether companies receiving assistance met program requirements. Further, we would determine how often the department has recouped money through performance clauses over the past five years. For a sample of incentive contracts, we would determine whether required performance measurements had been met, and if not, whether the department appropriately recouped money it was owed. We would perform additional work in this area as needed.

3. **Which programs and incentives do companies and other stakeholders think are most useful in enhancing Kansas' economic development?** To answer this question, we would review relevant literature, previous economic development audits, and economic development studies to determine what they show about the effectiveness of certain types of economic development spending. Further, we would work with Department of Commerce and Kansas Bioscience Authority staff to identify companies that have received economic development assistance in the past several years. We would survey company management to determine which incentives they think have been most and least useful in helping them succeed—including assistance that has recently been discontinued such as enterprise zones. If possible, we would interview management for a sample of those companies to better understand how economic development assistance has affected the companies' strategic decisions and its continued growth or stability. We would also interview corporate site consultants, local chamber executives, city managers, and economic development specialists to get their perspective on these issues (including their opinion on the potential effect of recent statutory tax changes on major economic development programs). We would perform additional work in this area as necessary.

4. **Does Kansas have the modern economic development programs and tools necessary to succeed in today's highly competitive global economy compared to other states?** To answer this question, we would contact officials in other states to determine what types of programs they have that provide monetary benefits similar to those provided by the Promoting Employment Across Kansas (PEAK) program and the Kansas Job Creation Fund (JCF). For those programs, we would work with those officials to understand the history, eligibility requirements, funding levels, and intended outcomes of those programs. Moreover, to the extent possible, we would collect summary information on what those programs have accomplished in recent years. Finally, we

would work with Department of Commerce and Kansas Bioscience Authority officials to collect the same information for Kansas programs. We would perform additional work in this area as necessary.

5. **Has the implementation of major Kansas economic development programs been successful?** To answer this question, we would work with the Legislative Research Department and the Revisor of Statutes to summarize the legislative intent of major economic development programs in Kansas. Further, we would work with Department of Commerce officials to collect various measures of economic impact for those major programs. Potential measures would include the total number of jobs created, retained, or relocated from other states. To the extent that data was available, we would also evaluate the compensation and education levels for those jobs and any capital improvements made to accommodate them (e.g. new offices). We would also work with state officials to determine how stable those jobs have been over time (e.g. what proportion of jobs created five years ago still exist). Further, we would estimate the potential effect of the jobs these programs facilitate on local government sales and property taxes. Using program funding levels, we would calculate the net cost of jobs created, retained, or relocated through these programs before and after any relevant withholdings, credits, or exemptions expire. We would perform additional work in this area as necessary.

Estimated Resources: 4 LPA staff
Estimated Time: 11 months (a)

(a) From the audit start date to our best estimate of when it would be ready for the committee. This time estimate includes a two-week agency review period.

APPENDIX B
Common Terms and Definitions

This appendix contains a glossary of the terms necessary for understanding economic modeling and other more technical aspects of the work we conducted in this audit.

Appendix B Glossary of Economic Modeling Terms	
Term	**Definition**
Attribution Rate	The likelihood a company created or retained jobs, or made capital investments because of the incentives it received. For example, an attribution rate of 90% indicates that we are 90% confident the project occurred because of the incentives the state and local government provided. In other words, we think one of 10 similar projects would have occured without any incentives.
Confidence Rate	The likelihood the actual number of jobs or the amount of capital investments are within the range of jobs, payroll, and capital investment we estimated.
Counterfactual	A counterfactual captures the business activities and tax revenue that would have been generated if the government funds had been spent in a different way. It is the opportunity cost of the project. For this analysis, we did not necessarily identify the next *best* way the incentives could have been used, but identified a possible alternative. The counterfactual could have up to three components depending on the specific circumstances of the project. Those components include: *State Tax Counterfactual:* This captures the total business activities and tax revenue that would have been generated had the state's share of the incentives been used for a statewide tax cut. *Local Tax Counterfactual:* This captures the total business activities and tax revenue that would have been generated had the local government's share of the incentives been used instead for a county tax cut. *Border Counterfactual:* This captures the total business activities and tax revenue that would have flowed to Kansas even if a company had chosen to remain or locate in Missouri instead of Kansas.
Economic Effects (or Business Activities)	Business activities can be measured in a variety of ways. For this evaluation, we captured business activities using a *value-added* measure, which is a measure of an individual company's contribution to Kansas' gross domestic product. The total value added economic effects of a business activity can subsequently be split into three types of effects: *Direct Effects (Primary):* These are the production changes and expenditures by the businesses that received state and local incentives and by their consumers. *Indirect Effects (Secondary):* These are the economic impacts from the businesses that received incentives buying goods and services from other businesses. If a company increases production (direct effect), it may need to buy additional supplies from businesses in other industry sectors, hire additional staff, or contract additional services (indirect effect), and those effects flow through the Kansas economy. *Induced Effects (Secondary):* These are the economic impacts of employees of the companies that provided direct and indirect effects and proprietors spending some of their increased income. Employees and proprietors spend some of their income on other goods and services such as food, clothing, and housing, and those effects flow through the Kansas economy.
Incentive	Grant money, cash payments, tax credits, and tax exemptions that the state or local government committed to the project.

Glossary of Economic Modeling Terms (Continued)	
Term	**Definition**
Net Business Activities and Net Tax Revenue	The difference between the project benefits and project costs from the counterfactuals.
Net Present Value	The present value of net business activities or net tax revenue. The net present value is an indicator for whether a project or program generated more business activities or tax revenue than an alternative use of that same money would have generated. A net present value greater than zero is an indication that benefits exceed costs.
Present Value	The current value of past and future cash flows given a specified rate of return (called a discount rate). Present value is a method of accounting for the time-value of money. In other words, $1 yesterday is worth more than $1 today and $1 today is worth more than $1 tomorrow. For this analysis, we calculated the present value of amounts in 2013 dollars using a discount rate of 4.5%.
Return on Investment	The net present value divided by state or local incentives. The return on investment is an indicator for how much net business activity or net tax revenue policymakers can expect to receive per dollar of incentive. A return on investment greater than zero indicates that benefits exceed costs.
State and Local Tax Revenue	State and local government tax revenue captures the revenue generated by taxes on employee compensation, production, households, and corporations. This includes sales, income, property, and several other categories of taxes. We modeled the total tax revenue projects created, which is comprised of direct, indirect, and induced taxes as described above.

APPENDIX C
Detailed Methodology and Major Assumptions

This appendix contains a detailed description of the methodology used and assumptions made in our work to determine the success of the state's main economic development programs. Specifically, the steps we used included: selecting a sample, conducting a detailed file review, accounting for unique aspects of PEAK and HPIP, modeling business activities and tax revenue in IMPLAN, developing a cost-benefit model, and allocating business activities and tax revenue by program.

1. Selecting a Sample

We worked with Department of Commerce officials to select a sample of projects for our evaluation of the state's major economic development programs. The projects selected through this process became the basis for the remainder of our analysis. The process we used to identify the sample is described below.

- **Department of Commerce officials identified the main economic development programs offered since fiscal year 2006.** The programs they identified were: the High Performance Incentive Program (HPIP), Investments in Major Projects and Comprehensive Training (IMPACT), Job Creation Program Fund (JCF), Kansas Economic Opportunity Initiatives Fund (KEOIF), Kansas Industrial Retraining (KIR), Kansas Industrial Training (KIT), and Promoting Employment Across Kansas (PEAK). All but IMPACT and KEOIF were the same programs the department identified as its major programs in Part 2 of this series of economic development audits. Because Part 2 reviewed the department's current program offerings only, IMPACT and KEOIF were not included in that work.

- **We selected a judgmental sample of 62 agreements from these programs.** In doing so, we made the following decisions to limit the scope and size of our work:

  - We did not initially select agreements for KIT, KIR, or HPIP. That is because KIT and KIR are very small programs that are often used in conjunction with other program incentives, and HPIP has a fundamentally different structure and reporting requirements (see page 22).

  - We limited our selection from the remaining programs to agreements with a start date between July 1, 2005 and June 30, 2011. There were two exceptions. Neither the JCF nor the expansion component of the PEAK program began until 2012, which was outside our original window. As a result, we did not limit our selection of agreements from these two programs by date.

  - We also limited our selection from the remaining programs to agreements that awarded $150,000 or more in state incentives.

  - We selected all JCF, KEOIF, and PEAK agreements that fell within the above parameters, but because of the number of IMPACT agreements, we used a monetary unit sampling technique to further narrow our selection from that program. We had to take this additional step for IMPACT due to the large number of contracts that remained even after applying our criteria. Additionally, we selected all PEAK agreements that met our criteria (2005-2011), as well as the first six PEAK expansion agreements from 2012.

- **Department of Commerce officials identified all other incentives offered in conjunction with these 62 agreements.** Department staff helped us identify projects by connecting the 62 agreements we selected to other contracts that were tied to the same economic development package. This expanded our sample to include 126 agreements from all of the major programs (including KIT, KIR, and HPIP) and worth more or less than $150,000.

- **We combined agreements that were part of the same package of incentives, ultimately forming 42 "projects" on which we based our file review.** A project can include agreements from various programs. The 42 projects we analyzed were made up of 98 agreements. These projects were the basis for the remaining work we did to evaluate the success of the state's main economic development programs.

Although our sample of projects is not representative of the population, it provides a reasonable basis to evaluate the state's major programs. Generally, we used our discretion to select agreements that reflected a variety of industries and locations throughout the state. Although not statistically representative, the characteristics of our sample provide a reasonable basis to evaluate the success of the six major Kansas economic development programs.

2. Conducting a Detailed File Review

We recorded company-reported jobs and capital investments as well as state and local government incentives for the 42 projects in our sample. The Department of Commerce compiled annual reports and agreements for each project in our sample for our review. We gathered company-reported jobs, payroll, and capital investments from these files by program. We collected actual company-reported data whenever possible, but relied on company-projected data when data on actual jobs, investments, and incentives did not exist. Additionally, we reviewed program agreements to record the actual amount of state incentives awarded to date and to document any remaining incentives a company had yet to receive. We collected similar data on the amount of local government incentives companies received as part of their incentive package. We included local incentives so as to not over attribute the total business activities and tax revenue associated with our sample to state incentives. We contacted local officials to identify local incentives since there is no available data.

We then developed factors like job ranges to account for uncertainty in future jobs, capital investments, and economic development incentives. After discussion with the economic consultant we hired from Wichita State University, we undertook the following efforts to address the issue of uncertainty.

- **We projected jobs through 2023 for most projects in order to measure the full business activities the projects created.** In general, the length of an agreement can vary from one year to 10 years. Companies are not required to report job or payroll data to the Department of Commerce once agreement terms have been met. However, it is likely the jobs created or retained through incentives often continue to exist well beyond the end of the agreement. As such, we projected jobs and payroll from the end of the reporting period through 2023 for all projects, except those that did not maintain a presence in Kansas. We did not project jobs further than 2023 based on input from the consultant and department officials. They indicated that projecting jobs further than 2023 would introduce too much uncertainty.

- **We projected capital investments through the end of a company's contract period only.** Unlike jobs, we generally did not project investments past the contract period. This is because data on such investments are limited to a company's application or annual report to the Department of Commerce, and once a company has fulfilled agreement terms it is no longer required to report that information. Also, capital investments often are a one-time expense, so there is not an expectation that capital investments will occur in future years. Therefore, we only projected investments when a project had not yet completed its agreement with the department. We used companies' agreements and projections to develop estimates for these years.

- **We projected state and local economic development incentive amounts awarded through the end of a company's contract period only.** We did not project incentives past the contract period because incentives are directly tied to a company's agreement with the Department of Commerce. If a company received incentives after the agreement included in our sample, it would have to be through a different agreement. Therefore, we only projected incentives when a project had not yet completed its agreement with the department. We used companies' agreements and projections to develop estimates for these years.

- **We identified a range of jobs, investments, and incentives in future years to account for the uncertainty associated with projecting future outcomes.** We estimated the lowest, highest, and most likely number of jobs, investments, and incentives companies would have in the future. In general, the jobs and investments we identified as most likely were the employment and investments a company projected, and the low and high estimates were some percentage lower and higher than the most likely estimate. We used companies' program applications, agreements, and other publicly available information to develop the ranges. The amount of incentives we identified as most likely was generally based on the amount contractually committed to the company by the Department of Commerce. If incentives were contingent on the number of jobs a company created (such as PEAK), we used companies' job projections to determine future incentives. We also accounted for any amounts repaid to the department if a company failed to meet its contract requirements and a clawback was enforced.

- **We used a confidence rate to scale the range of jobs and capital investments in future years.** The confidence rate is an additional way to account for the uncertainty inherent in projecting future business activities. For example, a 60% confidence rate on a job range we projected in 2020 would indicate that we are 60% confident the actual number of jobs in 2020 will fall within the limits of our projected range. The confidence rate we applied generally decreased over time to account for increasing uncertainty in future years, but also depended on the range of jobs we identified. The wider the job range, the greater our confidence in those projections and the narrower the job range, the lower our confidence.

- **We also used an attribution rate to scale jobs and capital investments in future and past years.** Companies base their decisions to locate, expand, remain, or train employees on a variety of factors, only one of which is economic development incentives. The attribution rate is a way to account for the likelihood the incented activity we recorded (job creation or retention or capital investment) occurred in Kansas as a direct result of state and local government incentives. By default, we assumed a 90% attribution rate on all economic development projects; meaning we were 90% confident a company created or retained jobs in the state as a direct result of the incentives given. We then adjusted that rate based on correspondence in the department's files, publicly available information, and in some cases, additional conversations with department staff. We generally applied the same attribution rate across all years on a single project. However, each project has a unique attribution rate.

3. Accounting for Unique Aspects of PEAK and HPIP

The funding mechanism of the PEAK program and the reporting structure of HPIP required us to make the following decisions to appropriately estimate the business activities and tax revenue generated by projects with those programs.

- **We counted total PEAK jobs to estimate the jobs and payroll that PEAK companies created, but counted PEAK-eligible jobs to estimate the amount of state incentives provided.** All employees that perform a new, expanded, or retained function count as PEAK jobs, while only those that receive a wage equal to or greater than the county median or average wage count as PEAK-eligible jobs. Qualified companies can retain the state withholding taxes of PEAK-eligible jobs only. Therefore, we counted PEAK jobs to capture the full economic benefits companies created, but only counted PEAK-eligible jobs in calculating the costs of the project.

- **We accounted for annual or cumulative limits on the state withholding taxes companies could retain under PEAK expansion and retention projects.** K.S.A. 74-50,213 caps the total amount of state withholding tax that certain in-state companies can retain through the PEAK program. Specifically, the statue limits the amount of incentives Kansas businesses can receive for expansion and retention projects. The Department of Commerce identified annual and, in some cases, cumulative caps on the amount of withholding tax these companies could retain. We accounted for these limits when they were applicable to our work.

- **We assumed an annual withholding rate of 3.5% in calculating PEAK incentives.** Because PEAK incentives are equivalent to 95% of the state withholding taxes generated by all PEAK-eligible jobs, we had to make an assumption about future withholding tax rates to estimate PEAK incentives in future years. We assumed an annual withholding rate of 3.5% based on the estimated withholding tax rates in tax years 2013 and 2018 for a single individual with annual wages of $50,000 claiming one allowance. This timeframe allowed us to account for current state law, which decreases individual income tax rates through tax year 2018.

- **We assumed the cost of the PEAK program was minimal for the state if a company located or remained in Kansas as a direct result of PEAK incentives.** PEAK allows companies to retain 95% of PEAK-eligible employees' state withholding taxes during the agreement period. Allowing a company to retain these withholdings is not a cost to the state if the company located or remained in Kansas because of the PEAK incentives (high attribution rate). This is because the PEAK-eligible jobs likely would not have existed in Kansas without PEAK. As a result, the 5% of employee withholding taxes the state receives is more than it would have received had the jobs not been located or retained in the state. Additionally, Kansas will receive 100% of these employee's state withholding taxes following the conclusion of the PEAK agreement. We used a standard formula to account for the incentive (95%), state remittance (5%), and attribution rate (unique to each project) in calculating the cost for each project containing a PEAK incentive.

- **We collected data on the amount of HPIP income tax credits companies earned through 2014 only.** Some of the companies in our sample certified for HPIP, but had not yet submitted a tax return to the Department of Revenue showing the amount of their qualifying investment. In these instances, we used companies' projected capital investments to estimate the amount of qualifying investments and income tax credits companies would earn. We assumed companies that did not certify for HPIP in 2014 would not earn income tax credits. Finally, we did not estimate HPIP income tax credits being earned beyond 2014 because there is no reliable way to estimate if, when, and how much companies might certify for and claim in future years.

- **We assumed companies that earned less than $1 million in HPIP investment tax credits would claim the full amount by 2023 and companies that earned more than $1 million in investment tax credits would claim some portion of that amount by 2023.** We made this assumption based on conversations with Department of Revenue staff. They indicated that most companies will have a state tax liability by 2023 and stressed that companies have 16 years to use any earned investment tax credits before they expire. We assumed companies that have a state tax liability will use any earned tax credits to reduce or eliminate that liability. However, a handful of companies in our sample accumulated such a large amount of HPIP investment tax credits that we took an additional step to develop a more reasonable estimate. For companies that earned more than $1 million in investment tax credits, we looked at those companies' historical use of HPIP investment tax credits to make an educated guess about if and how much of their investment tax credits they would use in the future.

  We simulated companies' use of earned HPIP investment tax credits between 2013 and 2023 because we had no way of knowing or predicting when and how much companies' state tax liability would be in future years. This allowed us to account for the possibility that companies could claim tax credits early in that time period (resulting in a greater cost to the state) or late (resulting in a lower cost to the state).

- **We assumed HPIP sales tax exemptions were used in full within one year of being issued.** In addition to income tax credits for investment and training expenditures, companies can also qualify for sales tax exemptions through HPIP. There is no information on how much sales tax is actually exempt through HPIP; rather, the Department of Revenue estimates that amount based on companies' estimates of total project costs. We used these estimates in our analysis. If a sales tax exemption was earned by June 30, we assumed the full amount of the estimated exemption was used in that same year. However, if a sales tax exemption was earned after June 30, we assumed the full amount of the estimated exemption was used in the following year.

4. Modeling Business Activities and Tax Revenue in IMPLAN

Our economic consultant used the economic modeling software IMPLAN to model the business activities and tax revenue created by the projects in our sample. We sent the job, payroll, capital investment, and incentive data collected during our file review to an economic consultant who modeled the primary and secondary economic effects (or business activities) and tax revenue of each project using IMPLAN. LPA and the consultant made several important decisions in setting up the work in IMPLAN and selecting the results to include in our subsequent analyses.

- **The consultant modeled the direct, indirect, and induced business activities and tax revenue that the projects in our sample created.** The direct effect is the immediate economic change resulting from some new activity or policy. In the present evaluation, the direct effect is the value of production from any jobs created or retained as a direct result of economic incentives offered by the state or local government. The indirect effect is the economic effects generated from an industry purchasing goods and services from other local industries. The induced effect is the economic effects generated by the re-spending of income of individuals associated with the incentive projects in our sample. The re-spending of income creates additional demand for local goods and services, which can lead to the creation of more local new jobs.

- **The consultant modeled the total business activities and tax revenue of an alternative use of the incentive (called a tax counterfactual).** The consultant used IMPLAN to model the business activities and tax revenue associated with an across-the-board tax cut equal to the incentives given in each project. The value of the tax cut represents the foregone effects associated with an alternative use of an incentive, or an opportunity cost. An across-the-board tax cut is one alternative use of the incentive, but we did not evaluate if it was the next best use of the incentive. The tax counterfactual can include a component for state incentives and a second component for local incentives.

- **The consultant modeled the total business activities and tax revenue of border relocations (called a border counterfactual).** Some of the incented companies in our sample relocated from Missouri to Kansas. Although these companies were previously located in Missouri, Kansas was already receiving some business activities and tax revenue from them. The consultant used the border counterfactual as a way to estimate the business activities and tax revenue Kansas was receiving from these companies while they were still located in Missouri.

- **We used the total "value-added" economic effects and tax revenue in our cost-benefit analysis.** Value added as a measure of business activities subtracts industry inputs (such as a company's consumption of goods or services) from industry outputs (such as company sales) to calculate the net economic impact of a project. Other measures of economic impact, such as labor income or output, do not subtract industry inputs. As such, the direct, indirect, and induced values generated through a value-added analysis are more comprehensive than other measures of economic impact.

  Value added is also a measure of an individual company's contribution to gross domestic product (GDP). It only measures the business activities that occur in Kansas. Although some portion of the business activities that companies create flow outside the state, our analysis does not capture these out-of-state effects.

Notably, the tax revenue does not account for recent changes to Kansas's tax structure such as the expensing deduction and reduction of individual income tax rates. However, we estimated how much these changes would reduce tax revenue based on information from the Department of Revenue, and applied that reduction to the tax revenue a sample of projects created. We concluded such adjustments would not have a significant effect on our results based on that work.

5. Developing a Cost-Benefit Model

The consultant developed a cost-benefit model that we used to simulate the net present value and return on investment of the projects in our sample. We applied many of the decisions and concepts discussed previously during this phase of our evaluation of Kansas' major economic development programs. In general, the cost-benefit model subtracted project costs from company-generated benefits to calculate the net effect. It was also used to calculate the present value of the net effect to determine each project's net present value. Finally, the model calculated each project's return on investment by dividing the net present value by the incentive amount. Project costs may include a tax counterfactual and a border counterfactual.

We assumed it would take three years for all indirect and induced effects resulting from an economic event to be fully realized. We assumed 100% of the total direct effects of a company locating, expanding, or remaining in Kansas occurred in the year such activity took place. However, we assumed only 60% of the total indirect and induced effects occurred in that year, while 30% of those effects occurred the following year and the remaining 10% of those effects occurred in the third year. We adopted such assumption because it approximates a similar schedule of indirect and induced effects cited in a 1981 regional economic research article by John Kort and Joseph Cartwright.

We simulated the 2013 net present value of each project to account for the range of jobs, capital investments, and incentives we identified in future years. We used a discount rate of 4.5% to calculate the 2013 present value of each project's net effects. This put all projects in a common year value. We then used an add-in function in Microsoft Excel to simulate 100,000 random trials of the net present value for each project. These trials accounted for the net present value that resulted from 100,000 different combinations of jobs, capital investments, and incentives within the ranges we identified. Each range consisted of a low estimate, most likely estimate, and high estimate, which formed the parameters for the 100,000 trials that were selected. The tool we used ensured most of the random values fell between the low estimate and high estimate, but also ensured the largest concentration of values clustered around the most likely estimate. We then calculated the 95% confidence interval from the results of the 100,000 trials to estimate the net present value for the project. Finally, we divided the net present value by the amount of state and local incentives that went into the project to calculate the return on investment.

6. Allocating Business Activities and Tax Revenue by Program

We attributed the net present value of business activities and tax revenue to the state's six major economic development programs based on the composition of incentives in each project. The 42 projects in our sample were often comprised of multiple economic development programs. We allocated the net present value of the business activities and tax revenue each project created across the relevant economic development programs. We

treated KIT and KIR as one program due to their similarities and relatively small incentive amounts. Also, although we used PEAK costs to calculate the net present value of projects (as described on page 34), we used PEAK incentives to allocate the net present value to programs. We used PEAK incentives for the allocation process because it reflects the amount companies actually received to create or retain jobs. The allocation process is described in detail below.

- **First, we determined the percentage of incentives each program contributed to a project.** We assumed the program that contributed the largest incentives was the most influential in a company's decision to locate or remain in the state. Conversely, the program that contributed the smallest incentives was the least influential in a company's decision. To give more weight to the biggest components of the project and less weight to the smallest components, we squared the individual program incentives and totaled those amounts, for each project. We then calculated what percentage each program was of the total.

- **Next, we used that percentage to allocate the net present value of business activities and tax revenue by program for each project.** We multiplied a project's net present value by the program percentages described previously, effectively allocating more net effects to the programs that were the largest component of the project and vice versa. Because we identified a range of incentives and net present value for many projects, the percentage of incentives each program contributed to the total incentive package also varied. To account for this variability, we simulated 100,000 different combinations of incentives and net present value within the identified ranges. We calculated the central 95% of the resulting range to get a low and high estimate of net present value by program for each individual project.

- **Last, we added the net present value by program for all projects to calculate the net present value and return on investment for each of the state's major economic development programs.** We added the net present value and incentives allocated to that program across projects. The resulting total gave us the present value of the net business activities and tax revenue by program. Finally, we calculated the return on investment by dividing the total net present value by the total incentives for the program.

APPENDIX D
Agency Response

On October 31, 2014 we provided copies of the draft audit report to the Department of Commerce and Department of Revenue. Because the report did not include any recommendations, those agencies' responses were optional. The response from the Department of Commerce is included in this appendix. The Department of Revenue chose not to submit a formal response.

The Department of Commerce generally agreed with the report's findings and conclusions, although they disagreed with a few of the assumptions we made to estimate programs' returns. We recognize different assumptions could be made, but are confident our decisions are reasonable. Therefore, we did not change any findings or assumptions as a result of the agency's response.

1000 S.W. Jackson St., Suite 100
Topeka, KS 66612-1354

Kansas
Department of Commerce

Phone: (785) 296-3481
Fax: (785) 296-5055 TTY: 711
admin@kansascommerce.com
KansasCommerce.com

Pat George, Secretary

Sam Brownback, Governor

November 18, 2014

CONFIDENTIAL

Scott Frank
Legislative Post Auditor
Legislative Division of Post Audit
800 SW Jackson St., Suite 1200
Topeka, KS 66612

RE: Economic Development: Determining Which Economic Development Tools are Most Important and Effective in Promoting Job Creation and Economic Growth in Kansas, Part 3

Dear Mr. Frank:

We have received the final audit report and thank you for the findings and the opportunity to respond. It is gratifying to hear Kansas' economic development programs are providing such a positive return on investment. Attempting to quantify the effectiveness of economic development tools is a challenging task and we appreciate LPA's efforts in analyzing these very complex issues. Below are brief observations on a couple of LPA's findings and the underlying assumptions which contributed to those findings.

Commerce agrees with the overall finding that implementation of Kansas economic development programs has been successful. In its report, LPA noted several limitations on its analysis. We agree the most critical limitation was due to largely unaudited company-reported information and the fact LPA attempted to project well into the future, the jobs, capital investments and incentives based on current data. Commerce appreciates the distinction between actual and estimated future performance as any company's growth over the next decade is difficult to project. In the course of its analysis, LPA also made certain choices and assumptions as to methodology, etc. None of these choices of assumptions or methodologies are wrong, but they directly impact the ultimate findings. Commerce disagrees with a couple of the stated assumptions, including that a vacancy created when a new job is filled by an employee already employed in Kansas won't be filled by yet another Kansas employee, leading to a reduction in economic activity.

Another of the assumptions in LPA's methodology and findings was the "attribution rate". This concept was defined by LPA to be the likelihood that the jobs and investments a company created occurred in Kansas because of the incentives provided by the state or local government. This is a somewhat subjective determination as companies decide to locate in a state for a variety of reasons. Also, research has demonstrated the inherent difficulties in quantifying why a business locates in a state. The allocation method chosen by LPA may not accurately compare the relative effectiveness of the various economic incentive programs. While LPA found the state's economic development programs all have

positive ROI, it is very difficult to unequivocally state which programs are most effective. The attribution rate and allocation methodology selected by LPA, gave significant, and potentially disproportionate, weight to those programs that contributed larger amounts of incentives to individual projects. This choice of allocation and attribution may not accurately reflect the importance of a particular program or incentive to a specific project. For example, the Job Creation Fund (JCF) is typically a relatively small component of a project's incentive package. However, economic development professionals realize that a "deal-closing" fund such as JCF is essential for success in many projects. Often it's not the first incentive dollars that seal the deal but the last dollars invested in a project that move the company to choose a state's offer. We believe all of our incentive programs are necessary and share LPA's findings that each are highly successful. Each of Kansas' economic development programs serve a particular need and work in a complementary manner. We understand the LPA findings are not intended to provide a relative analysis of the individual economic development programs.

Another key LPA assumption that is subject to differing interpretation is that capital investment generates significantly less economic activity as compared to created or retained jobs. This may be the result of the IMPLAN tool used by LPA's consultant to attempt and quantify the amount economic activity. Had another set of assumptions or modeling program been utilized, it is likely a much greater value would be assigned to capital investment. Capital investment has a significant influence on return on investment and demonstrates a company's commitment to continuing operations in Kansas. The capital investment contributes to those jobs staying in the state for a longer period of time. For example, a manufacturer recently invested several hundred million dollars on a new paint facility in Kansas. That paint facility has a shelf-life of around 30 years. That capital investment makes it much more likely each of the jobs associated with that facility will be in Kansas for at least 30 years. The stability of those retained jobs would then provide all of the positive business/economic activity attributed to jobs by LPA. LPA's choice in assigning a higher value to job creation as compared to capital investment should be considered in context and not as the only available assumption.

Thank you again for your work on this report. We enjoyed working with your staff and appreciate their professionalism.

Sincerely,

Pat George
Secretary