AUGUST 2018

KANSAS CITY

INCENTIVES STUDY

KANSAS CITY INCENTIVES STUDY

Prepared for the City of Kansas City, Missouri

By

Council of Development Finance Agencies

In coordination with

Business Development Advisors

PGAV Planners

Regional Economic Models, Inc.

Phillips-West Communications

Bennie L. Lewis & Associates

The Council of Development Finance Agencies is a national association dedicated to the advancement of development finance concerns and interests. CDFA is comprised of the nation's leading and most knowledgeable members of the development finance community representing public, private and non-profit entities alike. For more information about CDFA, visit www.cdfa.net or e-mail info@cdfa.net.

Council of Development Finance Agencies
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Table of Contents

Table of Figures

Executive Summary

KANSAS CITY INCENTIVES STUDY

Municipal, regional and state governments commonly evaluate the economic and fiscal impacts of incentivized projects, programs and other investments to better ensure public dollars are being put to good use. The use of dynamic, integrated models is important to evaluate how policy may influence economic, demographic and fiscal conditions overtime.

The Kansas City Incentives Study is a data-driven evaluation of the impact of the City's economic development incentives. It evaluates the 10-year performance of the key programs employed by the City to promote job creation and redevelopment from several critical perspectives:

- **Economic impact of the incentives and total investments made by the City**
- **Geographic analysis of where real estate investments were made**
- **Systems and procedures for managing incentive programs**

The Kansas City Incentives Study provides takeaways for the City to consider as it considers ways to maintain transparency and accountability in their economic incentive programs.

Data Collection & Analysis

The Kansas City Incentives Study spans the period from 2006 through 2015. AdvanceKC served as the foundation of the policies and metrics analyzed for the Kansas City Incentives Study. Federal sources provided historic data on the national and regional economic landscape. The primary sources of data for local incentive programs are from the Economic Development Corporation of Kansas City (EDCKC), the City of Kansas City, and Jackson, Platte and Clay Counties.

A comprehensive set of economic indicators was derived to measure Kansas City's economic development progress. The economic indicators in this study include changes in employment, compensation, personal income, industry output (sales), gross city product (net value of goods sold), population, and fiscal impacts.

Geographic indicators in this study include real property taxes paid, real property taxes abated, tax increment financing (TIF) incremental real property taxes paid, infrastructure projects, building permits, and service calls related to physical blight in neighborhoods. The geographic indicators were compiled and placed into a digital geographic database that was used to describe areas of the city that received incentivized investment.

A study of this depth covering such an extensive period of time has not previously been attempted in Kansas City, and the consulting team encountered several obstacles during the data collection and analysis process. The primary difficulty was associated with unifying data from various sources. This data, until recently, had not been used to explore the impact of economic development incentives. Throughout the collection and analysis process, city staff collaborated with the consulting team and coordinated with other taxing jurisdictions regarding their data.

In total, the consulting team processed and analyzed the following records related to the study's time period (2006–2015):

RECORDS ANALYZED FOR THE KANSAS CITY INCENTIVES STUDY

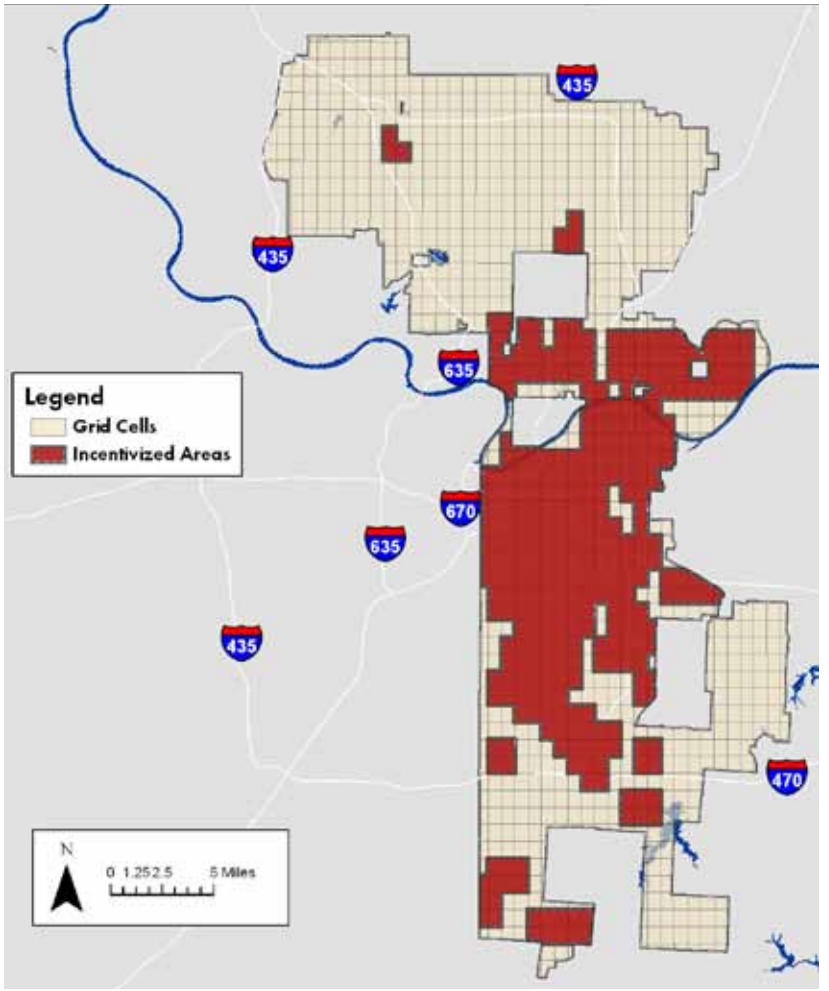
- **1,960,231 PARCEL RECORDS** and their assessed value, levy rate, location, and taxes paid
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records
- **REAL PROPERTY TAXES PAID** worth a combined **$3,900,000,000***
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **TIF INCREMENTAL REAL PROPERTY TAXES PAID** worth a combined **$288,000,000****
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **REAL PROPERTY TAXES ABATED** worth a combined **$252,000,000****
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **26,879 BUILDING PERMITS** worth a combined value of **$6,029,111,170**
  SOURCE: City of Kansas City Planning and Development Department
- **2,479 INFRASTRUCTURE PROJECTS** worth a combined value of **$505,143,554**
  SOURCE: City of Kansas City Planning and Development Department
- **950,270 311/SERVICE CALLS**, of which **177,319** related to instances of neighborhood blight
  SOURCE: City of Kansas City 311 Call Center

*This figure represents the dollar amount as it would appear on a tax bill (assessed value, net of exemptions and abatements, multiplied by the levy rate). The amount includes taxes paid to all overlapping taxing jurisdictions.

**Similar to real property taxes paid, the figures for TIF incremental real property taxes paid and real property taxes abated represent the dollar amount associated with all overlapping taxing jurisdictions.

The data collected relates to the following incentivized areas in the city:

MAP OF ALL PORTIONS OF THE CITY THAT RECEIVED REAL PROPERTY TAX-BASED INCENTIVES IN KANSAS CITY, 2006–2015



SUMMARY OF MAJOR FINDINGS

Incentivizing activities to occur (based on the City's defined economic development priorities) requires an investment of public resources, particularly through tax redirection and tax abatement programs. The Kansas City Incentives Study looks at the economic impact to the City based on the incentive investment made and the overall rate of return. To do this, the study considers the impact of incentives from both economic and geographic perspectives.

ECONOMIC IMPACT

A key factor in understanding the impact of incentives offered must be on whether the incentives improved the overall economy of Kansas City and its citizens. To that end, the Kansas City Incentives Study analyzes the incentives relative to the economic data available, including employment change, income trends, population change, and number of businesses. This data was used to evaluate the impact of incentives based on how they affect various aspects of the Kansas City economy, such as changes in employment, personal income, business activity, compensation, and investment.

The fiscal impacts on the City were evaluated in three main areas: **1) incentivized building construction; 2) incentivized Private-Business Operations (PBO); and 3) value of incentives**. The results reflect findings from the study period of 2006–2015. For this portion of the analysis, the study was guided by the following Key Performance Indicator:

KEY PERFORMANCE INDICATOR	MEASUREMENT
JOB CREATION *Has there been an increase in construction spending, private business operations, and employment and wages?*	Effects of incentivized construction on employment, population, compensation, personal income and Gross City Product Effects of incentivized private business operations on employment, population, compensation, personal income and Gross City Product

Overall, the Kansas City Incentives Study found a positive result in the economic analysis. Kansas City experienced an increase in construction spending, private business operations, and employment and wages as a result of incentivized activity. The City can report a positive return on investment along with more people living and working in Kansas City as a result of the incentives offered during the 10-year study period of 2006–2015. Approximately 23,430 jobs were created during this time and per capita income rose by an average of $3,906.

The economic impact analysis pointed to several areas of strength in the city:

FINDING: ***Each incentive dollar invested generated $3.83 in additional tax revenue.***

FINDING: ***There was an average increase in business sales of $4.75 billion.***

FINDING: ***There was an average increase in economic activity of approximately $2.66 billion.***

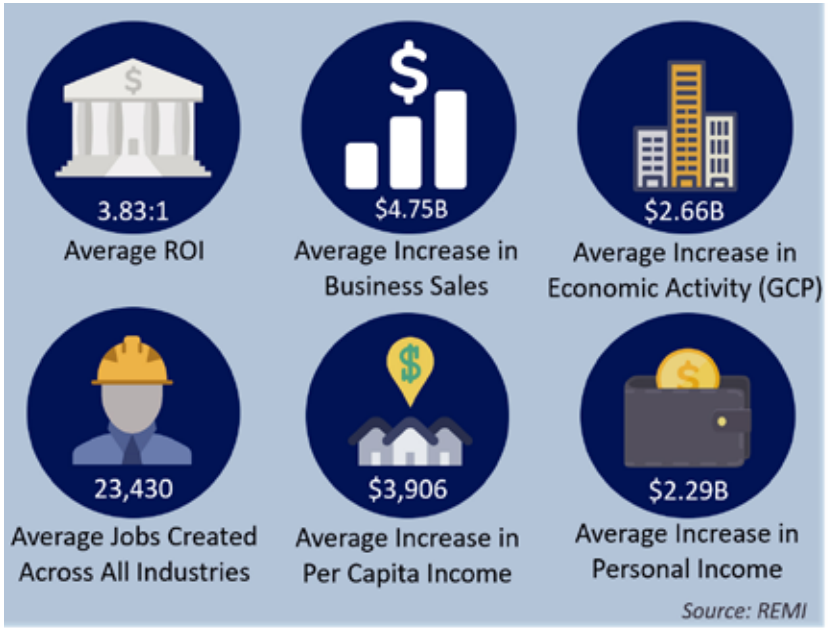
FINDING: ***The average number of jobs created across all industries was 23,430.***

FINDING: ***Per Capita Income increased by an average of $3,906.***

FINDING: ***Personal Income in KCMO increased by an average of $2.29 billion.***

The economic summary table on the next page provides further information associated with the infographic provided and additional commonly reported indicators. When reading the table, please review the associated indicator descriptions. All results are reported as a change from the baseline, or the changes/contributions to the business-as-usual economy within the 2006–2015 analysis period.

OVERVIEW OF THE ECONOMIC & FISCAL IMPACTS OF THE ESTIMATED CONTRIBUTION OF INCENTIVIZED ECONOMIC DEVELOPMENT PROGRAMS IN KANSAS CITY, MISSOURI, 2006–2015



ECONOMIC SUMMARY OF KANSAS CITY, MO INCENTIVE PROGRAM IMPACTS, 2006–2015

UNITS ARE IN BILLIONS OF 2018 DOLLARS AND INDIVIDUAL JOBS AND PEOPLE

	TOTAL	AVERAGE
TOTAL EMPLOYMENT	234,304	23,430
PRIVATE NON-FARM EMPLOYMENT	212,837	21,284
RESIDENCE ADJUSTED EMPLOYMENT	238,256	23,826
POPULATION	280,080	28,008
GROSS CITY PRODUCT (GCP)	$26.58	$2.66
OUTPUT	$47.46	$4.75
PERSONAL INCOME	$22.92	$2.29
REAL DISPOSABLE PERSONAL INCOME	$23.83	$2.38

TOTAL EMPLOYMENT comprises estimates of the number of jobs, (full-time, part-time and seasonal) by place of work. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included. Employment and jobs are synonymous terms within this report.

PRIVATE NON-FARM EMPLOYMENT is the same definition as total employment, less government and farm employment. Farm employment within Kansas City is not assumed to have not been affected from any segment of this analysis.

RESIDENCE ADJUSTMENT EMPLOYMENT is total employment adjusted for place of residence.

POPULATION reflects the total change in people, including survivors from the previous year, births, special populations and three types of migrants (economic, international and retired). Within this analysis, the types of population groups that are assumed to have witnessed almost the entirety of the change are economic migrants (ages 18–64) and associated dependents ages (0–18).

GROSS CITY PRODUCT (GCP) is also referred to as "economic activity," as it reflects the net market value of goods and services produced by labor and capital within the city. This is less than output, as it discounts intermediate goods coming from outside the region and flows of capital assumed to have left the city.

The increases in INDUSTRY OUTPUT is synonymous with business sales, or business revenue.

PERSONAL INCOME reflects income received by persons from all sources of income.

REAL DISPOSABLE PERSONAL INCOME reflects after-tax income received by persons, deflated by the Personal Consumption Expenditure (PCE) Price Index.

Average results reflect the average change in the associated indicator over the ten-year analysis period.

When reporting total changes in employment, it is recommended to include average change in employment, as one or multiple jobs can be held by the same person for many years.

NET CHANGE IN KANSAS CITY, MO REVENUES FROM INCENTIVE PROGRAMS, 2006–2015

REVENUES ARE IN MILLIONS OF 2018 DOLLARS

	TOTAL	AVERAGE
Net Change in Revenue from Incentivized Building Construction	$253.72	$25.37
Net Change in Revenue from Private Business Operations	$362.48	$36.25
Net Change in Revenue from Value of Incentives	-$9.44	-$0.94
Direct Value of Incentives	-$128.77	-$12.88
Total Net Change in Revenue	$477.99	$47.80
Return on Investment	$3.83 for every $1 invested	
Net Present Value (NPV) – Fixed 2015 Millions	$298.31	

The ROI calculated within this report includes the change in net change in revenues from each of the three phases of this analysis and the direct value of the incentives offered. Net changes in revenue include the estimated changes in the City of Kansas City revenues, less the value of incentives, less changes in the cost of government services. Including both the change in revenues and cost of services is important to include in such ROI analysis, as it is possible for the cost of services to exceed the increase in revenues generated.

On average, the CDFA consulting team estimates the contribution of the applicable incentivized economic development programs in Kansas City, between 2006 and 2015, created almost $478 million in additional revenue. This includes accounting for the increased cost of government services and value of incentives provided to stimulate investment and business activity.

For every $1 dollar invested in these programs, it is estimated that an average increase of $3.83 was generated in net revenue for the City of Kansas City. Over the 10-year analysis period, the direct value of the incentives totaled almost $128.77 million. Based the present value of the net changes in revenues, using a discount rate of 7% and subtracting the value of incentives as the investment made by the city, this yields a net present value (NPV) of $298.31 million fixed 2015 dollars.

GEOGRAPHIC ANALYSIS

Incentives impact the area or neighborhood where a project is located. The geographic analysis sought to answer questions about where and to what degree incentive programs were active. For this portion of the study, the team looked at three main areas:

KEY PERFORMANCE INDICATORS

	MEASUREMENT
BLIGHT REMEDIATION *Where and when did blight-related service calls take place?*	Blight-related service calls
INVESTMENT ACTIVITY *Where and when did investment take place? Where and when was public revenue generated?*	Number of building permits Value of building permits Value of infrastructure projects Number of infrastructure projects Real property taxes paid
INCENTIVE PROGRAM IMPLEMENTATION *Where and when were incentive programs active?*	TIF incremental real property taxes paid Real property taxes abated

Overall, the geographic analysis pointed to several conclusions addressing questions about where, and to what degree, incentive programs were active:

FINDING: ***Incentive programs were primarily concentrated in the downtown area and scattered intermittently in a few other parts of the City. In these locations, there was also a concentration of investment activity.***

FINDING: ***Although incentives were used in many different parts of the City, the highest concentrations of TIF and Abatement did not overlap with the highest concentrations of blight-related service calls.***

FINDING: ***All metrics evaluated were negatively impacted by the Great Recession (roughly December 2007 to June 2009) and most recovered to pre-recession levels by 2015.***

Several cluster maps are provided in the geographic analysis to show trends of activities over the 10-year study period. These maps indicate where incentivized development occurred and where various incentive tools were used.

The information displayed in these cluster maps points to a strong connection between the location of incentivized projects and high-value, high-tax generating parts of the city. However, there was a weak connection between incentivized projects and blight-related service calls. This indicates that areas that contained a high volume of service calls did not attract the same level of incentivized investment as areas with a low volume of service calls. Also, the areas that contained a high volume of service calls experienced less building activity than areas that contained a low volume of calls.

In addition, the cluster maps show that the primary concentrations of real property taxes paid were in the downtown area, south of downtown, and several areas north of the city center. The variation in real property taxes paid throughout the city is great, which is due to the wide variation in property value throughout the city. For example, concentrations of tax generation north of the city center were located around residential and commercial developments near major highway and interstate exits, while other concentrations of building permit activity and value occurred in the downtown area, the area south of downtown, and isolated occurrences in developing areas. Overall building activity decreased dramatically during the Great Recession, but it nearly returned to pre-recession levels by 2015.

SUMMARY OF INCENTIVE PROGRAM MANAGEMENT

The Kansas City Incentives Study could have been strengthened with a more comprehensive and consistent data set. However, it is important to note that incentive evaluations of this magnitude have not been a common practice at the state or local levels across the United States. Kansas City is among a select group of cities undertaking the challenging process of conducting a historical analysis of its incentive use and striving to improve program effectiveness. The City should take this opportunity to establish or improve performance metrics, enhance monitoring and tracking methods, and clarify the connection between incentives programs and economic strategy.

Quantifying the economic and community benefits of incentive programs is not easy for most cities because administrative systems and procedures have not been typically created with an eye toward reporting on outcomes. The consulting team reviewed several incentive systems and procedures in Kansas City that affect the City's ability to manage incentives for transparency and accountability. One important conclusion is that Kansas City already has in place many process elements that can be adapted to support quality reporting on incentive program effectiveness. Several opportunities exist to build on existing data collection and reporting activities to help Kansas City strengthen transparency and accountability in its incentive programs.

5 NEXT STEPS FOR CONSIDERATION FOR INCENTIVES MANAGEMENT

DATA

- Modify incentive application forms and reports that are submitted by recipients to ensure clearly and consistently defined outcome measures.
- Continuously update the data set created as part of this study using City and County sources.

REPORTING

- Incorporate jobs and investment reporting on ***actual*** outcomes achieved by active projects separately from recently approved projects and their expected outcomes in reports. The distinction should be clear to audiences.
- Incorporate data on incentive ***outcomes*** into KCStat.

ENGAGEMENT

- Work with community and stakeholder groups to select additional indicators of interest. These indicators may be integrated with Triple Bottom Line or equitable economic development objectives.

Much of the historic analysis conducted as part of the Kansas City Incentives Study evaluated construction spending, permitting activity, and real property tax revenue. The consulting team relied on administrative data records from several municipalities including: the City of Kansas City, Jackson, Platte and Clay County departments. Some of that data is accessible to the public. Other data was aggregated and provided to the consulting team by City staff, both to facilitate the data management process and to avoid sharing any confidential information. The consulting team is deeply grateful to the City and County professionals who spent hours determining data availability, accessibility, quality, and relevance to the KPIs, as well as making the actual data sharing available in support of this project. These are not easy tasks, and this is often work that is above and beyond normal duties.

Kansas City can build on this effort by tasking City staff to continue to access City and County data sets that help monitor and report on the outcomes of its incentive programs. It is important to note that even though the discussion in this study refers to existing data within City and County government, sharing it for program evaluation is not without costs. It is not a seamless process to access and bring together disparate data sets, especially when multiple jurisdictions are involved.

The section on Systems and Procedures for Managing Incentives Programs details numerous data collection ideas and improvements for the City's incentives programs. As the City seeks to improve its systems for transparency and accountability, it should consider creating new aspirational indicators to evaluate the equity of incentives, along with the economic and sustainability indicators. This Triple Bottom Line approach is differentiated from traditional economic development by its recognition that environmental, social, and economic factors are interrelated and by its commitment to create or retain jobs and wealth in ways that contribute to environmental, social, and economic well-being over time. The City has already demonstrated its commitment to Triple Bottom Line approaches in other areas, and should work toward establishing metrics to incorporate these principles into its incentive programs.

The Kansas City Incentives Study found positive results from incentivized activity from the period of 2006–2015. By capitalizing on this momentum and focusing on strengthening data collection, reporting, and aggregation practices, the City will be in an ideal position to better inform the public about economic growth and prosperity as a result of its various incentives programs. This will serve the citizens of the City well as community leaders and decision makers seek to improve neighborhood stabilization, increase investment in infrastructure, and realize equitable prosperity for all.

Project Scope

KANSAS CITY INCENTIVES STUDY

The City of Kansas City, under the leadership of the Mayor and City Council, continues to place a high priority on economic development. As part of this commitment, the City utilizes a number of incentive programs designed to support the creation and retention of jobs for Kansas City citizens, redevelopment and support for the urban core.

The City is also committed to ensuring that its use of incentives is both accountable and transparent. As part of this commitment, the City Council of Kansas City authorized the City Manager's Office to engage consulting services to complete a comprehensive study of economic development incentives.

In line with the recent efforts to develop strategies and metrics to improve the economy and to respond to increased interest in the effectiveness of the economic development incentives utilized by the City, the City Council chose to complete a comprehensive study of economic development incentives.

The City contracted with the Council of Development Finance Agencies (CDFA) to conduct the study. CDFA brought together five partners to complete the study including Business Development Advisors, PGAV Planners, Regional Economic Models, Inc. (REMI), Phillips-West Communications, and Bennie L. Lewis & Associates.

TEAM

Council of Development Finance Agencies
Columbus, OH
www.cdfa.net

The Council of Development Finance Agencies is a national association dedicated to the advancement of development finance concerns and interests. CDFA is comprised of the nation's leading and most knowledgeable members of the development finance community representing public, private and non-profit entities alike. For more information about CDFA, visit www.cdfa.net or e-mail info@cdfa.net.

CDFA brought together five partners to complete the study including Business Development Advisors, PGAV Planners, Regional Economic Models, Inc. (REMI), Phillips-West Communications, and Bennie L. Lewis & Associates:

Business Development Advisors (BDA)
Arlington, VA
www.businessdevelopmentadvisors.com

BDA is an economic development and market intelligence consulting firm. Established in 1999, BDA works with economic development leaders at the local, state and national levels to increase business investment and job growth in their communities. BDA principal Ellen Harpel is the founder of Smart Incentives, which helps communities make sound decisions throughout the economic development incentives process.

PGAV Planners
St. Louis, MO
www.pgavplanners.com

PGAV assisted the team in evaluating incentive finance mechanism, the development of incentive policies and procedures. PGAV, headquartered in St. Louis, has helped hundreds of communities and local governments around the world with their planning and economic development goal activities. The firm has been an integral part of planning for downtown revitalization in more than 40 communities.

Regional Economic Models, Inc. (REMI)
Amherst, MA
www.remi.com

REMI assisted the team in the intensive data aggregation and analysis. Founded in 1980, REMI is the nation's leading regional economic modeling and policy analysis firm. REMI provides PI+, TranSight, and Tax-PI modeling software, and technical analysis to federal, state, and regional government agencies, leading non-profit and trade organizations, universities, and consulting firms. REMI serves as economists, policy experts, and economic policy analysis modelers.

Phillips-West Communications
Kansas City, MO
www.phillips-west.com

Phillips-West Communications assisted the team in community engagement, communications. Phillips-West is a Kansas City-based full-service, minority and woman-owned public relations, communications and advertising firm with local and national

clients. Phillips-West specializes in media relations, coordination of special events, target marketing the products and programs of public and private entities to culturally-diverse audiences, and the facilitation of networking formats for private and public organizations. Carrie Stapleton, President and CEO of Phillips-West, has more than thirty years of experience representing corporate and community-based clients.

Bennie L. Lewis & Associates LLC

Bennie L. Lewis & Associates LLC
Kansas City, MO
www.bennielewis.com

Bennie L. Lewis & Associates LLC has been in business since 2005, developing an extensive background in Kansas City and Jefferson City's political, business and non-profit communities. The firm employs specialty associates, on a by-project basis. The client is offered a full range of lobbying, government, communication and public relation services. Bennie L. Lewis & Associates has been the firm of choice for major corporations, governments, and non-profit organizations. While with Mutual Benefit Life, Bennie receive the 1986 United States Presidential Volunteer Action Award. In 2009 Bennie L. Lewis & Associates was featured in the *KC Business Magazine* and in 2016 recognized by the State of Missouri and the City of Kansas City, MO as a Minority Business Enterprise.

APPROACH

The Kansas City Incentives Study is a data-driven evaluation of the impact of the City's economic development incentives. The Incentives Study evaluates key programs employed by the City in promoting job creation and redevelopment over a 10-year period from 2006–2015 from several critical perspectives:

- **Economic impact of the incentives and total investment made by the City**
- **Geographic analysis of where real estate investments were made**
- **Systems and procedures for managing incentive programs**

The Study also evaluates the processes by which the City and its partners evaluate, approve and monitor economic incentives, and provides takeaways for the City to consider as it looks at ways to maintain transparency and accountability in their economic incentive programs.

The consulting team assessed the key incentive programs and then developed a measuring tool to determine their effectiveness. As such, the Incentives Study was completed in the context of foundational policy and programmatic reports that have guided the City's efforts at economic development.

The consulting team took the following approach to building the Kansas City Incentives Study:

Development of Key Performance Indicators

To measure the outcomes from the City's investment, the Incentives Study includes Key Performance Indicators (KPIs) that provide a common set of measurements by which to evaluate the performance of the City's incentive programs. The creation of the KPIs followed a detailed evaluation of Kansas City incentive programs, including program statutes, goals, guidelines and project histories; quality and availability of data in city-provided data sets; and identification of data from other sources.

Historical Analysis of Outcomes through Key Performance and Economic Indicators

Following the development of the KPIs, data from each of the programs was aligned with the Master Data Set, which enabled a historical analysis that is reflected in the Incentives Study. This included developing program level performance evaluations based upon the agreed upon KPIs and economic indicators relating to census and economic conditions. This entailed applying relevant analytical methodologies and industry standard statistical modeling to measure performance based upon the selected KPI and census indicators. The analysis included both year over year (longitudinal) and geographic analyses, in comparison with other areas, and against the identified metrics.

Evaluation of and Recommendations on Monitoring and Reporting Systems

The Study involved a detailed review of the current systems and procedures used by the City in managing its incentive programs, considering national best practices for incentive program management. The evaluation looked at methods for streamlining processes and improving accessibility to project-, plan-, and program-based information for decision makers and the public.

This included reviewing the methodology by which the City records the performance of the incentive programs, including the regular collection of information on project activity, how individual project information is collected, how that information is validated and entered into appropriate data systems, annual reviews of program performance, and reports to citizens and community leaders in Kansas City.

A primary focus was to evaluate how the City measures and documents outcomes related to the overall AdvanceKC strategy, along with other key policy goals. The objective is to contribute protocols that will improve the transparency and accountability of the City's incentive programs.

Community Engagement and Outreach

In order to insure stakeholders' input on the development of the Kansas City Incentive Study, the Consulting team developed an extensive outreach strategy, with the goals of transparency, inclusion and input from a wide range of stakeholders.

The Strategy included developing a stakeholder list that includes Taxing Jurisdictions, Community Organizations, Developers & Lawyers, City Council, and Tax Incentive Administrators. Outreach included telephone interviews, one on one interviews and roundtable discussions. Two sets of roundtables were conducted in February 2017 and May 2017.

The vision of the stakeholder discussions was to have small group roundtable interaction with individuals representing their organization to allow them an opportunity to share their experiences, expected outcomes, and thoughts regarding the Kansas City tax incentive programs. The roundtables successfully included the stakeholders in the process of the Study's development, which resulted in valuable feedback for the Study to help inform how incentives policies and procedures could be improved.

The consulting team, along with the City of Kansas City, greatly appreciate the time that these agencies and individuals took to participate in the outreach for the Study.

Community Organizations

- *Bill Dietrich, President/CEO – Downtown Council*
- *Kristi Wyatt, Vice President – Greater Kansas City Chamber Of Commerce*
- *Carlos Gomez, Executive Director – Hispanic Chamber of Commerce.*
- *Lora McDonald, Executive Director – MORE2*
- *Shelia Tracy, President – Northland Chamber*
- *Stacey Johnson-Cosby, President – South Kansas City Alliance*
- *Sean Ackerson, Executive Director – Southtown Council*
- *Ken Bacchus – Co-chair Urban Summit*
- *Dr. Seft Hunter, Executive – Communities Creating Opportunities*
- *Kelvin Perry, Black Chamber of Commerce*

Development

- *Dave Frantze – Stinson Morrison Law Firm*
- *Roxsen Koch and John McGurk – Polsinelli Law Firm*
- *Charles Renner – Husch Blackwell Law Firm*
- *Jerry Riffel – Lathrop & Gage Law Firm*
- *Douglas Stone – Lewis Rice Law Firm*
- *Allison Bergman – Hardwick Law Firm*
- *Tom McGee – Van Trust Real Estate*
- *Emmet Pierson, Jr. – North 40 Development*
- *Mathew Webster – Ameritas*

Taxing Jurisdictions

- *Caleb Clifford, Brandon Keller, Jim Malle – Jackson County*
- *Alicia Stevens – Platte County*
- *Jim Hampton – Clay County*
- *Kevin Masters, Shannon Jaxx – Kansas City School District*
- *Crosby Kemper, Debbie Siragusa – Kansas City Public Library*
- *James Staley – Mid-Continent Public Library*
- *Terry Ward, Paul Harrell, Matthew Fritz – North Kansas City School District*
- *Yolanda Cargile, Dennis Carpenter – Hickman Mills School District*
- *Sharon Nibbelink – Center School District*
- *Jeremy Davis – Metropolitan Community College*
- *Bruce Eddy – Community Mental Health Center of Jackson County*
- *Jake Jacob – Developmental Disabled Services of Jackson County*

City of Kansas City, Missouri Council Members

- *Sylvester "Sly" James, Mayor*
- *Scott Wagner, Mayor Pro Tem – 1st District At-Large*
- *Heather Hall – 1st District*
- *Teresa Loar – 2nd District At-Large*
- *Dan Fowler – 2nd District*
- *Quinton Lucas – 3rd District At-Large*
- *Jermaine Reed – 3rd District*
- *Katheryn Shields – 4th District At-Large*
- *Jolie Justus – 4th District*
- *Lee Barnes – 5th District At-Large*
- *Alissia Canady – 5th District*
- *Scott Taylor – 6th District At-Large*
- *Kevin McManus – 6th District*

Tax Incentive Administrators and Programs

- *Robert Langenkamp, President/CEO – Economic Development Corporation*
- *Cindy Circo, Chairperson, Heather Brown, Exececutive Director – Tax Increment Finance Commission*
- *Greg Flisram, Executive Director – Land Clearance for Redevelopment Authority, 353 Tax Abatement*
- *David Macoubrie, Executive Director – Planned Industrial Expansion Authority*
- *Drew Solomon, Executive Director – Enhance Enterprise Zone*
- *Dawn Kennedy, Executive Director – EDC Loan Corporation Revolving Fund*
- *Annie Donovan, Director – Community Development Financial, Federal New Market Tax Credits*
- *Heather Brown, Executive Director – Industrial Development Bonds*

METRICS

In order to assess the impact of the Kansas City incentive programs, the consulting team first needed to establish a set of metrics, or Key Performance Indicators (KPIs), that could be applied to each program.

The Key Performance Indicators are intended to link economic development strategies and program use to outcomes of interest to the community. Establishing KPIs helps to identify when a program or an outcome has demonstrated success or effectiveness. The process for determining the KPIs for this study involved a review of the City's economic development strategy documents and statements with an emphasis on Advance KC; detailed analysis of each of the incentives programs including statutes, program guidelines and a sample of project agreements; and determination of available program and independent data.

The consulting team focused on identifying KPIs that could be applicable all Kansas City incentive programs considered in this report. In particular, the consulting team wanted to ensure that KPIs were only selected if independent data available correlated with program goals and that the data was available for multiple sequential years in order to measure year to year change and impact.

A number of agencies and organizations were very helpful in collecting or sharing information, especially when data was needed that isn't normally intended for the purpose of evaluating incentives. This includes the City Department of Finance, the City Human Relations Department, the City Planning Department, and the County Assessors from Jackson, Platte and Clay Counties.

KEY PERFORMANCE INDICATORS

	MEASUREMENT
JOB CREATION *Has there been an increase in construction spending, private business operations, and employment and wages?*	Effects of incentivized construction on employment, population, compensation, personal income and Gross City Product Effects of incentivized private business operations on employment, population, compensation, personal income and Gross City Product
BLIGHT REMEDIATION *Where and when did blight-related service calls take place?*	Blight-related service calls
INVESTMENT ACTIVITY *Where and when did investment take place? Where and when was public revenue generated?*	Number of building permits Value of building permits Value of infrastructure projects Number of infrastructure projects Real property taxes paid
INCENTIVE PROGRAM IMPLEMENTATION *Where and when were incentive programs active?*	TIF incremental real property taxes paid Real property taxes abated

Given data availability, and in close consultation with City staff, leaders and stakeholders, the following Key Performance Indicators were identified: Blight Remediation, Increased Investment, Job Creation, and Incentive Program Implementation.

DATA COLLECTION AND AGGREGATION

After finalizing the Key Performance Indicators (KPI), the consulting team set out to collect data based on those KPIs to determine the findings for this study. PGAV was responsible for compiling data related to the KPIs. They relied on Jackson, Platte, and Clay County staff and the staff of Kansas City to obtain information relating to KPIs during the study period. PGAV employed the following methodology to collect and assemble data.

During the data collection process, the consulting team discovered that data is collected in a variety of formats, with inconsistent processes across the three counties. With a multitude of government agencies supplying data along with the total volume of records collected, it became clear that the consulting team would need to assess all of the available data sources for accuracy and completeness before any conclusions could be made about the effectiveness of the incentives or their historical usage during the study period. The City should work with other governmental and quasi-governmental entities to establish well-designed data collection and transmission processes in order to produce more thorough incentives analyses in the future.

When inconsistencies were identified, but inclusion of the data was deemed vital to the study's outcome, extra care was taken to prepare the information for study. For example, property assessment data obtained from Platte, Clay, and Jackson counties varied widely in terms of format, terminology, and the presence of incentive information. Furthermore, the format and terminology related to an individual county's data occasionally changed from one year to the next. However, property assessment data was deemed vital for the study's outcome and inconsistencies were overcome by closely studying the data issues and communicating with the agencies that supplied the information to make corrections without altering the data.

In order to calculate the economic impacts for this study, REMI incorporated data collected from PGAV along with information on supply chain relationships, dynamic economic behavioral responses, and economic geography factors. The purpose of this is to show a wide variety of impacts, including various results associated with employment, industry output (sales), personal income, consumption, and capital investments. These impacts include not only the direct effect of a policy change but also the resulting changes in the supply chain and in the economy more widely.

REMI built a three-region model for this analysis. The first region reflects Kansas City, Missouri; the second region represents the rest of the Kansas City metropolitan area; and the third region covers the rest of Missouri. The model includes an underlying regional and national forecast. REMI used publicly available data interlinked with peer-reviewed theories to develop a dynamic economic and demographic structure.

It is important to note that data confidentiality issues and the historic coding of tax related data collected prevented the consulting team from running a program-specific analysis. Therefore, to solve this challenge, data was compiled from the Economic Development Corporation of Kansas City (EDCKC) to establish the most comprehensive approach possible in analyzing the economic impact of the associated incentives granted during the study period. More detailed information about the methodology that the consulting team employed can be found in the Appendix.

Kansas City Economic Development in Context

KANSAS CITY INCENTIVES STUDY

Kansas City is the epicenter of economic activity for the region as well as the state of Missouri. Kansas City contributes approximately 26% ($66 billion in 2015) of Missouri's Gross State Product.[1] Major private employers for the region include the Cerner Corporation (employing nearly 1% of the region's total labor force), HCA Midwest Health Systems (.94%), and the Sprint Corporation (.61%,) The single-largest employer in the Kansas City region is the federal government, followed closely by the state government.

In order to understand how incentive programs can impact a regional economy, it is important to first understand the regional makeup and trends. This section outlines some baseline information about the overall environment for economic development in the City. The findings are from the 10-year study period of 2006–2015.

FINDING: *Kansas City Population Growth Leads State Population Growth*

Kansas City's population grew on average by 4,586 people per year from 2006 to 2015. This growth is specific to the city, as opposed to greater Kansas City region. That translates into an annual growth in population for Kansas City of approximately 0.8%, or a total of 8.4% over ten years. It is important to note that the decline in population in the 2009–2011 period is generally occurring at the same time as the Great Recession. This decline is present in analyses of city, state, and national population trends.

[1] *"The Role of Metro Areas in the U.S. Economy"* (PDF). U.S. Conference of Mayors. February 2017. p. 53. Retrieved January 16, 2018.

During the same study period, annual growth in population for the State of Missouri is approximately 0.5%, for a total of 4.8% over ten years. Kansas City grew by almost double the rate of population growth in the state of Missouri (of about 4.8%). Without Kansas City, the rest of Missouri average growth rate

FIGURE 1: KANSAS CITY POPULATION GROWTH, 2005–2015

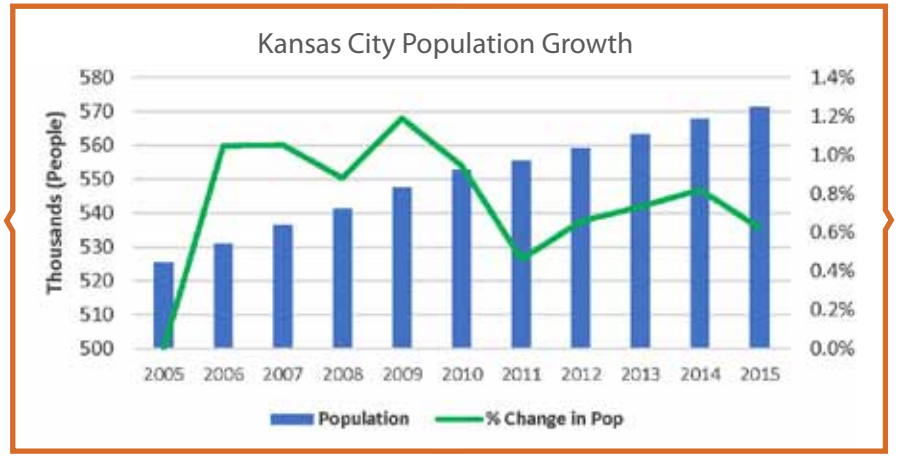


FIGURE 2: MISSOURI POPULATION GROWTH, 2005–2015

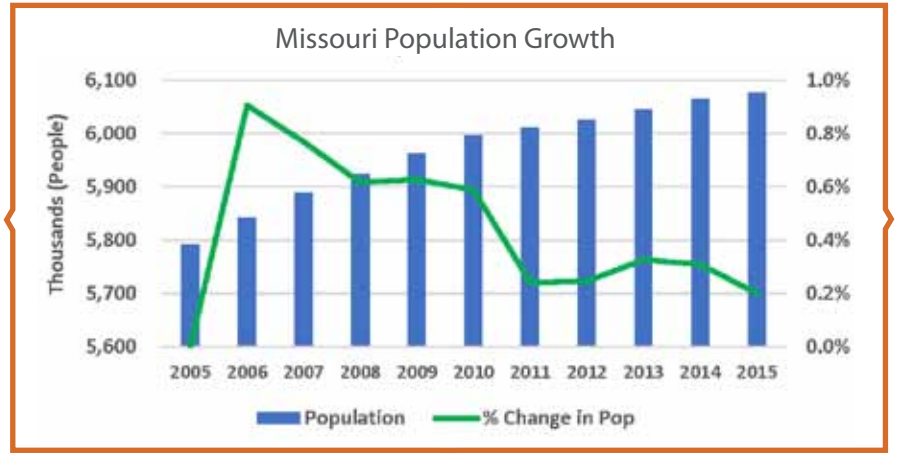
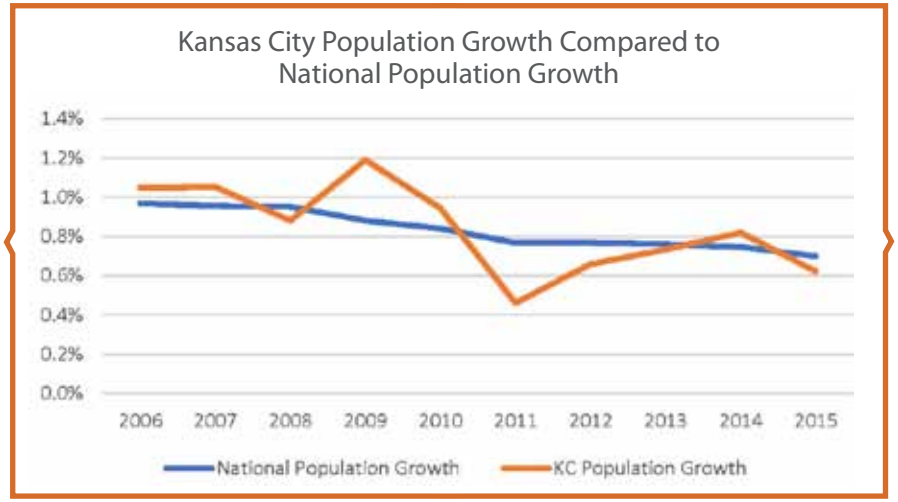


FIGURE 3: KANSAS CITY POPULATION GROWTH COMPARED TO NATIONAL POPULATION GROWTH, 2006–2015



over this period is 4.44%. Thus, Kansas City's population directly accounts for approximately 8% of Missouri's population growth during this period.

Average population annual growth rate for the nation over this period was 0.83%, which was 0.01% less than Kansas City.

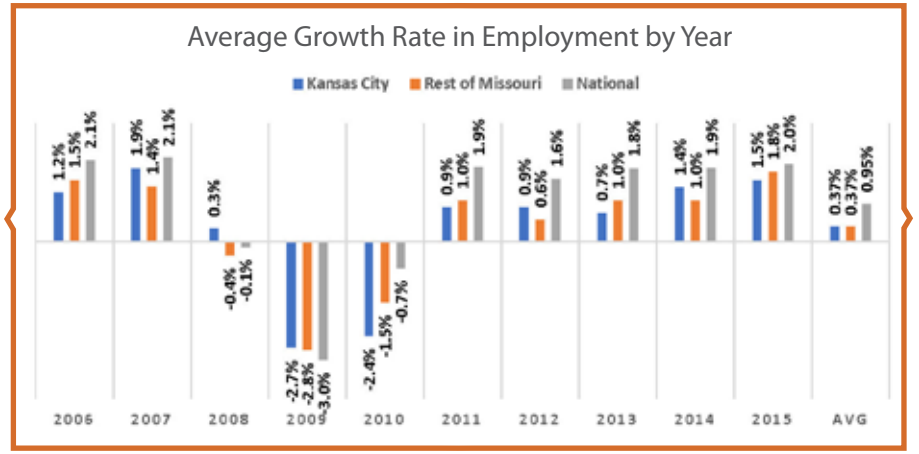
Comparing population growth to employment growth shows that change in employment for both Kansas City and the rest of Missouri was almost identical during the study period. On average the employment growth rate in Kansas City grew by only 0.003% more than the rest of the state. The average employment growth rate for the nation over this period was 0.95%. Any relative economic success compared to the rest of the state or nation is not directly associated with the overall change in employment.

FINDING: ***Historic Employment Opportunities & Relative Pay is Higher in Kansas City than Rest of State and National Average***

Throughout the study period, Kansas City consistently generated greater real disposable personal income than both the rest of Missouri and the national economy. On average, Kansas City's real personal income per capita is $3,404 higher than the nation and $8,145 higher than rest of the state.

Ensuring employment opportunities and real purchasing power of the local people is vital to maintain Kansas City's competitive advantage in real personal income per capita. Within this period, on average, the national real personal income per capita is growing at a rate of 2.44%, whereas Kansas City is growing at 2.14%. However, the rest of the state of Missouri is growing at 2.53% and the state is growing at 2.5%.

FIGURE 4: AVERAGE GROWTH RATE IN EMPLOYMENT BY YEAR, 2006–2015



A component of personal income is compensation. Compensation is the sum of wages and salaries and supplements to wages and salaries. The following table shows compensation rates by year across the study period. This average annual compensation rate is obtained by dividing total compensation by total employment within the given year.

The average percent change of compensation is about the same between the regions. Kansas City's average compensation rate is growing by approximately 2.05%, whereas Missouri is growing at 2.03% and the national rate at 2.07%. Within this period, on average, Kansas City's average compensation rate was $9,027 higher than the rest of Missouri and $4,642 higher than the nation.

FINDING: ***Cost of Living in Kansas City is Lower than the National Average***

On average, when accounting for the overall cost of goods, services and housing, the overall cost of living in Kansas City was approximately 12% less than the national average. Kansas City and the rest of Missouri are near identical. From 2006 through 2015, Kansas City had a relative Personal Consumption Expenditure Price Index with housing prices included to equal approximately 88% of the national average (thus accounting for the overall cost of living being about 12% less).

Based on the median sales price of existing single-family homes and supporting data sources, including the Census of Housing, American Community Survey and the Federal Housing Finance

FIGURE 5: REAL PERSONAL INCOME PER CAPITA, 2006–2015

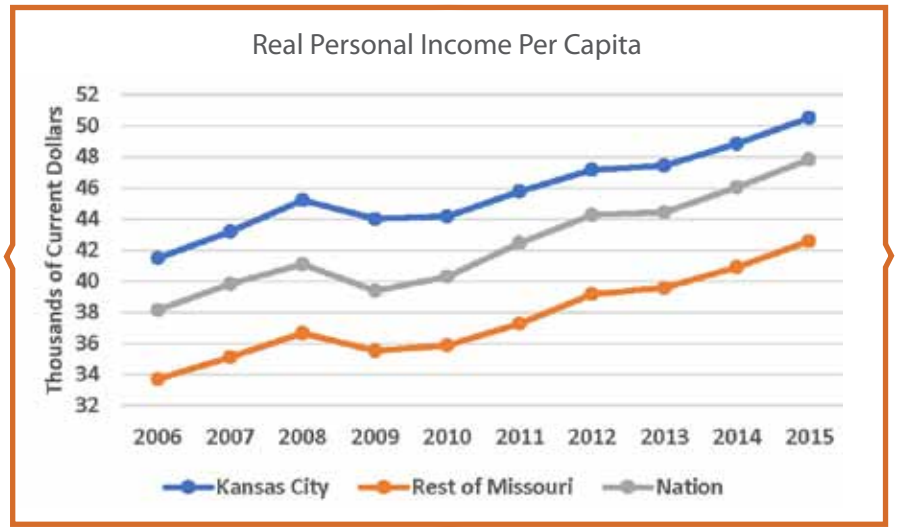


FIGURE 6: AVERAGE COMPENSATION RATE, 2006–2015

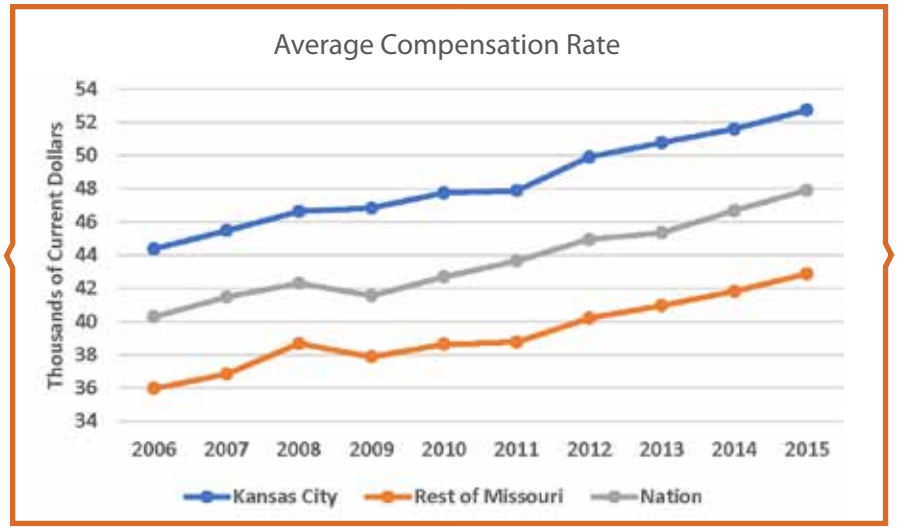
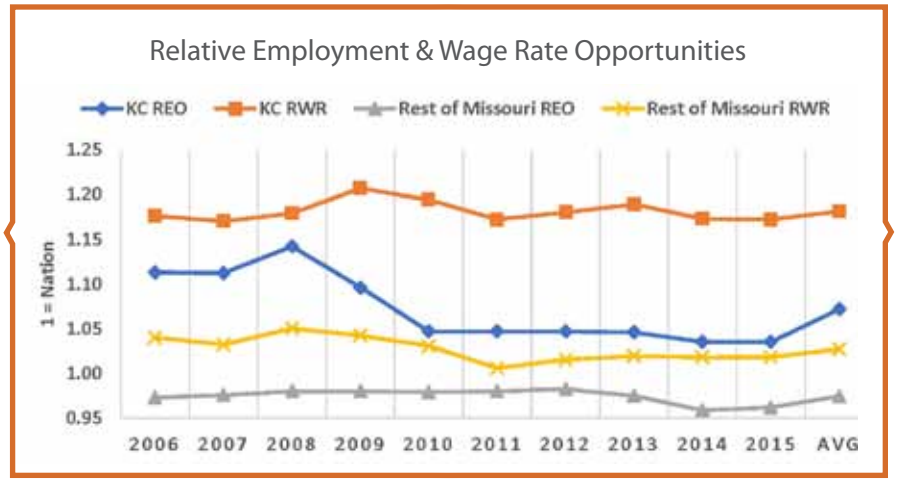


FIGURE 7: RELATIVE EMPLOYMENT & WAGE RATE OPPORTUNITIES, 2006–2015



Agency, Kansas City is assumed to have a 5.56% higher cost of housing than the rest of Missouri on average within the study period. The cost of other goods and services is assumed to be lower in Kansas City than rest of Missouri. It is assumed this is caused by relative delivery/access costs and economies of scale that enable Kansas City to have a slightly lower overall cost of living.

Figure 7 compares the Relative Employment Opportunities (REO) and Relative Wage Rates (RWR) of Kansas City and Missouri to each other and the rest of the nation. Relative Employment Opportunity (REO) is a measure of the probability of being employed. It is defined as the residence-adjusted employment divided by the labor force relative to the nation and is a determination of economic migrants. Real Relative Compensation Rate (RCR) accounts for the average compensation by industry and cost of living in region (including taxes and housing prices) relative to the nation.

Both REO and RWR rates are higher in Kansas City than in the rest of Missouri and the nation. The rest of Missouri economy has on average 3% fewer employment opportunities than compared to the nation for study period.

It is important to note that the metrics are relative. A value over one indicates a relative benefit when attracting economic migrants into a regional economy, whereas a value under one indicates less than average attractiveness. Economic migrants directly reflect anyone in the labor force age 18–64, as that age cohort is assumed to be willing to migrate for either employment opportunities, relative wages changes, or local amenity factors.

ECONOMIC DEVELOPMENT STRATEGIES IN KANSAS CITY

The strength of the economic data shows that efforts to improve the regional economy by community leaders in Kansas City has improved the city's economic health and overall competitiveness, especially as compared to the rest of Missouri and the nation.

"Prosperity at a Crossroads," a 2014 report from the Mid-America Regional Council and Brookings Metropolitan Policy Program, supported the work of community leaders and noted that Kansas City is the hub of the regional economy, and that the "region's

economy has been reliable, predictable and steady…." The report also noted that the City will continue to face significant challenges from global economic forces and competition. In particular, the region's productivity and competitiveness compared to the rest of the nation are lagging and that recovery since the recession has lagged many of its peer metropolitan areas.

The most recent economic forecast for Kansas City from the Mid-America Regional Council noted that, like many communities, the City has "struggled to rebound from the Great Recession." The City has demonstrated growth in median household income and improvement in two of the largest industry sectors (health care and professional services and scientific and technical services), with total employment growing faster than the average national growth. However manufacturing employment continues to face challenges, including a slowdown in the growth of quality jobs, with transportation, wholesale trade and information lagging. In keeping with the region's reliance on real estate development, construction employment is on par with national trends.

As such, the City has pursued a coordinated effort to build its economic development efforts and sustain a trajectory of growth. These efforts are outlined in greater detail below.

AdvanceKC

In 2011, under the leadership of Mayor Sly James, the AdvanceKC initiative brought together key stakeholders "to determine how

KANSAS CITY TARGETED INDUSTRIES

- Health Sciences and Services
- Financial and Technical Services
- Arts
- Design and Engineering
- Specialized Manufacturing
- Supply Chain Management
- Non Profit Management

SOURCE: AdvanceKC

Kansas City, Missouri can effectively utilize its competitive assets to grow its economy to the fullest potential." AdvanceKC assessed Kansas City's economic challenges, benchmarked the community against other cities, and finally, formulated a set of strategies to "come together in new and meaningful ways across all barriers to grow its economy, stabilize its population base and raise levels of local wealth."

AdvanceKC proposed 10 Strategic Recommendations to improve the economy, focusing on improving the business climate, arts and leisure, connectivity and collaboration, development of infrastructure, innovation and entrepreneurship, mobility, public safety, talent development and education, urban land use and revitalization, and support for targeted forward-looking industry sectors.

AdvanceKC also identified the priority employment sectors to be reflected in the city and region's economic development strategies and that represent growth sectors. These targeted industry sectors are built

into the growth strategies of the City, including the support of real estate development, existing and new business development, small business, workforce development and public policy.

KC Rising

In 2014, in parallel with the strategies proposed by AdvanceKC, a collaboration of public, private, education and philanthropy convened to identify specific strategies designed to "ensure the KC Region's job and economic output growth is keeping pace with peer cities, to improve, median household income, meet local education demand for educated workers, and increase net exports." KC Rising has established benchmarks for the Kansas City region with peer communities as a way of keeping track of progress in these areas.

The KC Rising metrics assess the Kansas City Region along a number of key measurements, including gross domestic product, number of quality jobs, and median household income.

Economic Development Corporation of Kansas City

An important part of Kansas City's strategy is the work of the Economic Development Corporation of Kansas City (EDCKC) to support an increased level of real estate development. EDCKC works under contract with the City of Kansas City in evaluating projects for incentives and managing incentive programs. Their purpose is to incentivize economic development in the city by offering tax credits or abatements to qualifying development projects.

Additional Supporting Agencies

In addition to the EDCKC, several other statutory agencies are tasked with providing a specific type of incentive or loan to a particular region of the city. They are then in turn responsible for recording and analyzing the appropriate data on the various projects that receive some type of loan or incentive from them. Those agencies include:

- Enhanced Enterprise Zone Boards (EEZ)
- Industrial Development Authority (IDA)
- Land Clearance for Redevelopment Authority (LCRA)
- Planned Industrial Expansion Authority (PIEA)
- Chapter 353 (353)
- EDC Loan Corporation (EDCLC)
- Tax Incrementing Financing Commission (TIF)
- Port KC

Together, these efforts to combine a coordinated effort in supporting the economic development strategies and needs in the City. The City's economic development policies have been adopted by City Council through various resolutions, including:

- City Council Economic Development Priorities in the Citywide Business Plan
- AdvanceKC Economic Development Priorities
- AdvanceKC Scoring System for evaluating potential projects for incentives
- Adopted policy for financial evaluation of real estate incentives

It should be noted that the City Council adopted guidelines in 2016 for the use of abated and exempted real property taxes that provided for a cap of 75% on tax abatements or redirections with two exceptions that include projects in distressed census tracts and those that receive a "high impact" score on the AdvanceKC scorecard. However, this action is not reflected in the data or findings of this study since it occurred outside of the study period.

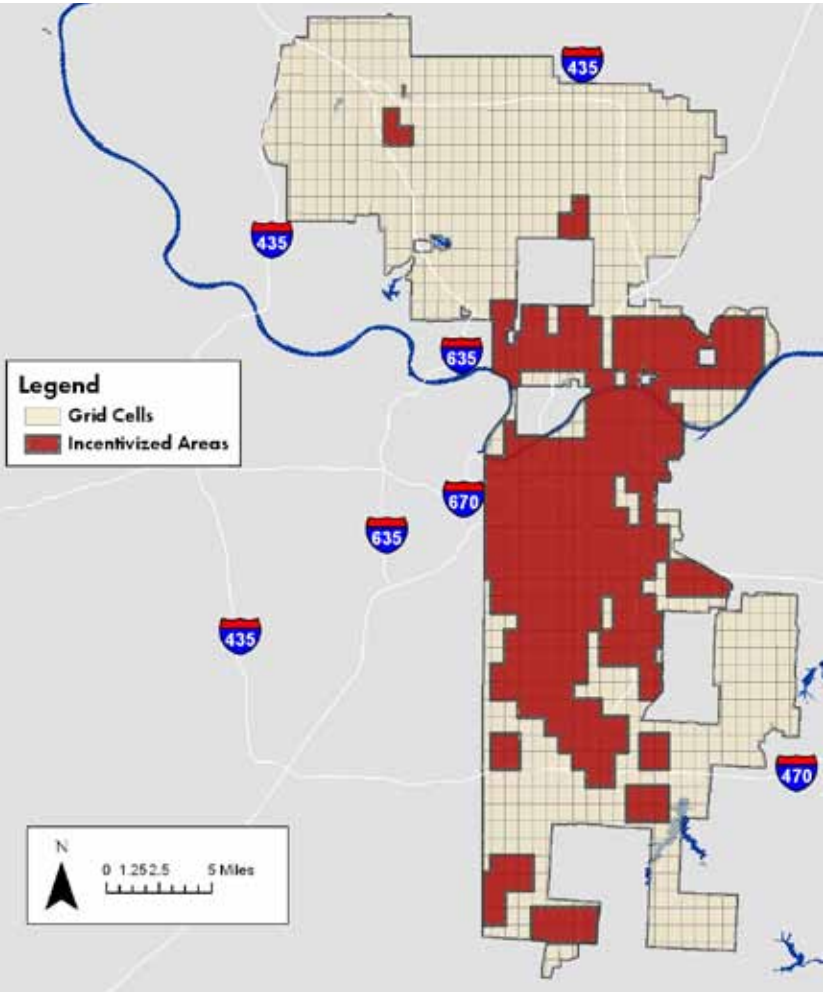
ECONOMIC DEVELOPMENT INCENTIVE PROGRAMS IN KANSAS CITY

Similar to communities across the nation, Kansas City and its partners have used economic development incentives as part of a coordinated package of services to promote and invest in economic growth and recovery.

Kansas City has well-established processes in place for project application and approval for the incentive programs reviewed for this study. Depending on the incentive program or project type, these processes could include the receipt and evaluation of project applications, completion of financial analyses that includes a "but for" and cost/benefit analysis, and a blight study. In addition, the City uses a scorecard to assess the overall impact of development projects and how the project aligns with the City's incentive policies.

The City's primary incentive programs and the focus of this study are described below. Each of these programs has a defined process for evaluating and approving requests for incentives. These incentive programs provide support for site-based real estate development and jobs-based projects through abatements, redirection of tax revenue, and credits.

FIGURE 8: MAP OF ALL AREAS THAT RECEIVED REAL PROPERTY TAX-BASED INCENTIVES IN KANSAS CITY, 2006–2015

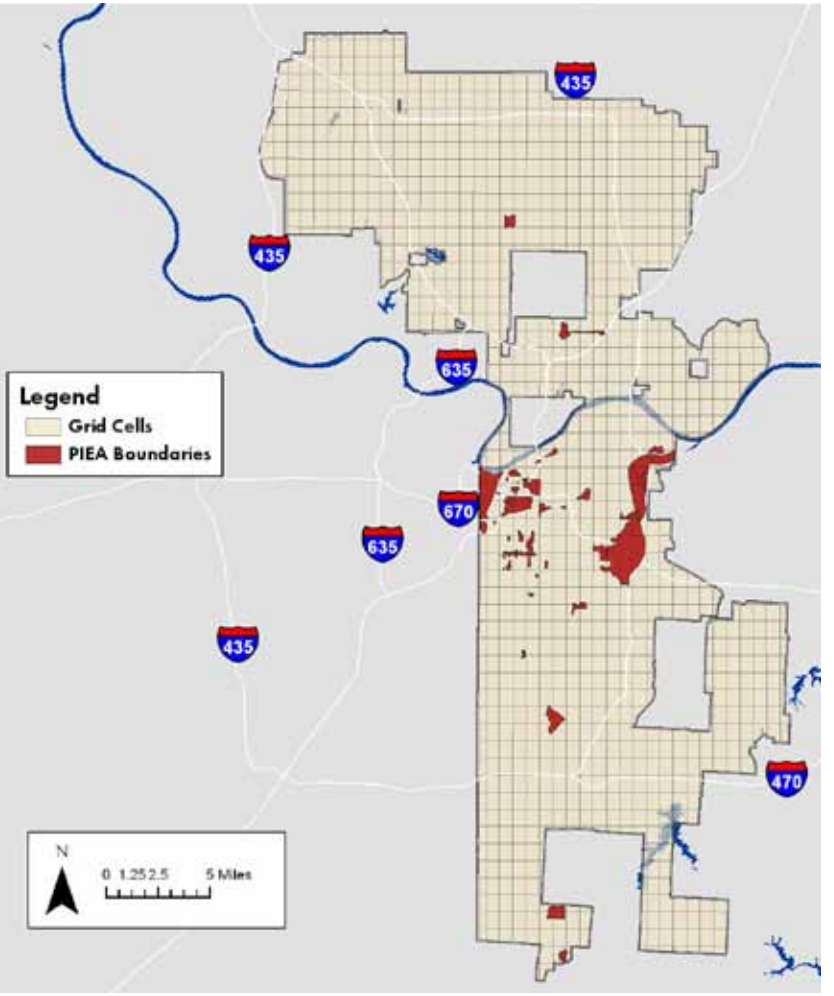


SITE-BASED PROGRAMS

Planned Industrial Expansion Authority (PIEA)

PIEA offers incentives to encourage investment to remove blight and blighting conditions within PIEA planning areas. Project assistance may include up to 25 years of tax abatement, sales tax exemption on construction materials during the construction process, and power of eminent domain. PIEA was established in 1974 to provide a vehicle for assisting with commercial (including multiple family residential) and industrial redevelopment in Kansas City. For a project to be eligible for PIEA benefits, it must (a) be a commercial, industrial, or multiple family housing project, and (b) be located in a designated PIEA redevelopment area, or be in an area that can meet blight standards under PIEA law if a blight study were undertaken. PIEA can also offer lease revenue bond financing for land acquisition, construction, and equipment. The PIEA consists of 15 Board Members.

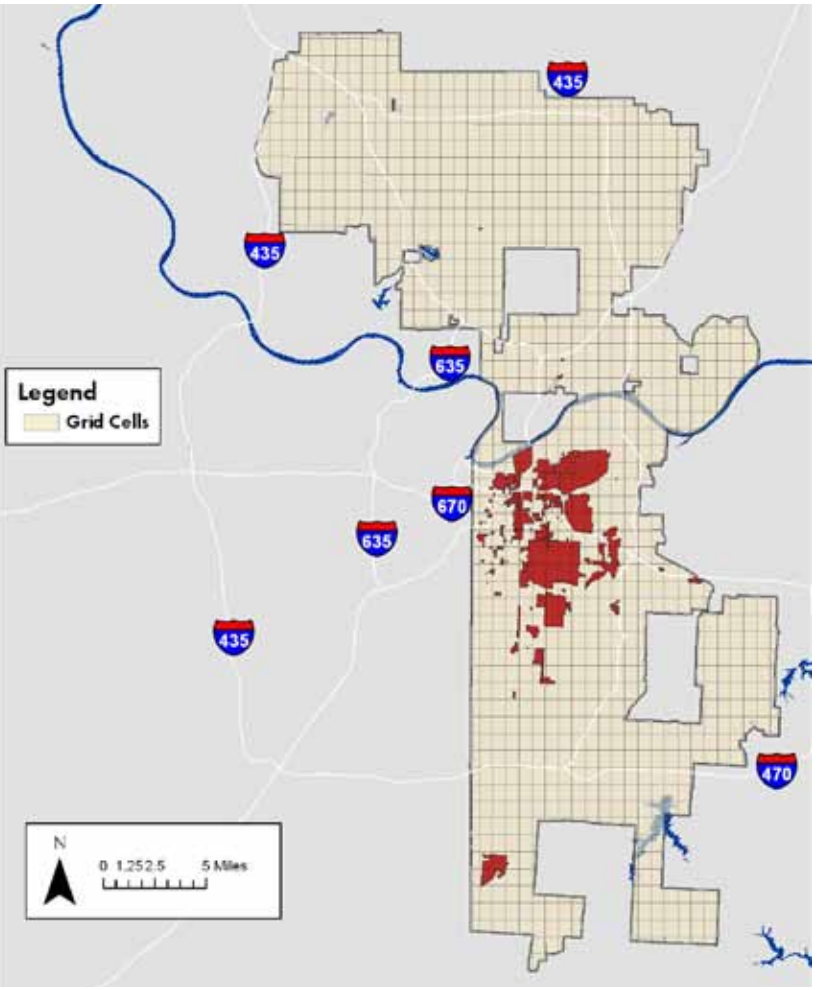
FIGURE 9: MAP OF PLANNED INDUSTRIAL EXPANSION AUTHORITY AREAS, 2006–2015



Land Clearance for Redevelopment Authority (LCRA)

The Land Clearance for Redevelopment Authority (LCRA) is a statutory agency that administers Urban Renewal Areas and approves property tax abatement for various projects. The LCRA can administer various types of tax abatements or incentives. Legislation supporting the LCRA was passed by the Missouri legislature in 1943 and is the second oldest such state legislation in the nation. The LCRA encourages redevelopment through the removal of blight and blighting conditions within a designated *Urban Renewal Area (URA)*, and has leveraged millions of dollars of investment in Kansas City. Projects that qualify for assistance may receive up to 100 percent real property tax abatement on property improvements for up to 10 years, land assembly, and power of eminent domain. The LCRA consists of five Board Members, including a Chair.

FIGURE 10: MAP OF DESIGNATED URBAN RENEWAL AREAS, 2006–2015



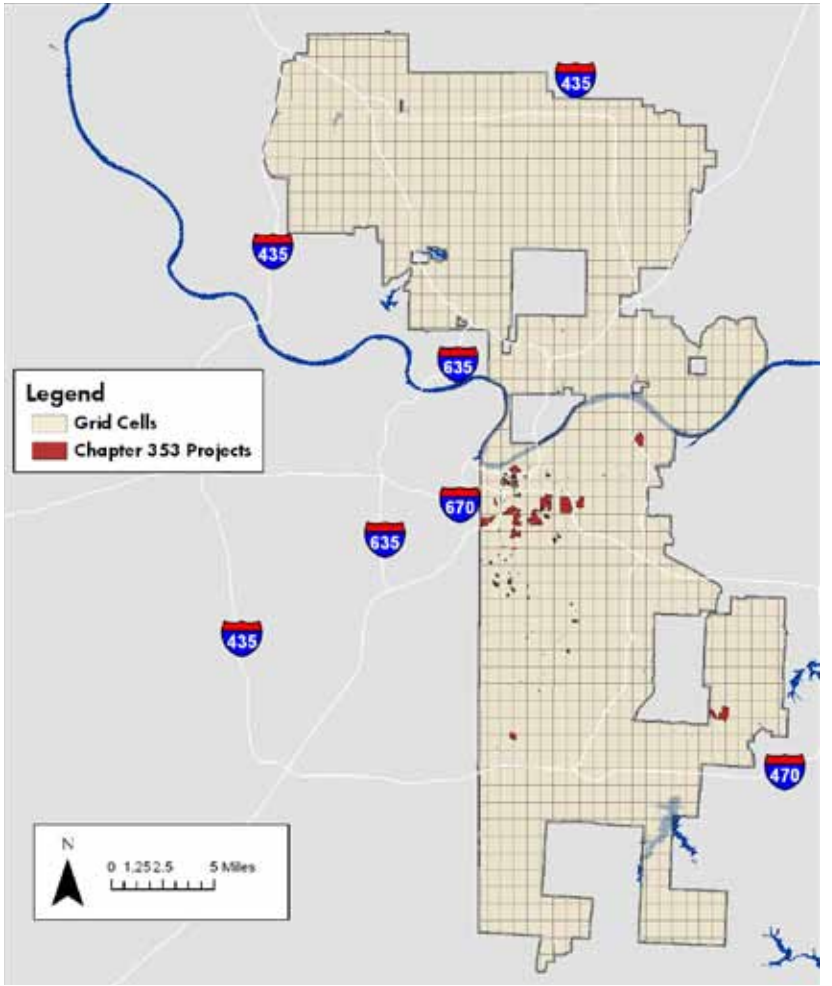
Chapter 353 Program

The Chapter 353 Program was created to assist the LCRA with the removal of blight and blighting conditions by providing local property tax abatement to development projects located within an *Urban Renewal Area (URA)*. Assistance may be provided in the form of real property tax abatement on improvements up to 100 percent for a 10-year period and 50 percent for a 15-year period. The administration of the Chapter 353 Program is exercised by the advisory board who are citizens of Kansas City and appointed by the Mayor.

Chapter 100 Program

The Chapter 100 program is a state authorized program that enables Missouri cities and counties to issue Industrial Development Bonds. These Industrial Development Bonds are revenue bonds used to finance industrial development projects for private companies. The Chapter 100 program provides up to 10 years financing through the issuance of "conduit" debt. Conduit debt repayment is based upon the project's financial condition, and is not full faith and credit of the City. Because title to the property is held in the name of the City during the lease term, the property acquired with the bond proceeds is tax exempt, which effectively results in tax abatement for the company. Under the City's program, the company makes payments in lieu of taxes (PILOTs) equal to 50% of the personal and real property tax it would have otherwise been required to pay. In addition to property tax abatement, the company also benefits from a sales tax exemption for construction materials and/or equipment for the project.

FIGURE 11: MAP OF CHAPTER 353 PROGRAM AREAS, 2006–2015



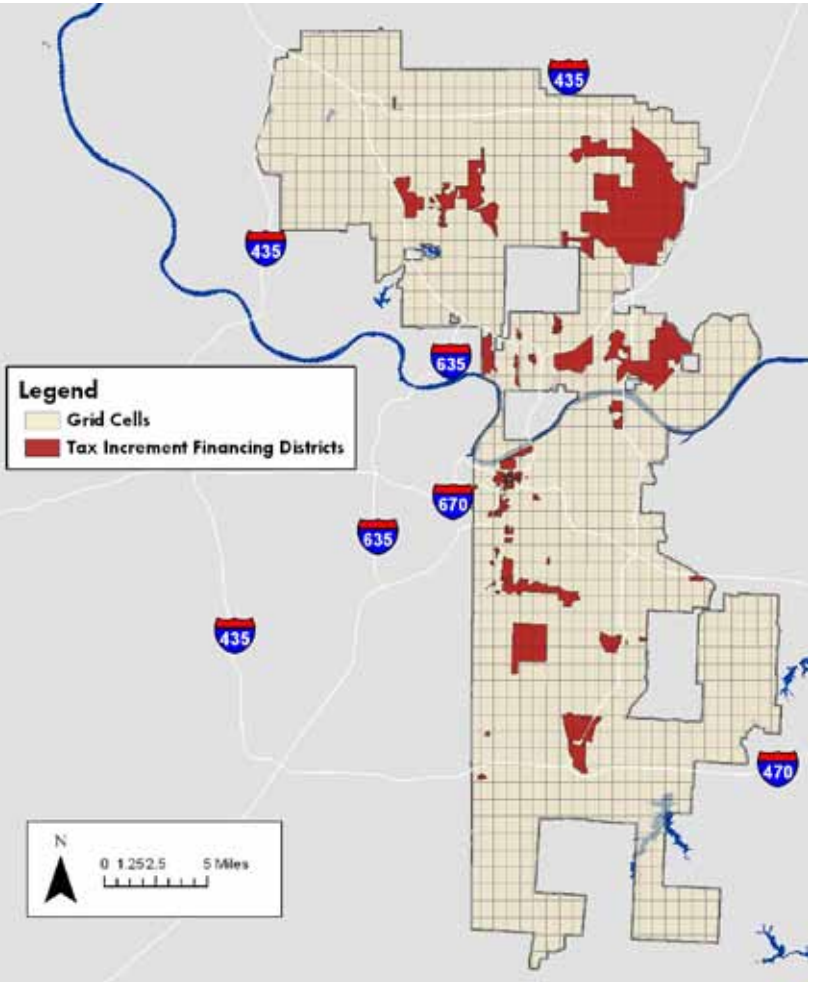
TAX REDIRECTION PROGRAMS

Tax Increment Financing (TIF)

Tax Increment Financing (TIF) is a tool that encourages the development of blighted, substandard and economically underutilized areas that would otherwise not be developed without public investment. This tool allows future real property taxes generated by new development to pay for public infrastructure construction and other improvement costs.

TIF is used for redevelopment projects that would not be reasonably expected to occur without the City's assistance. A cost-benefit analysis must be completed for each project and requires approval by the TIF Commission and City Council. A redevelopment area must be determined by the City or county to be a blighted area, conservation area or economic development area as defined by the Missouri TIF Act and must conform to the general plans of the City. The powers of TIF are exercised by a board of commissioners who are citizens of Kansas City appointed by the Mayor or by the other affected taxing jurisdictions.

FIGURE 12: MAP OF TAX INCREMENT FINANCING DISTRICTS, 2006–2015

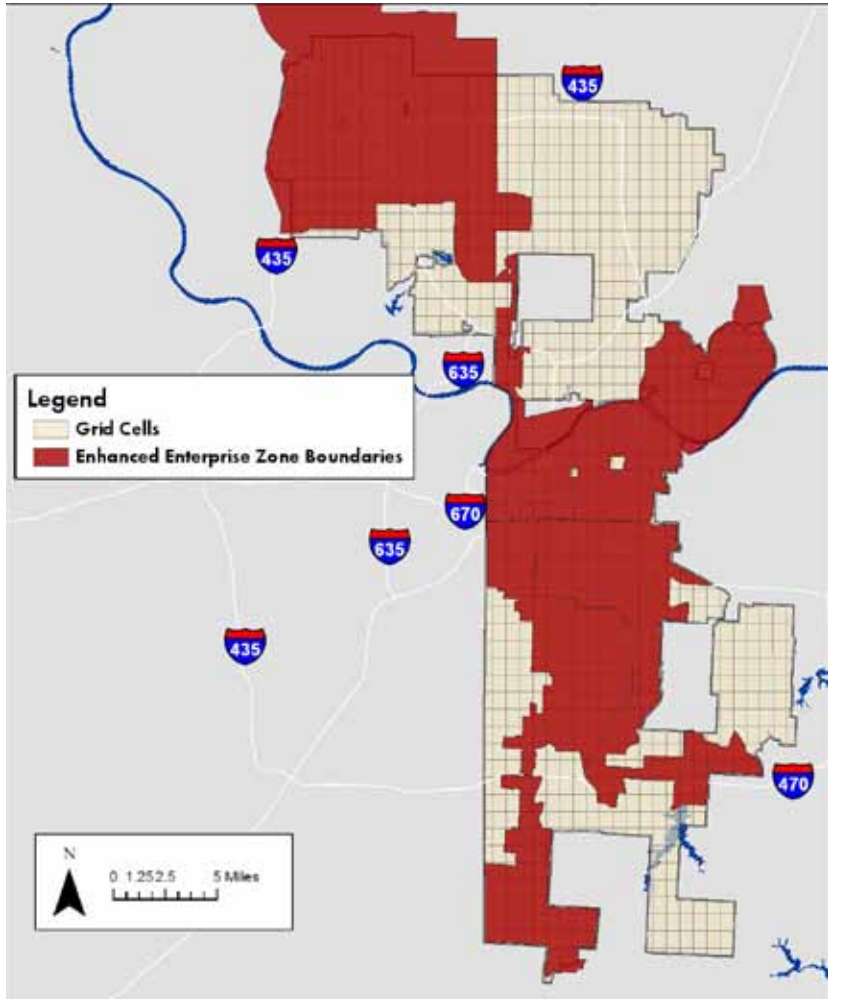


JOBS-BASED PROGRAMS

Enhanced Enterprise Zone (EEZ)

The Enhanced Enterprise Zone (EEZ) encourages job creation and investment by providing state tax credits and local property tax abatement to new or expanding businesses that locate in an EEZ. The program directs funding toward areas of Kansas City which are currently experiencing economic and social distress. Projects that qualify for the EEZ tax abatement may receive a standard abatement of 50% property tax abatement for a 10-year period for improvements made to real property. To qualify, the project must be located in an EEZ, invest a minimum of $100,000, and create a minimum of two new, full-time jobs. The EEZ is divided into three separate zones, each of which have several members representing them who are appointed by the Mayor.

FIGURE 13: MAP OF ENHANCED ENTERPRISE ZONE AREAS, 2006–2015



Introduction to Findings

KANSAS CITY INCENTIVES STUDY

Incentivizing activities to occur based on the City's defined economic development priorities require an investment of public resources, particularly through tax redirection and tax abatement programs. The Kansas City Incentives Study looks at the economic impact to the City based off of the incentives investment made and the overall rate of return. To do this, the study considers the impact of incentives from both economic and geographic perspectives.

ECONOMIC IMPACT

The economic indicators assess the impact of incentives based on how they affect various aspects of the Kansas City economy, such as changes in employment, personal income, business activity, compensation, and investment. Such changes to the economy occur based on both the construction and operations of each incentivized project causing an increase in economic activity.

For this portion of the analysis, the study is guided by the following Key Performance Indicator:

KEY PERFORMANCE INDICATOR

	MEASUREMENT
JOB CREATION *Has there been an increase in construction spending, private business operations, and employment and wages?*	Effects of incentivized construction on employment, population, compensation, personal income and Gross City Product Effects of incentivized private business operations on employment, population, compensation, personal income and Gross City Product

GEOGRAPHIC ANALYSIS

Incentives impact an area or neighborhood where a project is located. The geographic analysis determines if the capital investment coming from incentive programs appears to result in additional non-incentivized investment to occur. Determining to what extent incentivized investment causes secondary economic activity to occur is one of the main focuses of the incentive impact analysis.

For this portion of the analysis, the study is guided by the following Key Performance Indicators:

KEY PERFORMANCE INDICATORS

	MEASUREMENT
BLIGHT REMEDIATION *Where and when did blight-related service calls take place?*	Blight-related service calls
INVESTMENT ACTIVITY *Where and when did investment take place? Where and when was public revenue generated?*	Number of building permits Value of building permits Value of infrastructure projects Number of infrastructure projects Real property taxes paid
INCENTIVE PROGRAM IMPLEMENTATION *Where and when were incentive programs active?*	TIF incremental real property taxes paid Real property taxes abated

The following sections detail the findings in each area and outline performance, structure, follow-on investment, and key takeaways for future incentives use.

Methodology and Findings: Economic Impact

KANSAS CITY INCENTIVES STUDY

CONTEXT

A key factor in understanding the impact of incentives offered must be on whether the incentives improved the overall economy of Kansas City and its citizens. To that end, the Kansas City Incentives Study analyzes the incentives relative to the economic data available, including employment change, income trends, population change, and number of businesses. Specifically, the analysis considers if the incentives:

- **Increased income for Kansas City residents**
- **Increased employment opportunities for Kansas City residents**
- **Increased investment in Kansas City**
- **Increased valuation of real estate in Kansas City**

In order to assess this economic impact, the consulting team included Regional Economic Modeling, Inc. (REMI), a national leader in economic impact analysis. The REMI Model is a dynamic forecasting and policy analysis that is used by policy makers to assess the economic, social and community impact of specific programs. The REMI model uses available historic demographic, economic and social analysis tools – along with proprietary analytical methods that analyze the historic performance of these measures – to assess the impact of a programmatic or policy change over time.

The REMI model is an input-output model that represents inter-industry relationships. This way, the industry structure of a particular region is captured within the model, as well as transactions between industries. The REMI model can represent long term general equilibrium between the supply and demand as prices, production, consumption, imports, exports, and other changes occur to stabilize the economic system. The model's equations and responses are estimated using advanced statistical techniques. The model is also capable of capturing the spatial dimension of the economy. This incorporates the productivity and competitiveness benefits due to the concentration, or agglomeration, of economic activity in cities and metropolitan areas, and to the clustering of industries.

REMI utilized a three region model for this analysis. Region one reflects Kansas City, region two reflects the rest of the Kansas City metropolitan area, and region three reflects the rest of Missouri. The REMI model utilizes publicly available data to understand the regional economic and demographic structure of the regional and national content. The model is utilized within Missouri by the Mid-America Regional Council and by the Missouri Department of Economic Development to model similar types of incentive programs and for other ongoing analysis that requires the use of dynamic macroeconomic regional analysis. See the Appendix for more detailed information on the REMI methodology.

An advantage of utilizing the REMI model is that it captures the impact of some key economic development trends, for example whether a new business takes revenue away from an

existing business or whether a particular type of business (i.e. manufacturing) brings a higher impact on a community than another type of business (i.e. retail).

Program Impact Methodology

Construction Impact

To determine the economic impact from the construction of developments that have used tax incentives, the construction spending is entered into the model. Because of limitations on data availability, a ratio was calculated in order to estimate the percentage of all building permits that received tax incentives. The ratio was calculated by dividing the total cost of tax incentives to Kansas City by the total value of all construction permits issued by the city, and was determined to equal 0.577. This ratio was then multiplied by the total building permits issued each year to calculate an estimate of the construction costs specifically associated with tax incentive programs.

A few other construction impact scenarios were addressed: all building permits in Kansas City, building permits larger than $100K, and permits larger than $250K. Entering the total value of all building permits in Kansas City shows the impact of all construction projects (both programs with tax incentives and ones without). Entering the value of permits larger than $100K and $250K allows the impact of the larger projects to be assessed.

The simulations that analyze the impact of construction are split into residential and non-residential categories. In each, the amount of construction spending is entered into the REMI model through the Industry Sales policy variable for the Construction industry. The Industry Sales policy variable allows the user to enter in changes in output for a given industry, so the construction costs for residential and non-residential buildings enter into the model through this variable.

Impact of the Change in Capital Cost and Housing Price

When the number of developments being built increases, the housing supply and amount of commercial and industrial space grows, causing the price of housing to decrease and the cost of capital to decrease. This occurs because growth in supply results in more competition in the markets for housing and commercial and industrial office space. In the REMI model, there are policy variables to directly adjust capital cost and housing price.

For capital cost, the policy variable called Capital Cost is decreased based the number of building permits corresponding to the ratio of incentivized projects to all construction projects. It is assumed that the value of non-residential building permits in each category is equal to the corresponding level of construction for each scenario, and that the capital cost will decrease by the amount of construction investment.

Housing price is adjusted in the model through the Consumer Price policy variable in the following subcategories: “rental

of tenant-occupied nonfarm housing", "imputed rental of owner-occupied nonfarm housing", and "group housing". The amount that housing price is decreased is based on the applicable residential building permit values by year, which correspond to the construction amount for that year. It is spread across the three subcategories according to the proportion of personal consumption expenditures corresponding to each category.

The variables changing capital cost and housing price are run along with the construction variables. To prevent over estimating impacts from access to affordable housing, newly renovated business floor space and renovated neighborhoods, capital cost and housing prices were not assumed to maintain over time, thus only equaled the level of incentivized construction investment in the same year the construction activity took place.

Private Business Operations Impact

To determine the revenue from company operations that receive tax incentives, the number of withholdings for each year is divided by 1% (which is the percentage of revenue that companies pay to the city as a withholdings tax). The resulting value is the total revenue received each year from companies that receive tax incentives in Kansas City. This revenue was then spread in proportion to each applicable industry's output in Kansas City and entered into the REMI model. Despite the PBOs from having but-for statements, to prevent overestimation of the results, REMI assumed 50% of the activity was net new and the 50% competed with local firms.

Impact of the Investment of Tax Incentives to the City

An important part of the analysis is to determine the economic impact of the cost to the city when it has to forego other investments due to lost revenue as a result of the tax incentive. The City of Kansas City provided us with the value of incentives by year from 2006 – 2015. The value of incentives offered to participants reflect the borrowing cost to the city and calculated premiums to reflect other hypothetical opportunities that were not invested in. We treat the value of incentives investments as a reduction in local government spending. Reducing government spending equal to the direct costs of the value of incentives offered is recommended by REMI as best practices, unless other specifics of how the money would have been spent or incentive revenue sources are known.

FINDINGS

The fiscal impacts on the City have been evaluated in three main areas: **1) incentivized building construction**; **2) incentivized Private-Business Operations (PBO)**; and **3) value of incentives**. The results reflect findings from the study period of 2006–2015.

INCENTIVIZED BUILDING CONSTRUCTION IMPACTS

The construction industry has a direct effect on employment. As construction increases and there is more production, there is a need for more employees in the construction industry. Further, construction prices effect relative housing and capital costs to individuals and businesses. Decreasing the costs for construction

lead to decreases in housing prices, which causes the real compensation rate to increase. In other words, when people can spend less on housing, they have more income left over to purchase other goods. This increase in real disposable income allows more money to be spent in other areas of the economy.

The consulting team determined that data related to building permits was the most effective Key Performance Indicator (KPI) to represent construction activity, as it reflects the investment in real estate development. As such, employment is shown in two scenarios below based on building permits.

The first impact scenario is the economic impact associated with all building permits in Kansas City. This reflects the impacts from the total activity in the City from building permits covering residential and non-residential construction. The second impact scenario reflects the impact associated only with the proportion of incentivized building permits. This shows the impacts of construction that was incentivized for both residential and non-residential construction.

FINDING: ***Approximately 5% of Jobs in Kansas City are from Building Permit Related Construction***

From the beginning of 2006 through 2015, REMI estimates the impacts associated from the total of the direct construction activity, indirect supply chain, induced and associated spin-off effects to generate 212,178 jobs. These jobs could be held by the same person, or one person could hold multiple jobs. Thus, on average, REMI estimates this created 21,218 jobs per year, an average contribution of 4.89% to overall employment.

FIGURE 16: CONTRIBUTION OF BUILDING PERMIT RELATED CONSTRUCTION TO KANSAS CITY EMPLOYMENT, 2006–2015

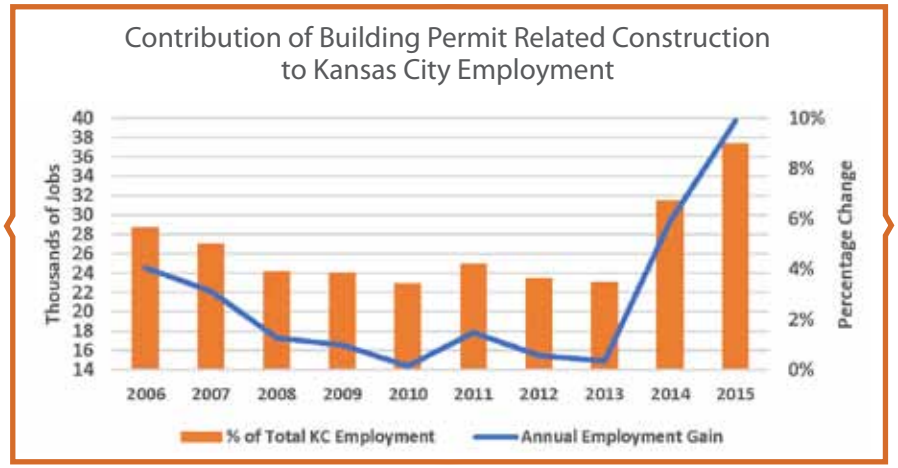


FIGURE 17: COMPARISON OF TOTAL EMPLOYMENT CONTRIBUTION TO CONSTRUCTION SECTOR EMPLOYMENT, 2006–2015

In Figure 17, the employment gain by year in thousands of jobs is depicted in blue, with values depicted on the left vertical axis. For example, in the year 2006, REMI estimates there was 24,530 jobs created because of the construction activity and the impacts it has on additional capital stock to the city. Employment as a percentage change from the baseline is depicted in orange, with values shown on the right vertical axis. When reading this graph, all values are positive. For example, in the year 2011, this would translate to an approximate 4.2% of the total employment of Kansas City.

From 2006–2015, REMI estimates the total gain in construction sector employment was 91,871 jobs, or an average annual impact of 9,187 jobs. When reading Figure 18, the annual employment gain employment impacts are the same in Figure 17. Figure 18 outlines the annual increase in employment across all sectors from the construction permit related activity compared to the increase in the construction sector employment.

FINDING: ***Incentivized Construction Accounted for 3% of all Employment in Kansas City***

From the beginning of 2006 through 2015, REMI looked at the impacts associated from the incentivized building permit construction. This includes the total of the direct construction activity, indirect supply chain, induced and associated spin-off effects. These jobs could be held by the same person, or one person could hold multiple jobs. Thus, on average REMI estimates this

FIGURE 18: CONTRIBUTION OF INCENTIVIZED CONSTRUCTION TO KANSAS CITY EMPLOYMENT

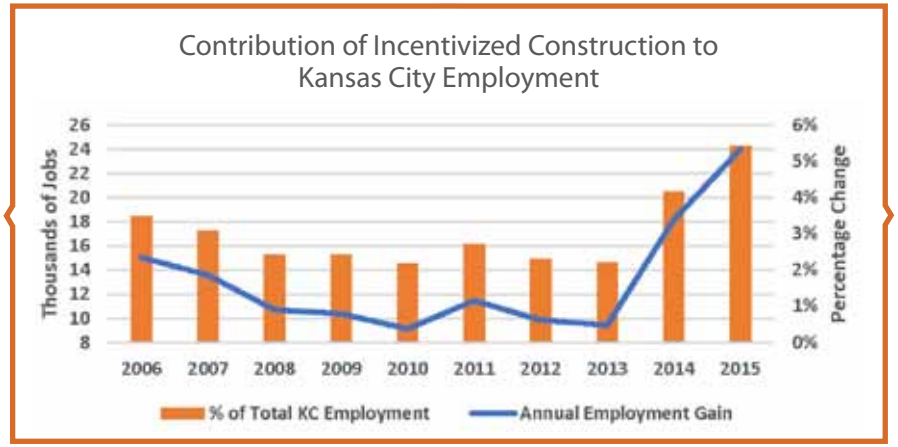
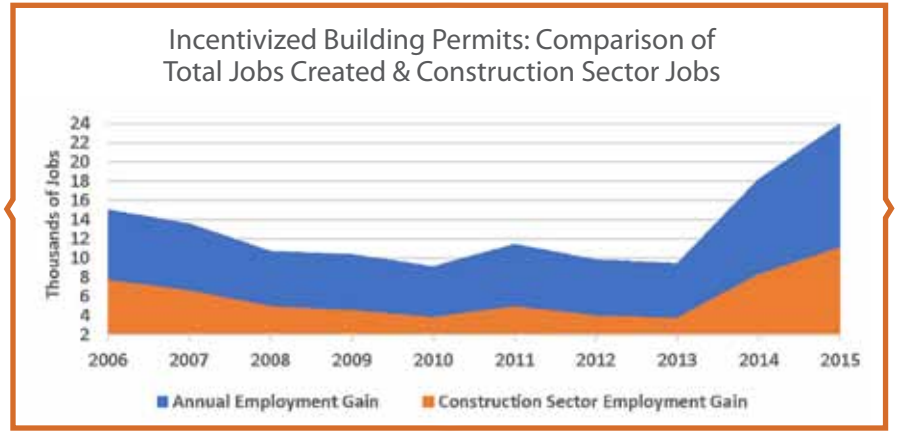


FIGURE 19: INCENTIVIZED BUILDING PERMITS: COMPARISON OF TOTAL JOBS CREATED & CONSTRUCTION SECTOR JOBS, 2006–2015



created 150,408 jobs during the study period, or 13,179 jobs per year, an average contribution of 3% to overall employment.

Figure 19 illustrates the employment impacts associated with incentivized construction permits. The increase in employment is

in thousands of jobs and is depicted by the blue line and on the left vertical axis. The percent of the total Kansas City employment is depicted by the orange line and on the right vertical axis.

From 2006–2015, REMI estimates the total gain in construction sector employment was 59,721 jobs, or an average annual impact of 5,972 jobs. When reading Figure 20, the annual employment gain employment impacts are the same in Figure 19. Figure 20 outlines the annual increase in employment across all sectors from the incentivized construction permit related activity compared to the increase in the construction sector employment.

On average, the change in total employment was approximately 2.25 times greater than the total construction sector employment. In other words, on average the construction sector employment accounted for approximately 45% of the overall employment impacts. The ratio remains within the same spectrum for much of the analysis period. The responses in the model to explain this ratio can be explained by four primary reasons.

1) The construction spending data REMI utilized was in dollars. This model accounts for changes in labor productivity for all industries overtime. On average from 2006–2015 the labor productivity of the construction sector is estimated to be $145,507, whereas the average labor productivity for the aggregate of all private non-farm industries is estimated to be $164,471. In 2006, the labor productivity for construction was

FIGURE 20: EMPLOYMENT IMPACTS OF INCENTIVIZED BUILDING CONSTRUCTION PERMITS, 2006–2015

EMPLOYMENT IMPACTS OF INCENTIVIZED BUILDING CONSTRUCTION PERMITS

INDUSTRY SECTOR	TOTAL	AVERAGE	% OF TOTAL
Construction	59,721	5,972	45.32%
Government	15,308	1,531	11.62%
Retail Trade	13,906	1,391	10.55%
Health Care and Social Assistance	7,429	743	5.64%
Accommodation and Food Services	6,026	603	4.57%
Real Estate and Rental and Leasing	5,184	518	3.93%
Professional, Scientific, and Technical Services	4,843	484	3.67%
Other Services, except Public Administration	4,560	456	3.46%
Administrative and Waste Management Services	3,204	320	2.43%
Manufacturing	2,225	223	1.69%
Finance and Insurance	2,161	216	1.64%
Wholesale Trade	2,156	216	1.64%
Transportation and Warehousing	1,823	182	1.38%
Management of Companies and Enterprises	755	76	0.57%
Information	732	73	0.56%
Arts, Entertainment, and Recreation	660	66	0.50%
Educational services; private	626	63	0.48%
Utilities	237	24	0.18%
Mining	207	21	0.16%
Forestry, Fishing, and Related Activities	26	3	0.02%
ALL INDUSTRIES	131,789	13,179	100%

approximately 95% of the private, non-farm industry average, in 2016 this declined to approximately 82% of the private, nonfarm average labor productivity. The discrepancy in the ratio occurred mostly in the last few years, helping to explain the shift in the proportion of construction employment from total employment.

2) The ratio between construction spending and associated changes to housing and business building capital costs were held constant over the analysis period.

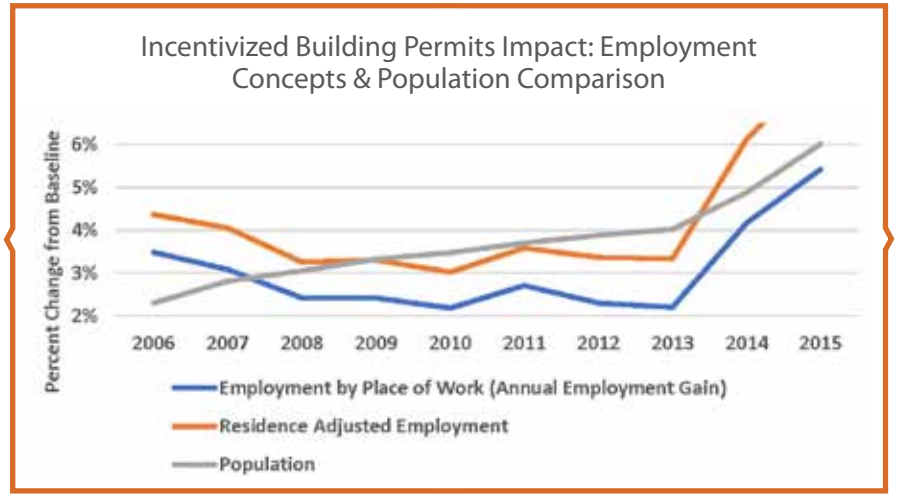
3) The REMI model assumes a built-in depreciation rate of residential and non-residential capital stock, which refers to calculations made to determine to what extent housing and commercial real estate lose value over time due to wear and tear. Added value to existing or new stock will depreciate overtime.

4) The model keeps supply and demand in balance; in this instance, among other factors it accounts for the difference between the optimal versus actual capital stock. This difference is a major factor that drives investment responses within the model. By creating capital investment, the economy benefits from lower costs and the ability to expand more quickly from increased access to quality capital in the near-term. As the economy expands, optimal capital stock will increase. This near-term buildup of capital does include the potential for crowding out effects of other construction activities that may have occurred otherwise. The consistent ratio of the construction industry employment to overall employment indicates the supply of suitable building capital investments can be matched by demand form businesses and consumers overtime.

FINDING: ***Construction, Government, Retail, and Health Care Industries Received the Most Employment from Incentivized Building Permit Construction***

Figure 21 provides an overview of the employment impacts of incentivized building permit construction. Compared to the other industries, most of the jobs were created in the construction sector. The construction sector witnessed the direct increase in spending from incentivized building permits and with approximately 35% of all direct construction spending going to labor, it is a relatively labor-intensive industry.

FIGURE 21: INCENTIVIZED BUILDING PERMITS IMPACT: EMPLOYMENT CONCEPTS & POPULATION COMPARISON, 2006–2015



The second most jobs are estimated to have been created within the Government sector, as government services are a part of all businesses annual expenditures. Government services account for slightly less than 0.5% of the construction sector typical annual expenditures. Secondly, REMI accounts for changes in demand for government services based on changes in population and industry sales growth. The construction activity and adding building stock attracts people and businesses into the region, thus growing the economy and demand for government services.

The substantial increase in employment within Retail Trade, Healthcare and Social Assistance, and Accommodation and Food Services industries are caused by two primary reasons.

1) These industries are supported largely by consumer spending and tends to reflect the types of goods and services that are locally supplied or final point of sale to the consumer. This type of spending is caused by induced demand made possible by the earning income that of the people that live in the area.

2) These industry sectors are some of the most labor-intensive factors of production. In other words, for each dollar of output (revenue generated), a significant amount is allocated to staff. For example, similar to the construction industry, of overall operational expenditures, the Food Services and Drinking Places industry spends on average approximately 35 cents on the dollar on direct labor.

The Real Estate and Rental and Leasing industry benefits significantly, as they account for over 2% of the construction sector's supply chain. This would include expenditures on equipment rentals. This industry also benefits from the sale of additional and newly renovated buildings to both business and consumers.

The Professional, Scientific, and Technical Services benefits from both the construction industry supply chain, as it supplies numerous services needed for instance: legal services, accounting, payroll, architectural, engineering and other professional services. On average the Professional, Scientific, and Technical Services industry accounts for approximately 3.5% of the construction industry annual expenditures. This industry also benefits from demand from other suppliers and induced spending.

The remainder of the significant industry impacts are mostly driven by supply chain demand from the Construction sector. Some of these industries like Manufacturing may not have a large local presence and are capital intensive, thus not requiring that many direct workers per unit created. Other industries like Arts, Entertainment, and Recreation are primarily driven by induced demand and thus are not a large component of the overall employment change.

It is important to note that this analysis does not include the farm aggregate level industry sector. The Farm sector (North American Industry Classification System 111, 112) is not included as REMI

assumes non-farm related shocks to have no direct effect on the farm sector. The total in Figure 21 matches the total and average impacts depicted in Figure 19 and 20.

FINDING: ***People who Live in Kansas City and are Employed Increased by 4.2% as a Result of Incentivized Building Permit Construction***

"Residence adjusted employment" is another set of important metrics because it measures where people with jobs in Kansas City live. It can help us better understand how incentives and other scenarios impact employment of City residents and how the relationship between overall employment, population and residence adjusted employment change overtime. The number of jobs that may be held by people who live within the City is often reflected in changes to local population and employment trends.

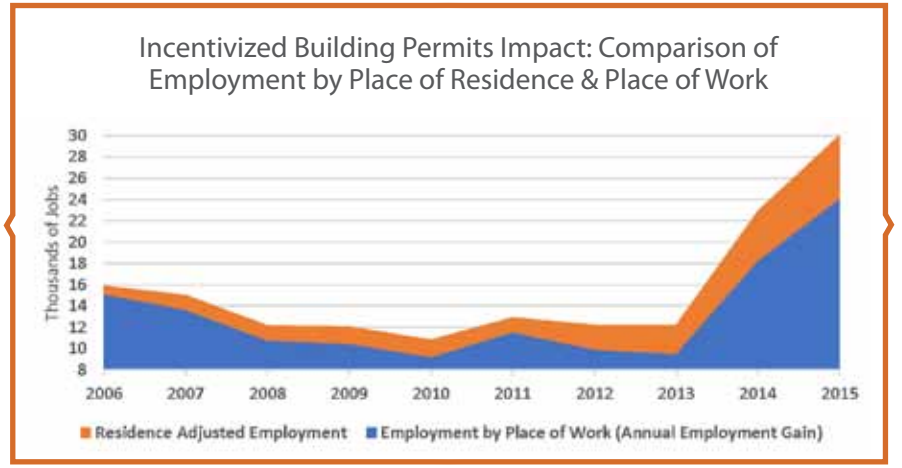
Witnessing increases in residence adjusted employment relative to employment indicates people's desirability to live in the city where they work. This is fundamental to achieving sustainable and vibrant neighborhoods.

On average, during the study period, the incentivized building permits is estimated to have caused the change in total employment to grow by 3%, residence adjustment employment 4.2% and population by 3.7%. Residence adjusted employment impact is on average 1.2% higher than the average change in total employment. This is a compelling finding, as the increased availability of quality, affordable housing and access to businesses is causing more people to live in the city.

The relatively higher change in residence adjusted employment compared to total employment can be further explained by people who accepted a job in Kansas City and decided to reside in Kansas City rather than living outside of the city limits. Population and residence adjustment employment follow in a similar trend line, as population reflects all people, whereas residence adjustment employment is an employment count.

Figure 22 provides indicators to compare the impacts the incentivized building permits may have had on the Kansas City

FIGURE 22: INCENTIVIZED BUILDING PERMITS IMPACT: COMPARISON OF EMPLOYMENT BY PLACE OF RESIDENCE & PLACE OF WORK, 2006–2015



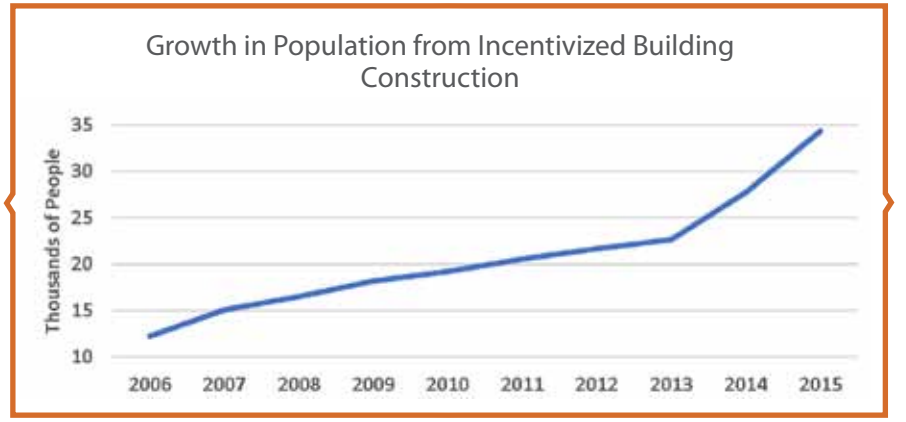
economy. The results are provided annually across the analysis period and are compared to the baseline data. The employment by place of work is synonymous in this report with annual employment gain, expressed as the blue line and matches corresponding data point in Figure 19. The percent change in Residence Adjusted Employment is reflected by the orange line. Population has been included for reference as this is important to understand when evaluating the need for types of government services. The annual percent change in Population is reflected with the gray line.

When reading Figure 22, it is important to note the clarification on the terms of employment concepts. Employment referenced in Figures 17 and 19 reflect employment by place of work. Terms within this report reference this type of employment as annual employment gain, total or change in employment/jobs. This is the most commonly reported type of employment referenced in similar types of economic reports. Residence adjusted employment is employment by place of residence. This concept adjusts the total or change in employment by place of residence. It is possible for the total or change in residence adjusted employment/jobs to be greater than employment, as they are two different concepts that are not completely dependent on each other.

FINDING: ***On Average, 15,600 Jobs were Created for People who Live in Kansas City and are Employed as a Result of Incentivized Building Permit Construction***

The full effects from the incentivized building permit construction are estimated to have contributed an average impact of 15,635 jobs held by local Kansas City residents. On average per year, there were 2,456 more residence adjusted jobs than jobs by place of work. Figure 23 provides additional context to the change in residence adjusted employment compared to the change in total employment over the period. Employment by Place of Work matches Annual Employment Gain in Figures 17 and 19.

FIGURE 23: GROWTH IN POPULATION FROM INCENTIVIZED BUILDING CONSTRUCTION, 2006–2015



FINDING: ***Kansas City Population Grew by 6% as a Result of Incentivized Building Permit Construction***

Population is one of the most important measures of the growth of a region's economy. More people moving into a region translates into an increased demand for goods and services as well as increased tax revenue.

By the end of 2015, REMI estimates the full effects from the incentivized building construction contributed to 34,310 people, or over 6% of the Kansas City population. On average from 2006 to 2015, this contributed to adding or retaining 20,803 people per year. Over this same time period, that would equate to about 3.7% of Kansas City's historic population.

Figure 24 provides the overall change in population from the full effects of the incentivized building construction activity. Figure 25 provides a more detailed breakout of the change in population by four age groups. The totals in Figure 25 equal Figure 24.

Most of the population change is associated with what REMI defines as economic migrants. Economic migration is the movement of people to regions with better economic conditions. Economic migrants are attracted to places with relatively high wages and employment opportunities. Migrants are also attracted to places with high amenities. The cost of goods, services and housing are reflected in the relative wage rates.

An economic migrant can be any member of the labor force ages 18-64 that is looking for employment opportunities. After age 64 people can still work; however, REMI does not assume they will relocate for wage rates or employment opportunities. The change in

FIGURE 24: POPULATION INCREASE FROM INCENTIVIZED BUILDING CONSTRUCTION BY FOUR AGE GROUPS, 2006–2015

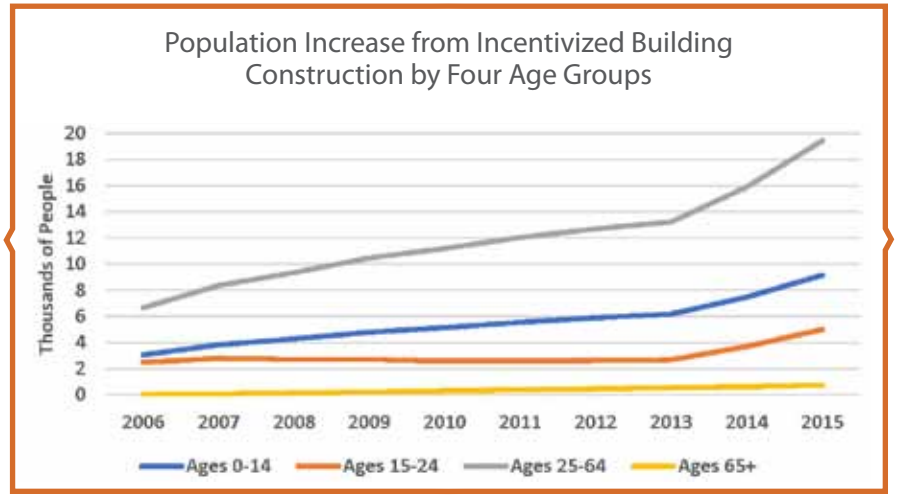


FIGURE 25: GROWTH IN COMPENSATION FROM INCENTIVIZED BUILDING CONSTRUCTION, 2006–2015

population of ages 65+ within Figure 25 is associated with people who moved into the region before age 65, remained in the region and aged into that group over time.

There are different labor force participation rates, birth rates and death rates by age and gender. Economic migrants in their mid-20s to early 30s are estimated to have the greatest willingness to relocate, then begins to decrease over time. This is importance to note as the underlying demographics of the region play a part in new births and changes in dependents (ages 0–18) over time. The increase in dependents is vital to aid in the renewal growth of the regional population and labor force; however, it also is important to account for when considering the demands for public sector education.

FINDING: ***Compensation Increased by $262 per year from Incentivized Building Permit Construction***

One of the direct and associated effects of an increase in employment is a rise in compensation for the region. Figure 26, provides estimates on the change in wages, compensation and earnings from the impact in incentivized building construction. Compensation is the sum of wages and salaries plus supplements to wages and salaries. Compensation does not include proprietor's income. Compensation is a good indicator to evaluate, as it reflects the majority of the workforce, of which the source of income is not from unincorporated proprietorships or other non-

FIGURE 26: GROWTH IN PERSONAL INCOME FROM INCENTIVIZED BUILDING CONSTRUCTION, 2006–2015

labor sources of income. On average, during the study period the average change in compensation from the incentivized building construction was $884 Million. Within this analysis period, REMI estimates there was an average annual compensation rate increase of $262 dollars per year, equating to an average increase of 0.39% in the compensation rate.

FINDING: ***Personal Income Increased as a Result of Incentivized Building Permit Construction***

Personal income is the income received by persons from all sources. It includes income received from participation in production as well as from government and business transfer payments. Similar to the change in compensation, personal income shows an increase from

2006 to 2015. Figure 27 illustrates the additional personal Income from the incentivized construction impacts, which ranged from $1.25 billion in 2006 to $3.25 billion in 2015.

FINDING: ***Gross City Product Increased by 2.73% from Incentivized Building Permit Construction***

Gross Domestic Product (GDP) is the total market value of goods and services produced within the United States each year. The GDP can also be measured at the local level, such as within a city, state or county. For Kansas City, the Gross City Product (GCP) is the net market value of goods and services produced by labor and capital within the city.

The increase in GCP from Incentivized construction ranged from about $1.228 Billion in 2006 to $3.06 Billion in 2015. Over this time period, this incentivized building construction is assumed to have contributed an average GCP increase of 2.73%.

GCP is composed of six major components, each of which are added to calculate GCP (with the exception of imports which is subtracted). These six components are consumption, investment, change in private inventories, exports, imports, and government spending. Seeing what percentage each of these components comprises GCP provides some information on how the economy operates in the region.

FIGURE 27: INCREASE IN GROSS CITY PRODUCT FROM INCENTIVIZED BUILDING CONSTRUCTION IN KANSAS CITY, 2006–2015

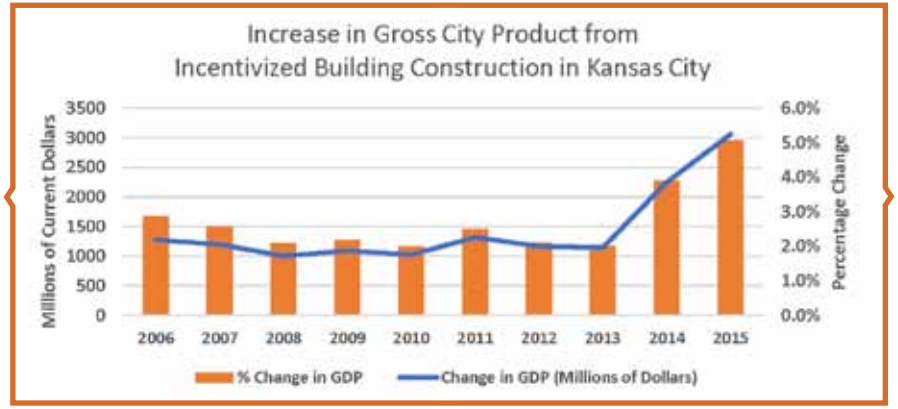
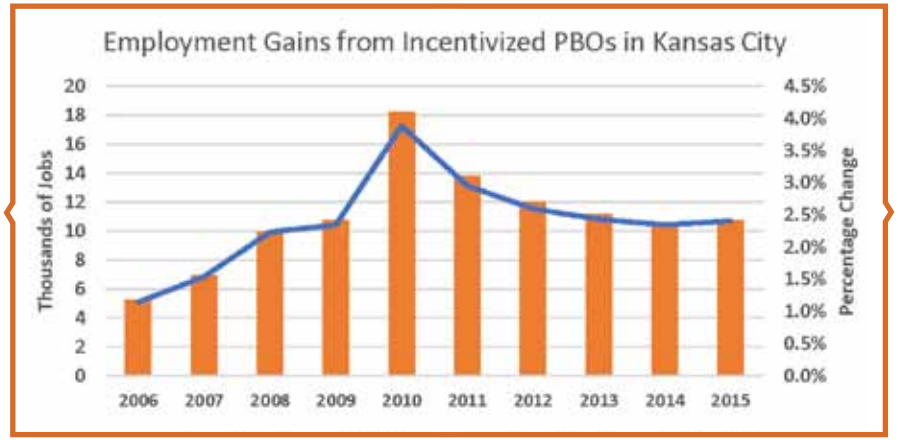


FIGURE 28: EMPLOYMENT GAINS FROM INCENTIVIZED PRIVATE BUSINESS OPERATIONS IN KANSAS CITY, 2006–2015



The largest increases in the components of GCP from incentivized building construction was personal consumption expenditures, followed by investment. The change in net exports was negative, which is common as many of the goods and select services demanded to support the investment in Kansas City are coming from outside of the region.

INCENTIVIZED PRIVATE BUSINESS OPERATIONS IMPACT

Private business operations (PBO) refer to the businesses operations of firms that receive incentives included in evaluated incentive programs. Incentivized PBOs covered in this analysis include both new business attraction and retention. The following section describes the impact associated with PBOs associated with companies that receive tax incentives from Kansas City.

It is important to note that "but-for" documentation was required for incentivized business attraction and retention, however REMI discounted the positive economic impacts of those businesses operations, assuming half of those operations would cause displacement of existing industry operations. In other words, the intent of this discount to incentivized business activity, is to prevent potential overestimation of the results, by accounting for firm level competition.

FINDING: ***10,600 Jobs were Created as a Result of Incentivized Private Business Operations***

One of the main benefits of businesses operations is the number of employees hired. The average change in total employment in Kansas City due to incentivized business operations is over 10,600 additional jobs across the 10-year period (see Figure 29). This corresponds to about a 3% change in total employment.

FIGURE 29: CHANGE IN EMPLOYMENT BY ALL INDUSTRY IN KANSAS CITY DUE TO INCENTIVIZED PRIVATE BUSINESS OPERATIONS, 2006–2015

CHANGE IN EMPLOYMENT BY ALL INDUSTRY IN KANSAS CITY DUE TO INCENTIVIZED PRIVATE BUSINESS OPERATIONS

INDUSTRY SECTOR	TOTAL	AVERAGE	% OF TOTAL
Construction	13,933	1,393	13.1%
Government	8,432	843	7.9%
Retail Trade	10,578	1,058	10.0%
Health Care and Social Assistance	9,510	951	9.0%
Accommodation and Food Services	7,338	734	6.9%
Real Estate and Rental and Leasing	4,659	466	4.4%
Professional, Scientific, and Technical Services	9,240	924	8.7%
Other Services, except Public Administration	5,731	573	5.4%
Administrative and Waste Management Services	7,270	727	6.9%
Manufacturing	4,330	433	4.1%
Finance and Insurance	7,719	772	7.3%
Wholesale Trade	3,905	390	3.7%
Transportation and Warehousing	4,151	415	3.9%
Management of Companies and Enterprises	2,313	231	2.2%
Information	2,195	219	2.1%
Arts, Entertainment, and Recreation	2,398	240	2.3%
Educational services; private	2,007	201	1.9%
Utilities	186	19	0.2%
Mining	202	20	0.2%
Forestry, Fishing, and Related Activities	15	1	0.0%
ALL INDUSTRIES	106,111	10,611	100.0%

In Figure 30, the employment changes (in individual jobs) is provided at the aggregate sector industry level. The largest change in jobs is in the Construction Industry, which is expected since the construction industry is a major part of the supply chain for business expansion and benefits greatly from increased disposable personal income. Other major industries affected are Retail Trade and Health Care. The relatively high increases in government employment, compared to other industries was surprising. Changes in government sector employment started at less than 200 jobs, but quickly grew as the additional and retained population demanded more government services and supported by increased revenue from economic activity gains. Retail and health care are both labor intensive and benefit from increases in population and disposable personal income.

FINDING: ***7,400 People Moved to Kansas City as a Result of Incentivized Private Business Operations***

The average change in population is over 7,400 additional people moving to Kansas City from 2006–2015 as a result of incentivized business operations (see Figure 29). The change in population growth for Kansas City over this period went from 1,600 in 2006 to 11,643 in 2015. The percentage change from the baseline starts at 0.3% in 2006, going to 2.04% in 2015. A larger population inside a region has a wide range of economic benefits, such as: the ability to support

FIGURE 30: CHANGE IN POPULATION FROM INCENTIVIZED PRIVATE BUSINESS OPERATIONS, 2006–2015

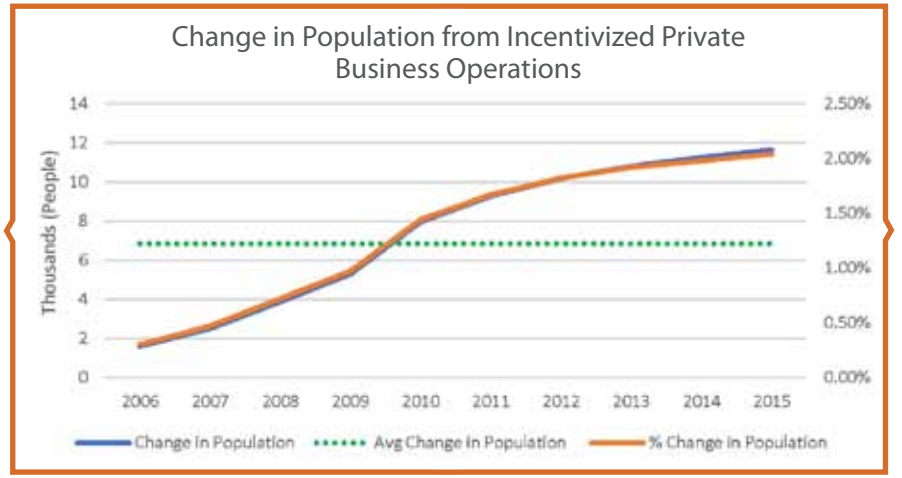
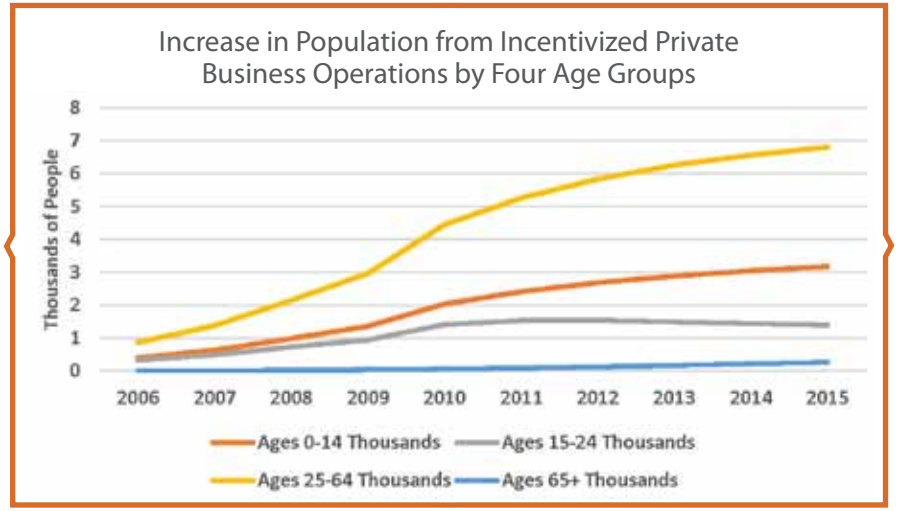


FIGURE 31: INCREASE IN POPULATION FROM INCENTIVIZED PRIVATE BUSINESS OPERATIONS BY FOUR AGE GROUPS, 2006–2015

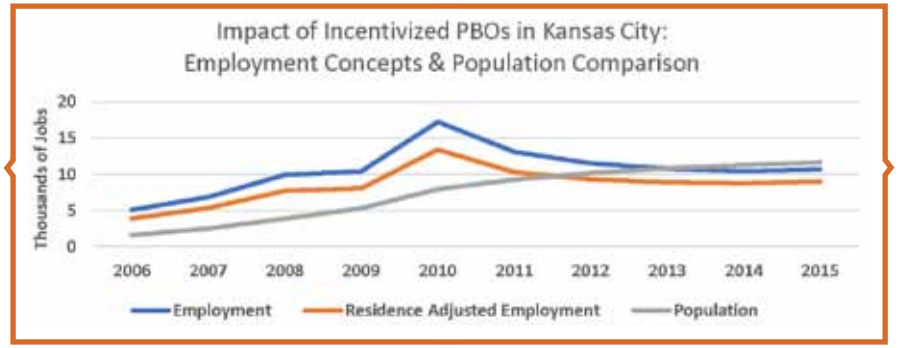


a more stable consumer goods and services industry; clustering effects to make the area more competitive and potentially more efficient government spending per capita. More people located within a region also increases the demand for housing, driving property values up, which causes the amount of property tax collected to rise.

In Figure 32, the four age groups add up to the total population change for each given year. The age group cohorts responding to increased business activity illustrate a similar response to what occurred during the incentivized construction phase. Increase in employment demands drive inward migration for those seeking employment opportunities. The increase in dependent age cohorts follow. Small increases in the retired population are assumed based on economic migrants aging over time.

Across the incentivized PBOs impact analysis, employment, residence adjusted employment, and population are expected to have increased as a result of the increased level of business activity. These three variables generally move in the same direction; as businesses attract more people, additional people are drawn into the region because of the increased employment opportunity.

FIGURE 32: IMPACT OF INCENTIVIZED PRIVATE BUSINESS OPERATIONS IN KANSAS CITY: EMPLOYMENT CONCEPTS & POPULATION COMPARISON, 2006–2015



FINDING: ***Average Compensation Rate Grew by $215 per year as a Result of Incentivized Private Business Operations***

The increase in employment caused compensation to increase within Kansas City, averaging to be about an $800 million increase annually over the 10-year period (see Figure 34). On average, over this time period, the increased demand for employment is estimated to have caused the average compensation rate to increase by $215 annually. In other words, this led to an increase of an additional approximate 0.3% a year, to what it may have been without the incentivized PBOs.

FIGURE 33: INCREASE IN COMPENSATION CHANGE FROM INCENTIVIZED PRIVATE BUSINESS OPERATION IN KANSAS CITY, 2006–2015

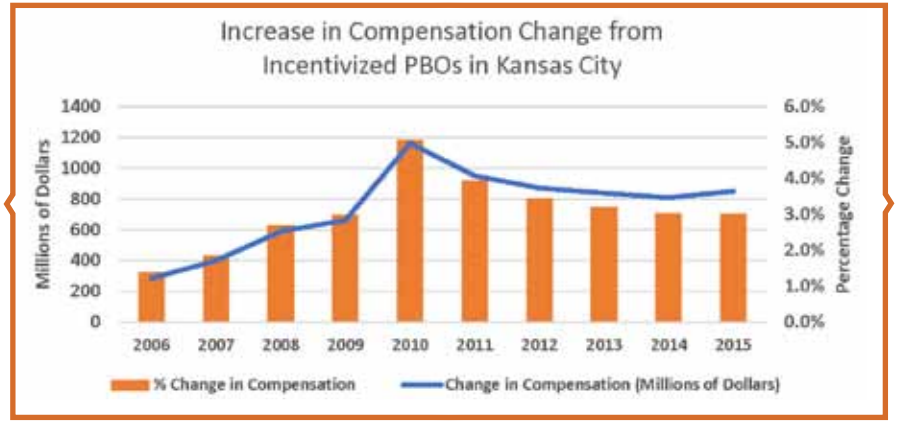
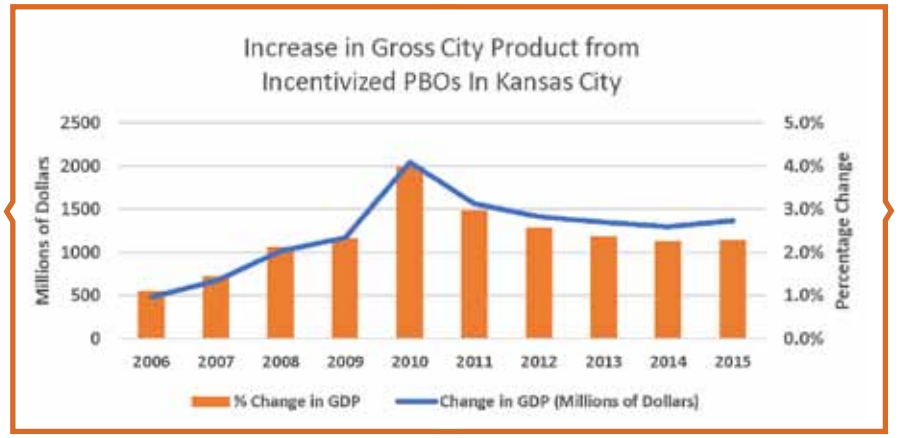


FIGURE 34: INCREASE IN PERSONAL INCOME FROM INCENTIVIZED PRIVATE BUSINESS OPERATIONS IN KANSAS CITY, 2006–2015

FIGURE 35: INCREASE IN GROSS CITY PRODUCT FROM INCENTIVIZED PRIVATE BUSINESS OPERATIONS IN KANSAS CITY, 2006–2015



FINDING: ***Personal Income Increased as a Result of Incentivized Private Business Operations***

Personal income resulting from incentivized PBOs also increases within the region, averaging a slightly over $754 million increase over the 10-year period (see Figure 35). The average increase in real disposable personal income per capita grew by $330 dollars.

FINDING: ***Gross City Product Increased by $1.24 Billion from Incentivized Private Business Operations***

The incentivized private business operations in Kansas City, associated supply chain growth and spin-off effects based GCP and industry output (sales) substantially increased over the 10-year period. As Figure 36 illustrates the average change in GCP over this period is estimated to have been $1.236 billion higher from the baseline if the incentivized PBOs did not occur.

Out of the five major GCP components (exports, imports, personal consumption expenditures, gross private domestic fixed investment, and government consumption expenditures), the largest changes are estimated to be in private fixed investment, followed by exports.

FIGURE 36: STATE & LOCAL GOVERNMENT SECTOR ECONOMIC PROFILE, KANSAS CITY, MO, 2015

CATEGORY	UNITS	TOTAL	AVERAGE	PART COMPARED ALL PHASES
Total Employment	Individuals (Jobs)	-3,594	-359	1.5%
Private Non-Farm Employment	Individuals (Jobs)	-1,323	-132	0.6%
Residence Adjusted Employment	Individuals	-2,799	-280	1.2%
Population	Individuals	-2,378	-238	0.8%
Gross City Product (GCP)	Millions of Current Dollars	-$317.89	-$31.79	1.2%
Industry Output (Sales)	Millions of Current Dollars	-$544.88	-$54.49	1.1%
Personal Income	Millions of Current Dollars	-$239.29	-$23.93	1.0%

Net exports are positive under this scenario, whereas under the construction investments phase, net exports were negative, as large segments of the building materials are assumed to be supplied from outside of the city.

The increase in private fixed investment is associated with increased investment spending to support growing industry. The increase in net exports is caused by the model balancing supply and demand. More of the demand for the industry output is assumed to be exported to rest of state, nation and world, than consumed locally. Secondly, of the demand for goods and services to support the increased level of economy activity, more of it is assumed to be supplied locally than obtained from outside of the region. The relatively high capacity to supply additional applicable goods/services locally is facilitated by the regional industry supply chain relationships with the industries that were directly incentivized, and secondly, the further spending responses like building capital investment and consumer consumption expenditures on services that can be supplied within the region.

IMPACT OF THE VALUE OF INCENTIVES

An important part of the analysis is to determine the economic impact of the cost to the City when it has to forego other investments due to lost revenue as a result of the tax incentive. Kansas City provided the consulting team with county tax data that was used to estimate the value of incentives by year from 2006–2015. The value of incentives offered to participants reflect the borrowing cost to the City and calculated premiums to reflect other hypothetical opportunities that were not invested in.

The value of incentives investments is treated as a reduction in local government spending. Reducing government spending equal to the direct costs of the value of incentives offered is generally a best practice, unless other specifics of how the money would have been spent or incentive revenue sources are known.

Government spending is labor intensive, demanding a good deal of locally sourced inputs to yield a large multiplier effect. When government reduces spending, it tends to yield greater negative economic impacts when compared to reductions in other industry activity or tax increases. For instance, Figure 37 provides an overview of the economic profile of the state and local government sector within Kansas City in 2015.

FIGURE 37: ECONOMIC IMPACTS FROM VALUE OF INVESTMENT, LOSS IN POTENTIAL KANSAS CITY GOVERNMENT SPENDING, 2006–2015

INDUSTRY PROFILE	UNITS
Employment	43,743 Individual Jobs
Average Compensation Rate	$65,870 Current Dollars
Labor Productivity (Estimated output per employee)	$115,778 Current Dollars

On average, for every $1 in S&L government expenditure, $0.58 cents are spent on direct labor.

TOP 5 SUPPORTING INDUSTRIES (SUPPLY CHAIN):	PER DOLLAR OF EXPENDITURE
Professional, scientific, and technical services	$0.04
Petroleum and coal products manufacturing	$0.036
Real estate	$0.024
Construction	$0.023
Administrative and support services	$0.02

The general outline of the economic impacts associated with the less local government spending are outlined in Figure 38. If government were to reduce spending by not offering incentives, the greatest portion of the impacts would be in total employment, followed by resident adjustment employment and Gross City Product.

The majority of the employment loss from a reduction in local government spending within Kansas City would be located within the public sector. Figure 39 reflects that the reduction of employment within the government sector accounts for a minimum of 59% and an average 63% of the total loss in employment.

Given the relatively small impacts of the value of incentives compared to other phases in this analysis, additional findings and graphs have been placed in the Appendix.

FINDING: ***Kansas City Received $3.83 for Every $1 Invested in Incentives***

On average, the contribution of the applicable incentivized economic development programs in Kansas City between 2006 and 2015 created almost $478 million dollars in additional revenue, this includes accounting for the increased cost of government services and value of incentives provided to stimulate investment and business activity. For every $1 invested in these programs, an average increase of $3.83 was generated in net revenue for Kansas City.

FIGURE 38: CHANGE IN EMPLOYMENT FROM VALUE OF INCENTIVES: COMPARISON OF EMPLOYMENT TO STATE AND LOCAL GOVERNMENT EMPLOYMENT IN KANSAS CITY, 2006–2015

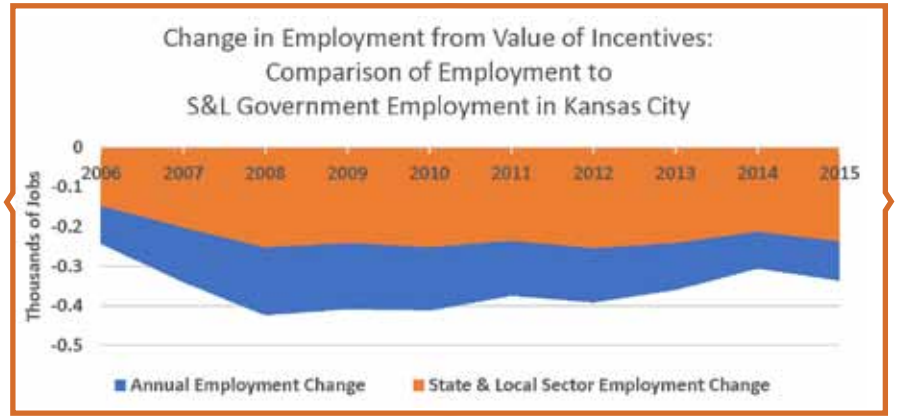


FIGURE 39: NET CHANGE IN KANSAS CITY REVENUES, 2006–2015

NET CHANGE IN KANSAS CITY REVENUES –
REVENUES *ARE IN MILLIONS OF CURRENT DOLLARS*

	TOTAL	AVERAGE
Net Change in Revenue from Incentivized Building Construction	$253.72	$25.37
Net Change in Revenue from Private Business Operations	$362.48	$36.25
Net Change in Revenue from Value of Incentives	-$9.44	-$0.94
DIRECT VALUE OF INCENTIVES	-$128.77	-$12.88
TOTAL NET CHANGE IN REVENUE	$477.99	$47.80
RETURN ON INVESTMENT	$3.83 for every $1 invested	
NET PRESENT VALUE (NPV) – *FIXED 2015 MILLIONS*	$298.31	

The Return on Investment calculated within this study includes the change in net change in revenues from each of the three phases of this analysis and the direct value of the incentives offered. The ROI calculated within this report includes the change in net change in revenues from each of the three phases of this analysis and the direct value of the incentives offered. Net changes in revenue include the estimated changes in the City of Kansas City revenues, less the value of incentives, less changes in the cost of government services. Including both the change in revenues and cost of services is important to include in such ROI analysis, as it is possible for the cost of services to exceed the increase in revenues generated.

Over the study period, the direct value of the incentives totaled almost $128.77 million. Based on the 2006 value of revenues from 2006–2015 and subtracting the value of incentives as the investment made by the City, this yields a net present value (NPV) of $298.31 million fixed in 2015 dollars. This analysis assumes a discount rate of 7%.

CONCLUSION

In this study, REMI evaluated the economic impacts of Kansas City's incentivized economic development programs on the City's economy, over a ten-year period from 2006–2015. This study provides a general overview of the Kansas City economy during this time period and analyzes the various economic, demographic and fiscal impacts associated with the three phases of the incentive programs.

FIGURE 40: ECONOMIC SUMMARY OF KANSAS CITY INCENTIVE PROGRAMS, 2006–2015

ECONOMIC SUMMARY OF KANSAS CITY INCENTIVE PROGRAMS
UNITS ARE IN BILLIONS OF CURRENT DOLLARS AND INDIVIDUAL JOBS AND PEOPLE

	TOTAL	AVERAGE
Total Employment	234,304	23,430
Private Non-Farm Employment	212,837	21,284
Residence Adjusted Employment	238,256	23,826
Population	280,080	28,008
Gross City Product (GCP)	$26.58	$2.66
Output	$47.46	$4.75
Personal Income	$22.92	$2.29
Real Disposable Personal Income	$23.83	$2.38

The results of the combined benefits and costs associated with these incentive programs indicate positive economic, demographic and fiscal gains for the City.

In referencing the Key Performance Indictor for the economic analysis, this section reports a positive result. Yes, Kansas City experienced an increase in construction spending, private business operations, and employment and wages as a result of incentivized activity.

The City can report a positive return on investment along with more people living and working in Kansas City as a result of the incentives offered during the 10-year study period of 2006–2015.

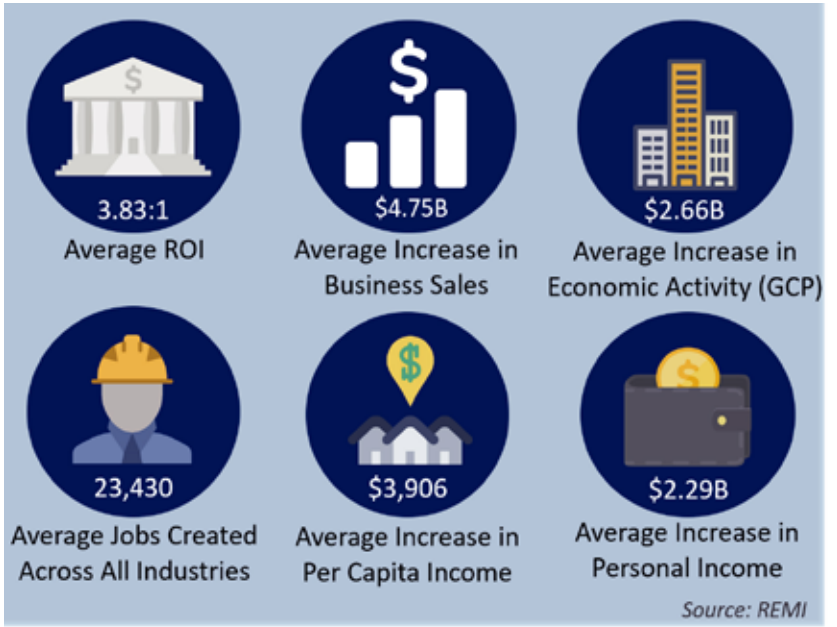
Approximately 23,430 jobs were created during this time and per capita income rose by an average of $3,906.

Forward-Looking Considerations

Several projects that received incentives during this time period were linked to data confidentiality agreements that prevent third-party consultants from having the specific data necessary to run consistent quantitative analysis on projects or individual programs. Although the data provided was sufficient to understand the general and impacts associated with incentivized building construction, incentivized private business operations and the value of the incentives, the city should review the current regulations going forward to allow access to third-party consultative review of program applicant data. This will be useful when accommodating requests to make project and program reviews more transparent and increase the level of confidence in the results.

The City should develop a centralized system for collecting data related to business and redevelopment incentive programs by year. Several types of data are outlined below as a reference. The categories in bold reflect critical data to collect. The categories italicized reflect ideal, but not required data. During the consulting team's analysis of the data available and through discussions with various senior level City staff, it appears the that Kansas City is collecting most of this data, however the data collection process is often not centralized or standardized across jurisdictions and is subject to data confidentiality agreements.

OVERVIEW OF THE ECONOMIC & FISCAL IMPACTS OF THE ESTIMATED CONTRIBUTION OF INCENTIVIZED ECONOMIC DEVELOPMENT PROGRAMS IN KANSAS CITY, MISSOURI, 2006–2015



Data to Collect when Evaluating Economic & Fiscal Effects of Business Incentive Programs

- **Industry type by NAICS or clear understanding of type of industry production activity preformed** (Preferably at 3 digit NAICS or more detailed level, although 2 digit can suffice)
- Direct applicant(s) **industry sales or employment**
  – Having both are preferred

  - If industries are in retail, food services or accommodations, then a breakout of what portion of the sales is assumed to be net new is important to have. If not provided, assume all activity will compete with existing industry.
  - Discuss further discounting factors for retail, wholesale, as for these industries, sales should reflect mark-up, not total revenue
  - Square footage to employment or sales estimate, as backup option
- **Value of incentive provided**
  - What type of incentive is this?
- *Direct employee average compensation or wages*
- *Expenditures during any construction phase and procurement of equipment*
  - Breakout of locally sourced inputs if available
  - Total spending on suppliers (supply chain spending)

Data to Collect when Evaluating Economic & Fiscal Effects of Redevelopment Incentive Programs

- **Cost to build**
- **Value of incentive provided**
  - What type of incentive is this?
- Any estimate on direct construction jobs needed or other construction related detailed spending
- *Type of housing development by aggregate type (single family, multi-family, apartment, etc.)*
- *If mixed-use is a part of the development, include known data below*
  - Type of business(s) by NAICS (otherwise an average spreading weight is assumed for the city split between retail, restaurants and commercial sectors)
  - Direct employment and or sales. If unknown, then provide square footage
  - Any estimates on how much is net new activity? Otherwise, assume competes with existing building stock.

Methodology and Findings: Geographic Analysis

KANSAS CITY INCENTIVES STUDY

CONTEXT

Incentives impact the area or neighborhood where a project is located. The geographic analysis sought to answer questions about where and to what degree incentive programs were active. For this portion of the study, the team looked at three main areas:

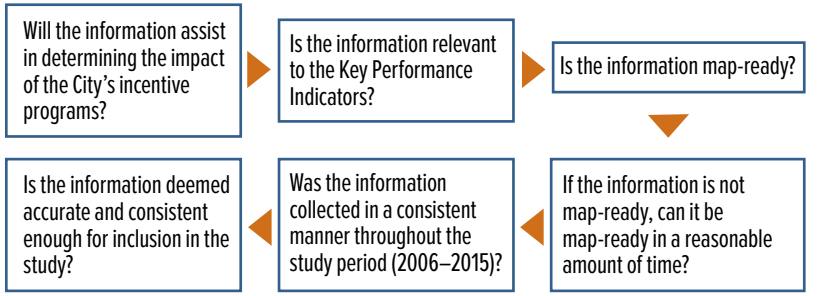
KEY PERFORMANCE INDICATORS

	MEASUREMENT
BLIGHT REMEDIATION *Where and when did blight-related service calls take place?*	Blight-related service calls
INVESTMENT ACTIVITY *Where and when did investment take place? Where and when was public revenue generated?*	Number of building permits Value of building permits Value of infrastructure projects Number of infrastructure projects Real property taxes paid
INCENTIVE PROGRAM IMPLEMENTATION *Where and when were incentive programs active?*	TIF incremental real property taxes paid Real property taxes abated

The goal of the geographic analysis was to collect key geographic data, unify the data into a central database, and observe the geographic patterns associated with incentive programs in the City from 2006 to 2015. The goal of the geographic component was not to determine the validity of the "but for" argument for individual projects, the impact on parcels immediately adjacent to incentivized projects, or the fiscal impact of projects on all taxing jurisdictions, but the goal was to add a geographic element to the project and heighten the understanding of the partial dimensions of variables and data used in this report.

By observing geographic patterns, the consulting team was able to draw conclusions about the distribution of incentive, construction, and service call activity. The consulting team adhered to the following process to determine which data were consistent with the study's scope and study period:

1. GEOGRAPHIC INFORMATION COLLECTION CHECKLIST



The term "map-ready", used above, refers to information that is associated with a specific location, and manipulation and analysis of the data via modern geographic software is possible. Completion of the Geographic Information Collection Checklist informed the team as to what datasets should be measured. Each measurement used in the geographic analysis are as follows:

Blight-Related Service Calls – The location of service calls and the associated data (types of service requests) were obtained from the 311 call center in the City. It was determined that a portion of the service calls would be used as a proxy for neighborhood physical blight in the geospatial section of this report. A proxy is a figure that can be used to represent the value of something in a calculation. The information obtained from the 311 call center does not represent a citywide analysis of blighting factors exactly as they are defined in the Missouri Revised Statutes, but the definition contained in the statute was used as a guide to eliminate non-blight-related service calls. The location of an insignificant number of service calls exhibited coordinates that were outside the city boundaries. It is likely that the locations of these calls were recorded in a manner inconsistent with the vast majority of the other service calls recorded by the 311 call center.

Building Permit (Count) – The location of building permits and the associated data (types of building permits) were obtained from the City Planning and Development Department. It was determined that the location of building permits would represent construction activity in the City. Only building permits associated with new construction or additions were used in this study. Permits associated with demolitions were dropped from the report.

Building Permit (Value) – The value of building permits and the associated data (types of building permits) were also obtained from the City Planning and Development Department. It was determined that the value of building permits would represent value of construction projects in the City.

Infrastructure Project (Count) – The location of infrastructure projects was obtained from the City Planning and Development Department. It was determined that the location of infrastructure projects would represent public investment in infrastructure assets in the City.

Infrastructure Project (Value) – The value of infrastructure projects was obtained from the City Planning and Development Department. It was determined that the value of infrastructure projects would represent the value of public investments in infrastructure assets in the City.

Real Property Taxes Paid, TIF Value, and Taxes Abated – The values for real property taxes paid, hereinafter referred to as "Taxes Paid", TIF incremental real property taxes paid, hereinafter referred to as "TIF Value", and real property taxes abated, hereinafter referred to as "Taxes Abated", were calculated using similar methods, described below. It was determined that Taxes Paid would represent real property tax-based public revenue in the City. Taxes Paid could also be considered to represent a return on investment from the perspective of all overlapping taxing jurisdictions, albeit an incomplete representation due to the fact that real property tax-based public revenue was tracked and not revenue associated with income, sales, utility, etc.

It was determined that TIF Value and Taxes Abated would represent the value of the investment made by all overlapping taxing jurisdictions, including the City, into incentivized projects and neighborhoods. TIF Value and Taxes Abated do not include the redirection, credit, or abatement of other types of public revenue such as income, sales, utility, etc., as part of the public investment made in incentive programs. The information came from several sources and it was received via several formats. The sources consulted included Platte, Clay, and Jackson County assessment offices, Jackson County's GIS department, and information from the Economic Development Corporation of Kansas City ("EDCKC").

Individual parcel taxable assessed value (net of incentive exemptions), levy codes and rates, and incremental and abated assessed value were obtained from Platte, Clay, and Jackson Counties. The formatting of this information included text files containing delimiter-separated values, Microsoft Excel ("Excel") spreadsheets, and Microsoft Access database tables. All of the information was converted into Excel spreadsheets before being converted to Esri GIS format. The study team worked with City staff to write cross-column equations in the spreadsheets to isolate taxable assessed value from incremental and abated assessed value.

The value of Taxes Paid was calculated with the intent of quantifying the share that each overlapping taxing jurisdiction received from each parcel during the study period, net of active incentives. Similarly, TIF Value and Taxes Abated were calculated with the intent of quantifying the share that each overlapping taxing jurisdiction invested into the programs. Each parcel's incentive-related and non-incentive-related assessed values were multiplied by its levy rate to determine the value associated with all overlapping taxing jurisdictions and not strictly the City's portion of the tax bill. A fictional scenario is provided to help illustrate the method by which TIF Value, Taxes Abated, and Taxes Paid were calculated. It is important to note the scenario includes one property over a period of ten years.

The following assumptions were made in the fictional scenario:

- The Original Assessed Value of the property in Year 1 was $200,000.
- In Year 2, 100%, 5-year real property tax abatement was granted to a business to help them expand and reimburse them for the cost of making improvements to their building. The sidewalks and parking lot serving the business are in poor condition and the poor condition of the roof presents a danger to customers.
- In Year 3, the construction was complete and the property was reassessed at an assessed value of $250,000. The Additional Assessed Value of $50,000 was not taxable until after Year 7.
- The tax assessor applied a property tax equal to $8 for every $100 in assessed value, or a levy rate of 0.08.

In Year 1:

$200,000 (Original Assessed Value)x 0.08 (Levy Rate) = $16,000 (Taxes Paid)

At the end of Year 1, the value of Taxes Paid was $16,000. The value of Taxes Abated was $0.00 because the abatement was not active until Year 2. The property was not reassessed until the end of Year 2 and the abatement began in Year 3.

In Year 3:

$200,000 (Original Assessed Value) x 0.08 (Levy Rate) = $16,000 (Taxes Paid)

$50,000 (Additional Assessed Value) x 0.08 (Levy Rate) = $4,000 (Taxes Abated)

At the end of Year 3, the value of Taxes Paid was $16,000. The value of Taxes Abated was $4,000

In Year 7:

$200,000 (Original Assessed Value) x 0.08 (Levy Rate) = $16,000 (Taxes Paid)

$50,000 (Additional Assessed Value) x 0.08 (Levy Rate) = $4,000 (Taxes Abated)

The total value of Taxes Paid from Year 3 to Year 7 was $80,000. The total value of Taxes Abated from Year 3 to Year 7 was $20,000. The total incentive received by the business over five years was $20,000. A similar method was used to calculate TIF value for parcels that received a TIF incentive.

In total, the consulting team processed and analyzed the following records related to the study's time period (2006–2015):

RECORDS ANALYZED FOR THE KANSAS CITY INCENTIVES STUDY

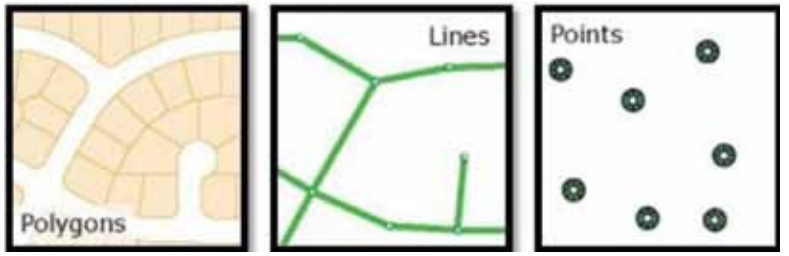
- **1,960,231 PARCEL RECORDS** and their assessed value, levy rate, location, and taxes paid
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records
- **REAL PROPERTY TAXES PAID** worth a combined **$3,900,000,000***
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **TIF INCREMENTAL REAL PROPERTY TAXES PAID** worth a combined **$288,000,000****
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **REAL PROPERTY TAXES ABATED** worth a combined **$252,000,000****
  SOURCE: Jackson, Clay, and Platte County tax parcel assessment records (based on historic parcel records)
- **26,879 BUILDING PERMITS** worth a combined value of **$6,029,111,170**
  SOURCE: City of Kansas City Planning and Development Department
- **2,479 INFRASTRUCTURE PROJECTS** worth a combined value of **$505,143,554**
  SOURCE: City of Kansas City Planning and Development Department
- **950,270 311/SERVICE CALLS**, of which **177,319** related to instances of neighborhood blight
  SOURCE: City of Kansas City 311 Call Center

*This figure represents the dollar amount as it would appear on a tax bill (assessed value, net of exemptions and abatements, multiplied by the levy rate). The amount includes taxes paid to all overlapping taxing jurisdictions.

**Similar to real property taxes paid, the figures for TIF incremental real property taxes paid and real property taxes abated represent the dollar amount associated with all overlapping taxing jurisdictions.

The consulting team employed several methods to address challenges presented by the data collected for the Kansas City Incentives Study. All of the data in the geographic analysis was aggregated into a grid index, or Master Grid, to enable the team to analyze data of various types (points, lines, and shapes) simultaneously. Generally, spatially referenced data comes in two forms: vector and raster. Vector data was utilized in this study. Vector data consists of three types: polygon, line, and points. Polygons are used to represent areas such as municipal boundaries, census tracts, and zip codes. Lines represent linear features such as roads, sidewalks, and alleys. Points are commonly used to represent discrete data such as intersections, place names, and service calls.[2]

The following figure shows the three types of vector data used in this study:



These data were carefully aggregated into the Master Grid. The process is explained in the following figure and description:

[2] ESRI 2018 online help/tutorials if further clarification of spatial ...

SAMPLE 1 SAMPLE 2 SAMPLE 3

Samples 1, 2, and 3 show building permits as points, infrastructure projects as lines, and underlying parcels as polygons. Sample 1 shows raw data in the City's downtown area. Sample 2 shows how parcels and blocks were grouped together to form larger Book and Page units, described below. Sample 3 shows building permits and infrastructure projects grouped together and codified based on the grid cell they fall within. The Book and Page or tax parcel information we also codified based on the grid cell they fall with.

Book and Page Units

After completing the Geographic Information Collection Checklist shown on page 65, the consulting team determined they were unable to obtain historic tax parcel polygons for years 2006 to 2015. The earliest parcel polygons available were from 2016. The team overcame the challenge of missing geographic information by extracting a portion of each parcel identification number, sometimes referred to as book and page digits. The

book and page digits refer to the physical map books and pages in which parcel information were recorded before parcel records were digitized. Some parcel identification numbers contain section, quarter, and parcel blocks instead of books and pages, but they serve similar purposes. Hereinafter, this study will refer to the extracted digits as Book and Page Digits.

Clay, Jackson, and Platte Counties each had slightly different parcel numbering systems, but they follow similar principles. Clay County's contained sixteen digits, Jackson County's contained seventeen digits, and Platte County's contained eighteen digits. The team extracted the following digits from each identification number in every year from 2006 to 2015:

Clay County (16 digits)	XXXXXX-XXXXXXXXXX
Jackson County (17 digits)	XXXXX-XXXXXXXXXXX
Platte County (18 digits)	XXXX-XXXXX-XXXXXXXXX

The team used tax parcel polygons from 2016 to create book and page blocks, hereinafter referred to as Book and Page Units, based on the aforementioned Book and Page Digit extraction process. The Book and Page Unit map, Figure 1, shows the result of these changes. After altering the parcel polygons, the values associated with Taxes Paid, TIF Value, and Taxes Abated, as described previously, were summarized and added to the Book and Page Units.

The decision to aggregate parcels, and their KPI values, into Book and Page Units was necessary to be able to view information on a map and perform geographic analyses. The Book and Page Unit conversion process informed the study team's decision to aggregate all study information into a grid index. Figure 2 displays the Master Grid (note the similarity in appearance to the map of Book and Page Units):

FIGURE 1

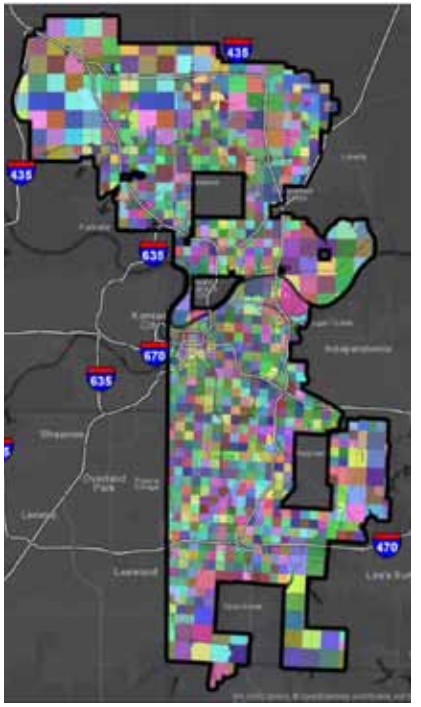
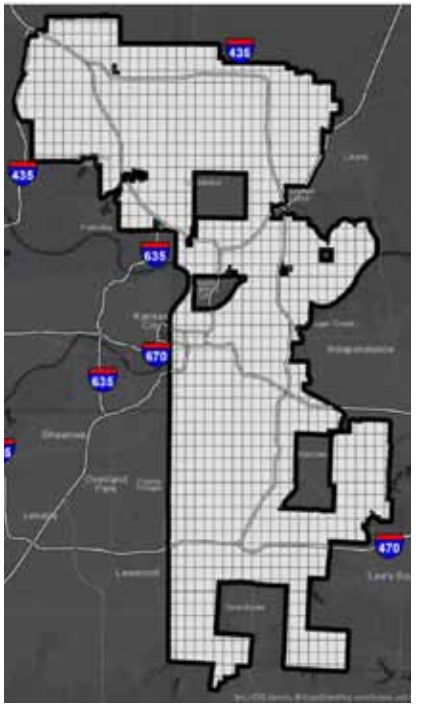
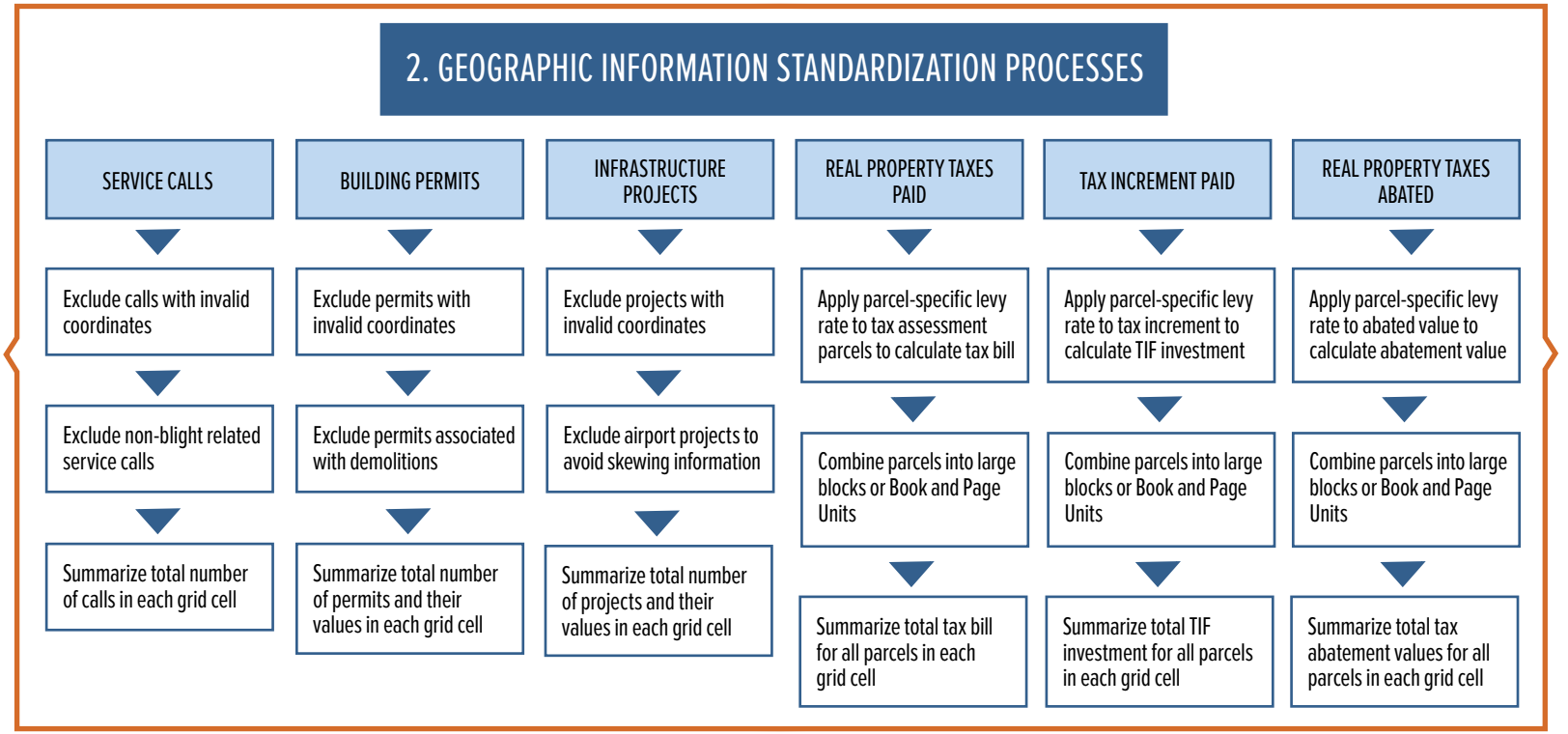


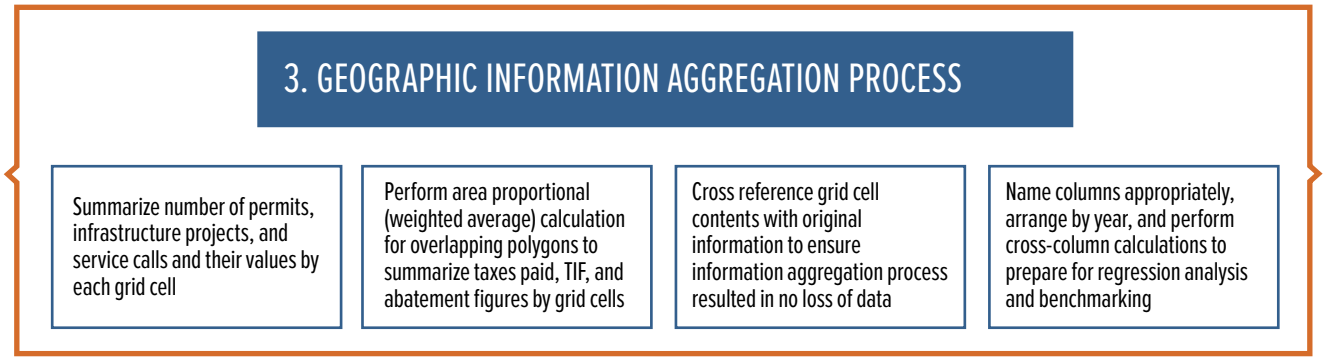
FIGURE 2



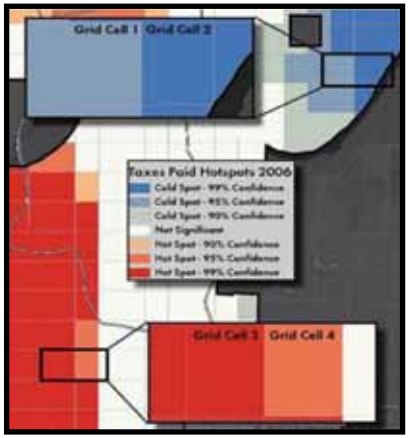
The consulting team adhered to the following process to standardize KPI values and move them into the Master Grid:



The following process provides a broader view of the aggregation process:



Individual grid cells contain information about each KPI measurement for every year of the study period. As an example, the zoomed portion of the "Taxes Paid Hot Spots 2006" map, to the right, shows four grid cells and the information they represent.



The shaded areas represent cold and hot spots, explained in great detail later in this section, and the color of the grid cells correspond to the legend in the larger map. Grids 1 and 2 are shades of blue; therefore, this part of the city represents a cold spot, or an area that does not contain a concentration of real property taxes paid in 2006. Grids 3 and 4 are shades of red; therefore, this part of the city represents a hot spot, or an area that contains a concentration of real property taxes paid in 2006.

Grid cells in the dense urban parts of Kansas City contain roughly twenty square blocks, whereas cells in more rural parts of the city only contain a single residential subdivision or a handful of buildings.[3]

[3] ESRI's Grid Index Features Tool was specifically employed, and the size of each cell is very similar to the Book and Page Units.

FINDINGS

After migrating all of the data collected for the Kansas City Incentives study in the Master Grid, the following trends were observed for each of the KPI measurements during the study period. These findings are displayed in both graphs and cluster maps.

FINDING: ***Property Taxes Paid Increased from 2006–2015***

With the exception of some stagnation during the Great Recession, and two noticeable dips in 2009 ($391 million) and 2013 ($383 million), Real Property Taxes Paid generally increased during the study period.

In terms of the real property tax component, TIF incremental taxes paid appears to have peaked in 2010 ($33 million). There has been a slight decline in overall value from 2010 to 2015 ($29 million).

FIGURE 41: REAL PROPERTY TAXES PAID, 2006–2015

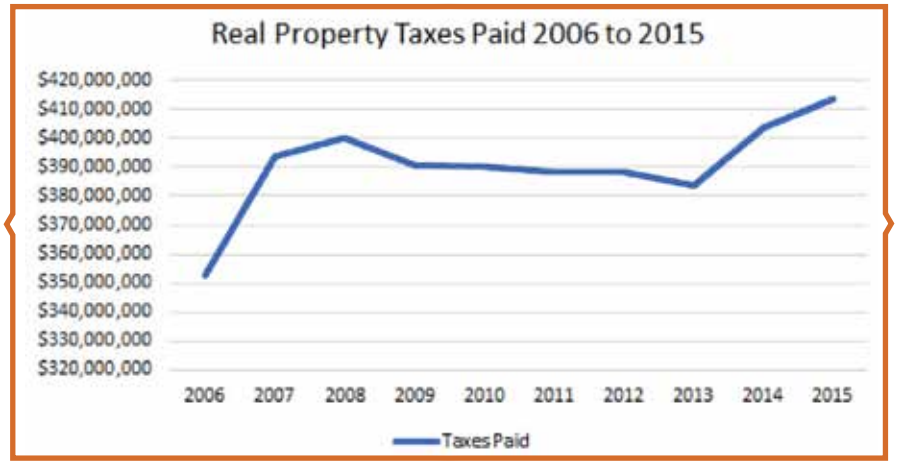
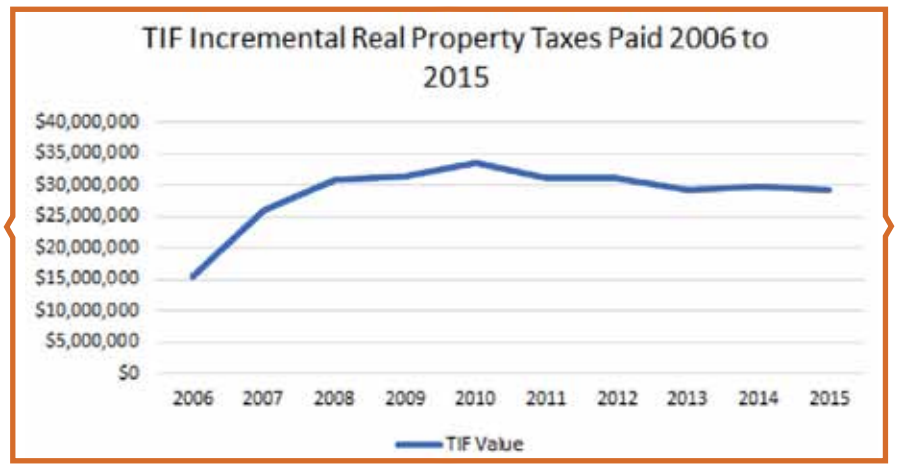


FIGURE 42: TIF INCREMENTAL REAL PROPERTY TAXES PAID, 2006–2015

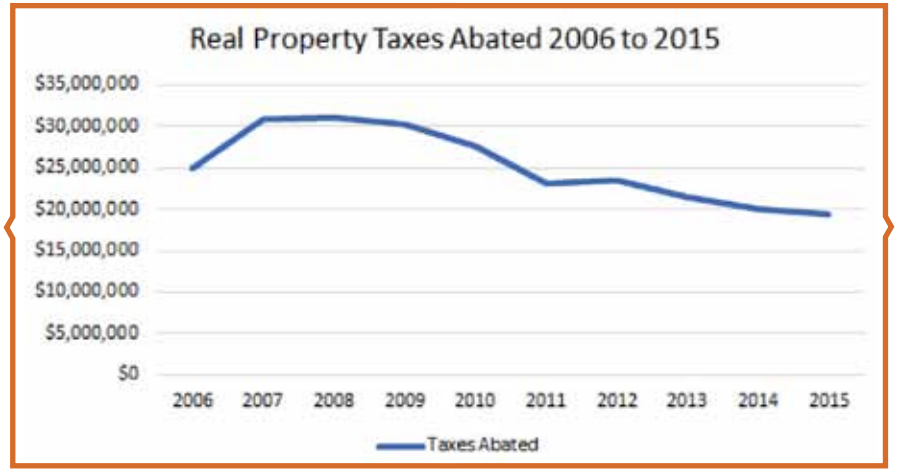


FINDING: ***Property Taxes Abated Declined from 2006–2015***

The annual amount of real property taxes abated appears to have declined steadily during the study period. The decline started in 2008 ($31 million) and continued through the end of the study period ($19 million in 2015).

It is clear that building activity in the city, in terms of the number of permits, declined significantly during the Great Recession. The number of building permits in 2009 (2,185) was nearly half what it was in 2006 (4,116). There was a steady recovery through 2015 (2,849).

FIGURE 43: REAL PROPERTY TAXES ABATED, 2006–2015



FINDING: ***Value of Building Permits Recovered to Pre-Recession Levels by 2015***

FIGURE 44: NUMBER OF BUILDING PERMITS, 2006–2015

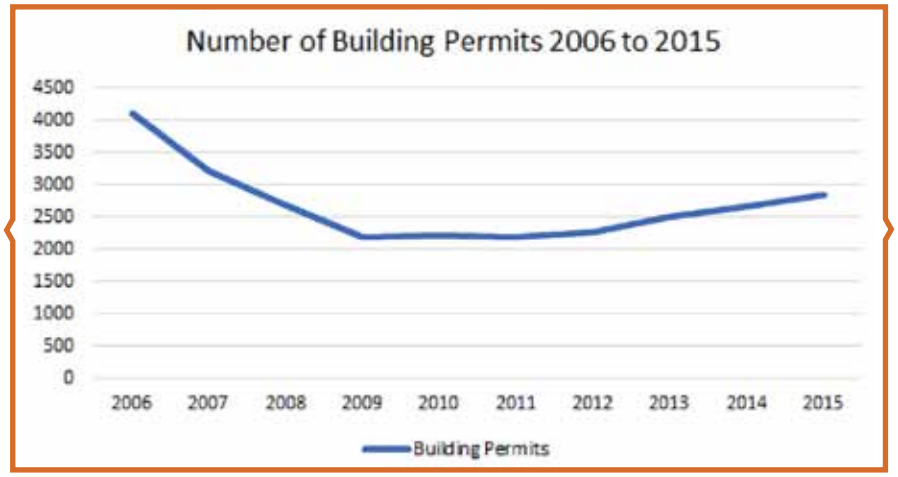
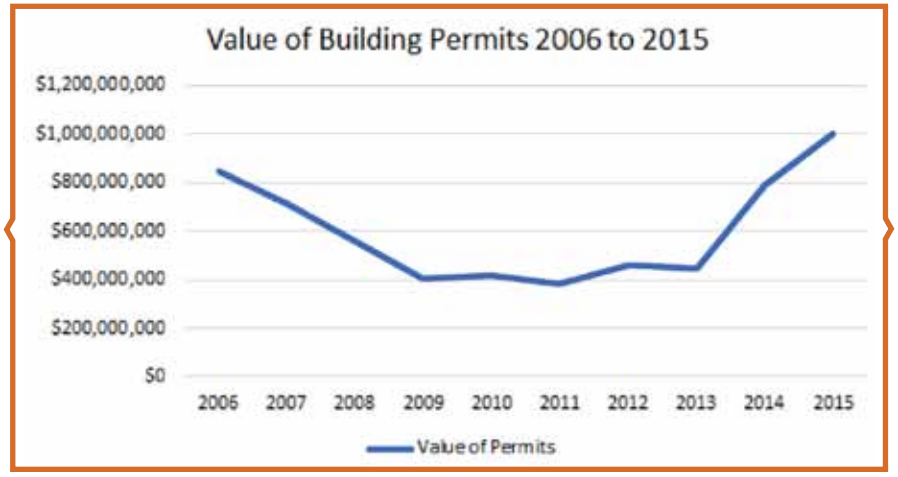


FIGURE 45: VALUE OF BUILDING PERMITS, 2006–2015

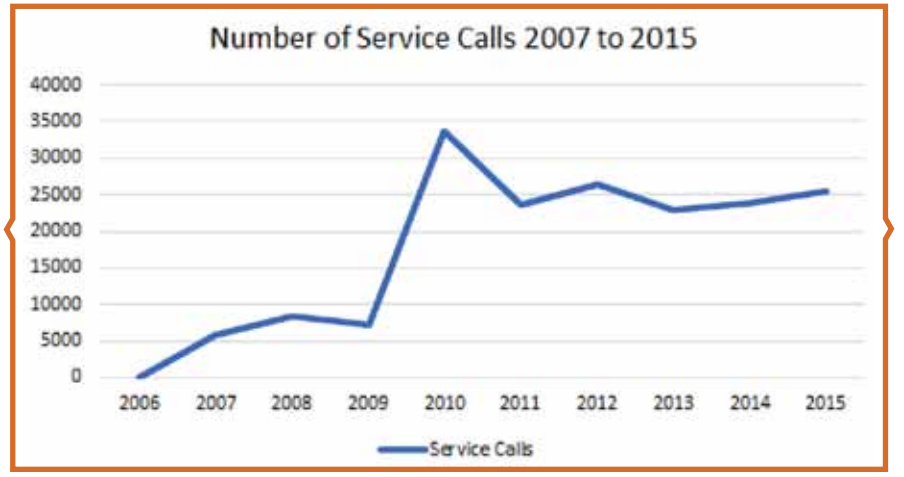


Again, building activity in the city, in terms of permit value, declined significantly during the Great Recession. The two noticeable low points were in 2009 ($404 million) and 2011 ($385 million), less than half the value in 2006 ($848 million). Overall, value recovered from 2013 ($446 million) to 2015 ($1 billion).

The Service Call dataset did not entirely cover the study period. It is unclear why blight-related Service Calls peaked in 2010 (33,621), but the number of calls was steady from 2011 (23,633) to 2015 (25,533).

The number of infrastructure projects declined from 2006 (247) to 2010 (205). The number of projects was steady during the Great Recession and then climbed from 2012 (208) to 2014 (365). The trendline appears to have mirrored the decline and recovery of other KPI measurements during the Great Recession, but the change was less dramatic.

FIGURE 46: NUMBER OF SERVICE CALLS, 2007–2015



The value of infrastructure projects declined from 2008 ($69 million) to 2011 ($38 million). The lowest point was in 2011, similar to the lowest points for the number of building permits (2011) and value of building permits (2011).

FIGURE 47: NUMBER OF INFRASTRUCTURE PROJECTS, 2006–2015

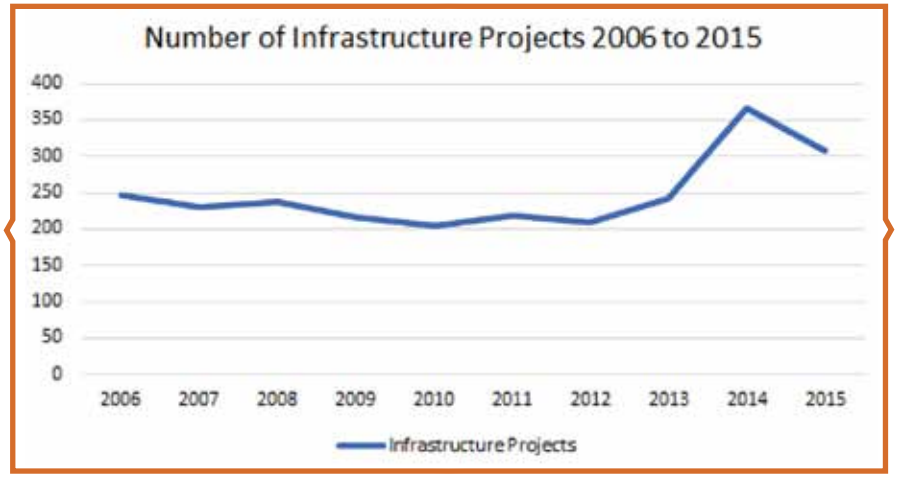
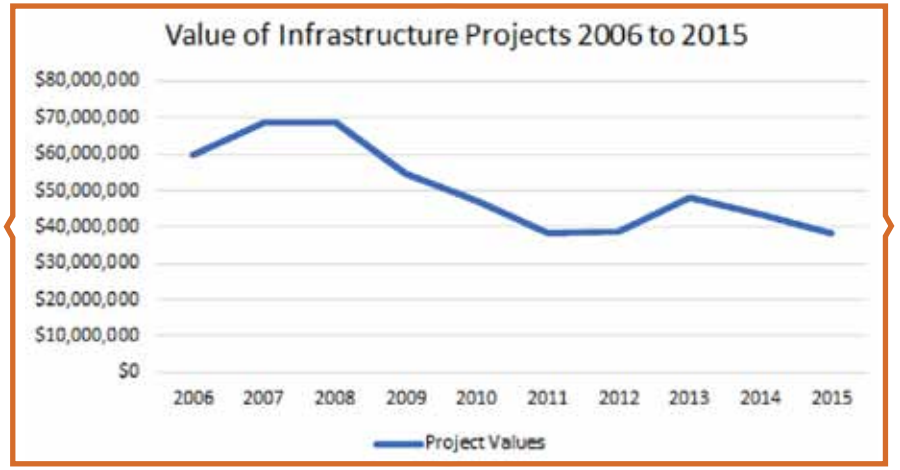


FIGURE 48: VALUE OF INFRASTRUCTURE PROJECTS, 2006–2015



CLUSTER MAPS

Cluster maps were generated to evaluate clustering activity in the study area. Using ESRI Geographic Information System ("GIS") software, the consulting team observed significant clustering, both hot and cold. The Optimized Hot Spot Analysis tool in the Esri software is a way to analyze points and create a map indicating areas of significant hot and cold spots using the Getis-Ord Gi* statistic.[4] The tool identifies spatial clusters of high values and low values.[5] For example, an area is a hot spot of blight-related service calls if several grid cells located near one another contain high values related to service call. In the following cluster maps, areas of hot spot activity will be denoted with increasing shades of red, while areas of cold spot activity will be denoted with increasing shades of blue.

Data was divided into annual time slices to allow for comparison not only between KPIs, but also within a single KPI over time. In the case of the former, where multiple significant hot or cold spots occur in the same location, conclusions about the combined KPIs in a clustering area can be made. For example, if there were a significant TIF Value hot spot that occurred in the same place that also had a significant Infrastructure Project hot spot, the TIF area can be described as having a greater concentration of Infrastructure Projects as compared to other areas in the city and other TIF areas in the city that do not have high concentrations

of infrastructure projects. The clusters can describe the nature of one KPI in relation to the other cluster-mapped KPIs over time.

Furthermore, by dividing the data by year, clustering trends from one year to another can similarly be made within a KPI. For example, if Building Permits Count activity indicated a significant hot spot in the north and the hot spot disappeared a few years later, and a significant hot spot appeared in the south, the concentration cluster of Building Permit Count activity has relocated. Knowing which activities are clustering where in a city can provide interesting clues about how areas of a city are changing over time with respect to the KPIs.

The following series of cluster maps were generated:

CLUSTER MAPS OVERVIEW

MAPS	YEARS ANALYZED
TIF INCREMENTAL REAL PROPERTY TAXES PAID (TIF VALUE)	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
REAL PROPERTY TAXES ABATED (TAXES ABATED)	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
REAL PROPERTY TAXES PAID (TAXES PAID)	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
BUILDING PERMITS COUNT (NEW CONSTRUCTION AND ADDITIONS)	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
SERVICE CALLS (BLIGHT-RELATED)	2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
INFRASTRUCTURE PROJECTS COUNT	2006–2010, 2011–2015

The mapped KPIs are presented in the order that they appear in the list above. Text accompanies each KPI series of maps, which describes cluster map findings for that KPI. At the end of the cluster map section, broad findings from the cluster maps are discussed.

[4] The Optimized Hot Spot Analysis tool calculates the Getis-Ord Gi* statistic for each feature in a dataset. The resultant z-scores and p-values tell you where features with either high or low values cluster spatially. This tool works by looking at each feature within the context of neighboring features. A feature with a high value is interesting but may not be a statistically significant hot spot. To be a statistically significant hot spot, a feature will have a high value and be surrounded by other features with high values as well. The local sum for a feature and its neighbors is compared proportionally to the sum of all features; when the local sum is very different from the expected local sum, and when that difference is too large to be the result of random chance, a statistically significant z-score results. When the FDR correction is applied, statistical significance is adjusted to account for multiple testing and spatial dependency (Getting to Know ArcGISPro, 2016, ESRI Press).

[5] The Gi* statistic returned for each feature in the dataset is a z-score. For statistically significant positive z-scores, the larger the z-score is, the more intense the clustering of high values (hot spot). For statistically significant negative z-scores, the smaller the z-score is, the more intense the clustering of low values (cold spot) (Getting to Know ArcGISPro, 2016, ESRI Press).

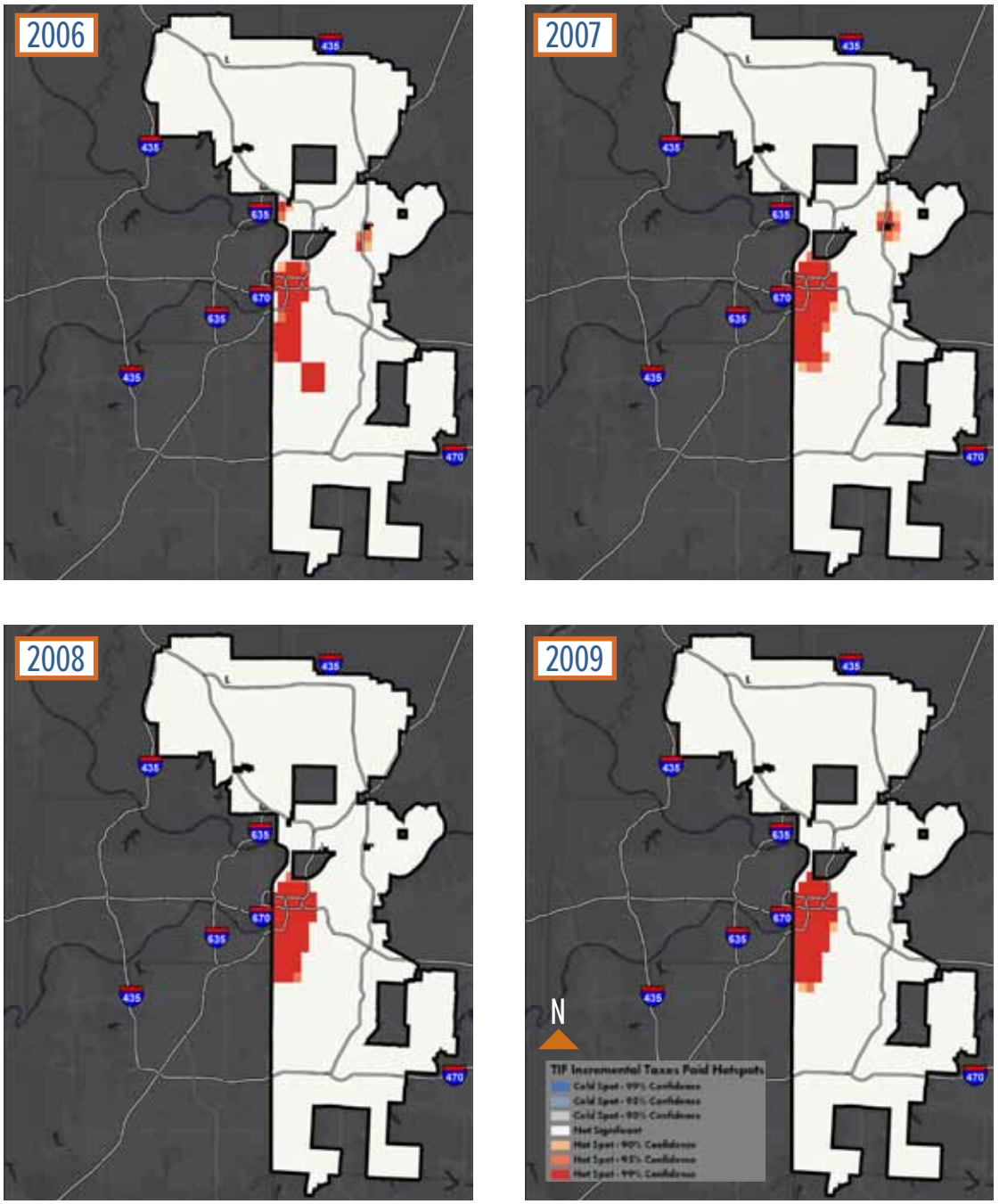
FINDING: ***TIF Real Property Values were primarily concentrated in the downtown area and scattered intermittently in a few other parts of the City***

In evaluating TIF Value shown in Figure 49, the maps show that the majority of real property activity occurred around downtown and the central business district. This KPI exhibited no cold spot activity. It is important to note the northern portion of the city has TIF activity, but this is not included in these maps. This is because these TIFs primarily utilized sales taxes and not real property taxes. As such, it can be expected that this clustering activity would be less pronounced around the downtown area if these other TIFs were included.

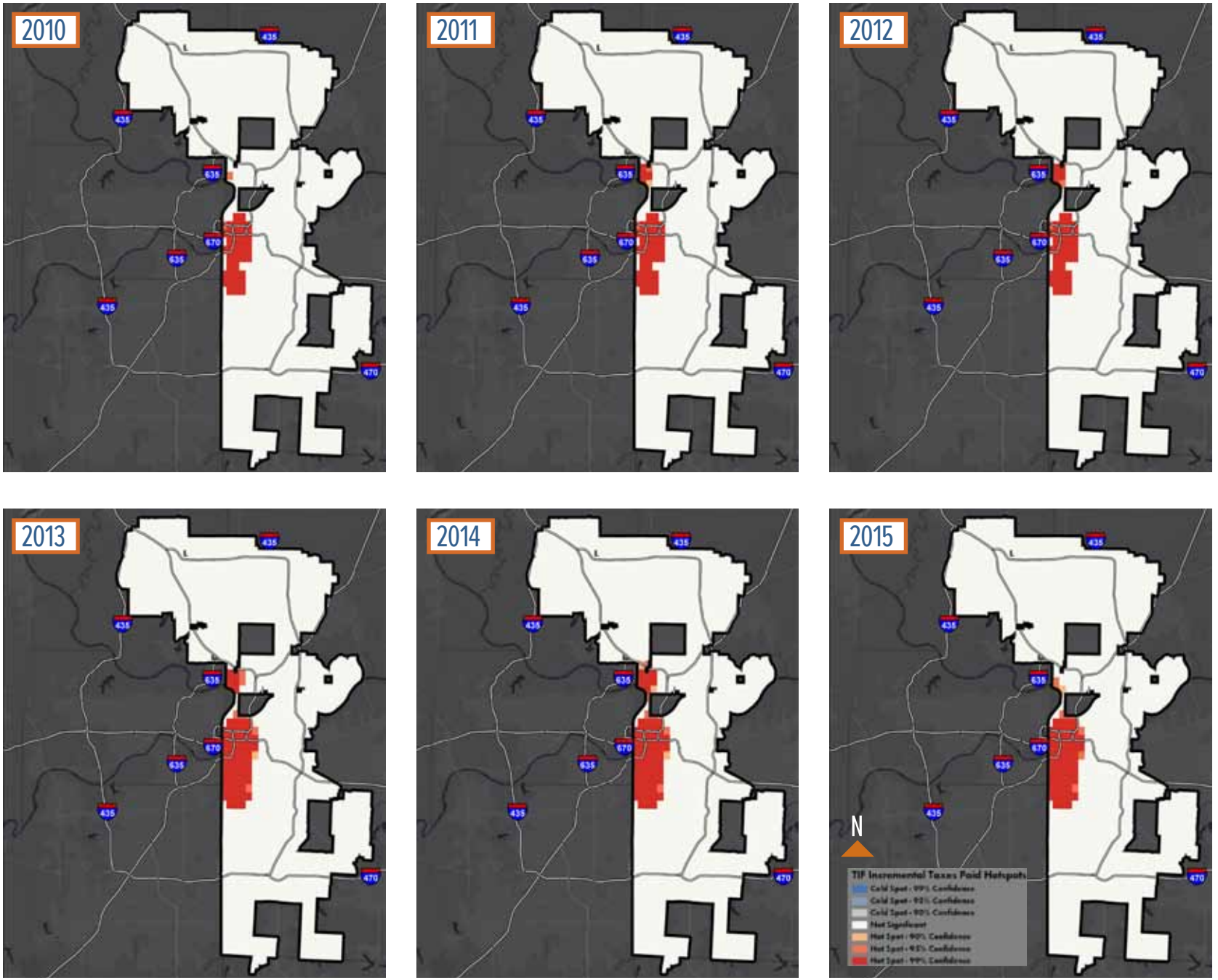
There are two exceptions to this central hot spot clustering concentration:

- In years 2006 and 2007, a cluster appears to the east of the main clusters
- In years 2006, 2010, 2011, 2012, 2013, a protrusion from the downtown TIF heading north can be seen. This northern protrusion also strengthens over time, indicating an expanding TIF influence in this area.

FIGURE 49: CLUSTER MAP SERIES 1 – TIF INCREMENTAL REAL PROPERTY TAXES PAID, 2006–2015



(CONTINUED) FIGURE 49: CLUSTER MAP SERIES 1 – TIF INCREMENTAL REAL PROPERTY TAXES PAID, 2006–2015

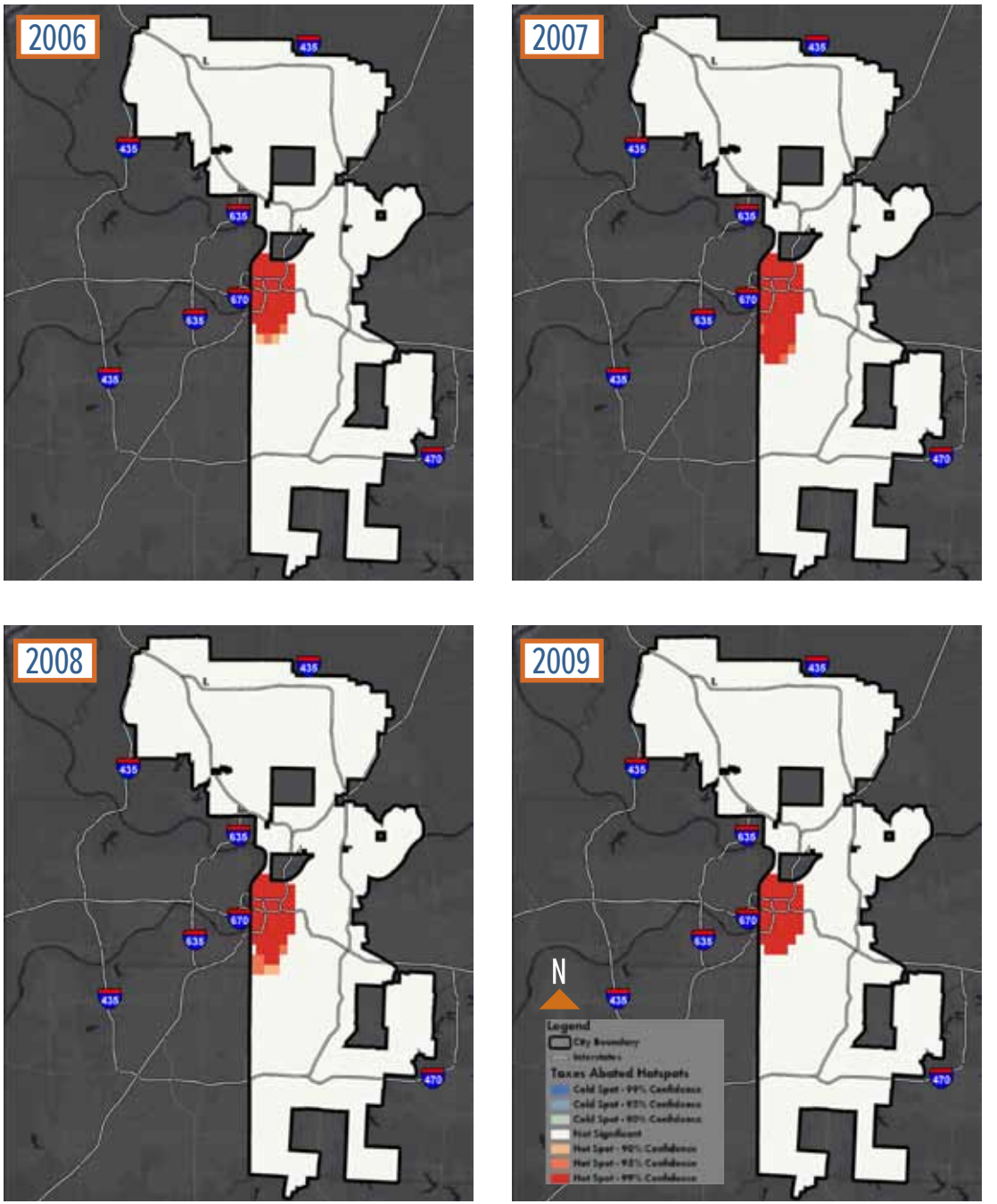


Overall, the absence of cold spots and sparse areas of high clustering concentrations indicate that the areas outside these sparse concentrations are homogenous in pattern. In other words, the white areas indicate that the study area has two TIF areas, one that intensely clusters and another, outside this downtown area, that exhibits a more even distribution of TIF activity.

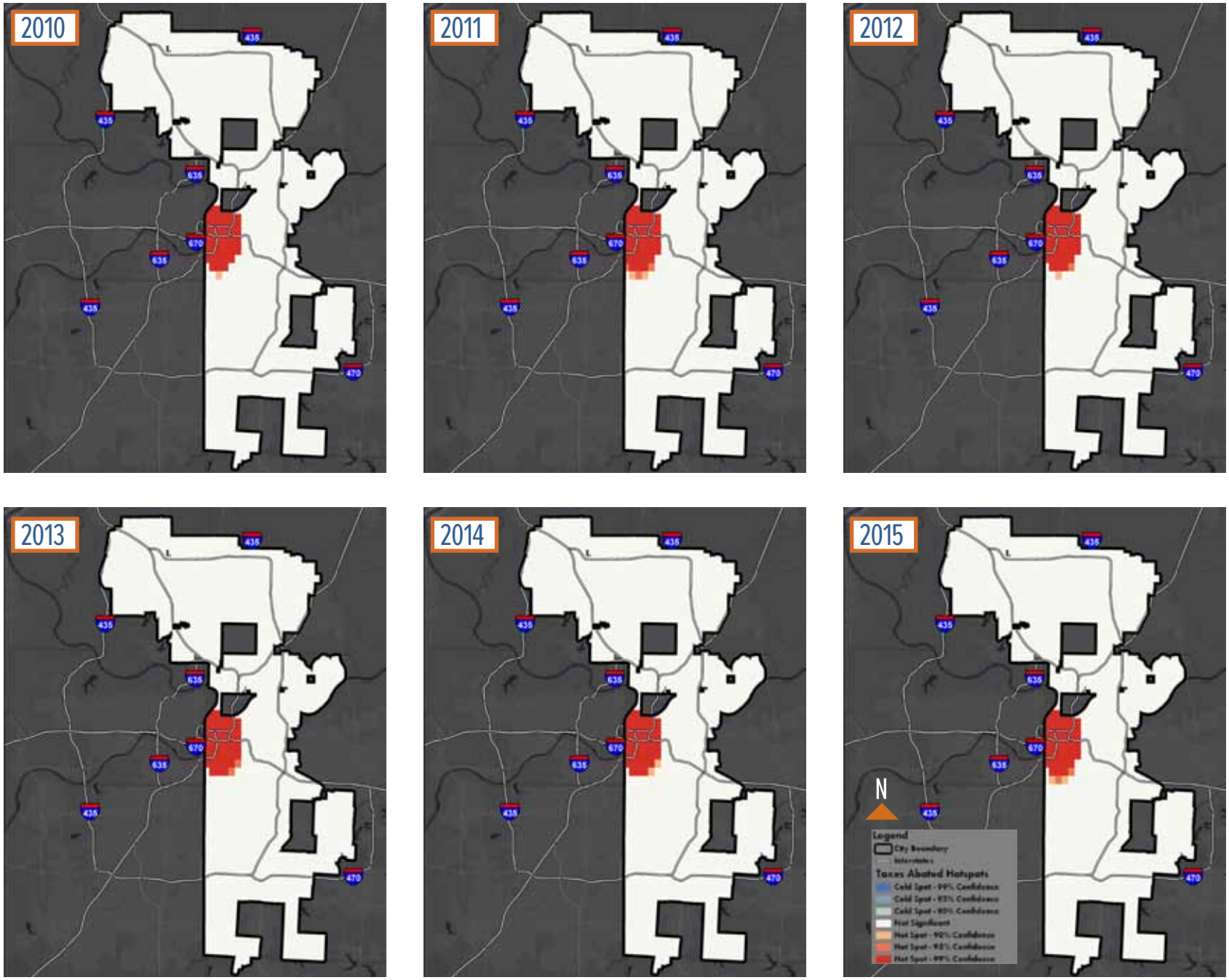
Taxes Abated in Figure 50 shows a similar pattern to TIF Value shown in Figure 49, with concentration primarily in the downtown area. There was no cold spot activity. The general shape of the Taxes Abated cluster did alter some, with southern protrusions evident in 2007, 2008, 2011, 2014 and 2015. Overall, the abatement hot spot clustering footprint is slightly growing.

Similar to what was found in the TIF maps shown in Figure 49, the absence of cold spots and sparse areas of high clustering concentrations indicate that the areas outside these sparse concentrations are homogenous in pattern (meaning they lack hot and cold clusters). In other words, the white areas indicate that the study area has a relatively even distribution of Taxes Abated activity outside of these high cluster areas.

FIGURE 50: CLUSTER MAP SERIES 2 – REAL PROPERTY TAXES ABATED, 2006–2015



(CONTINUED) FIGURE 50: CLUSTER MAP SERIES 2 – REAL PROPERTY TAXES ABATED, 2006–2015

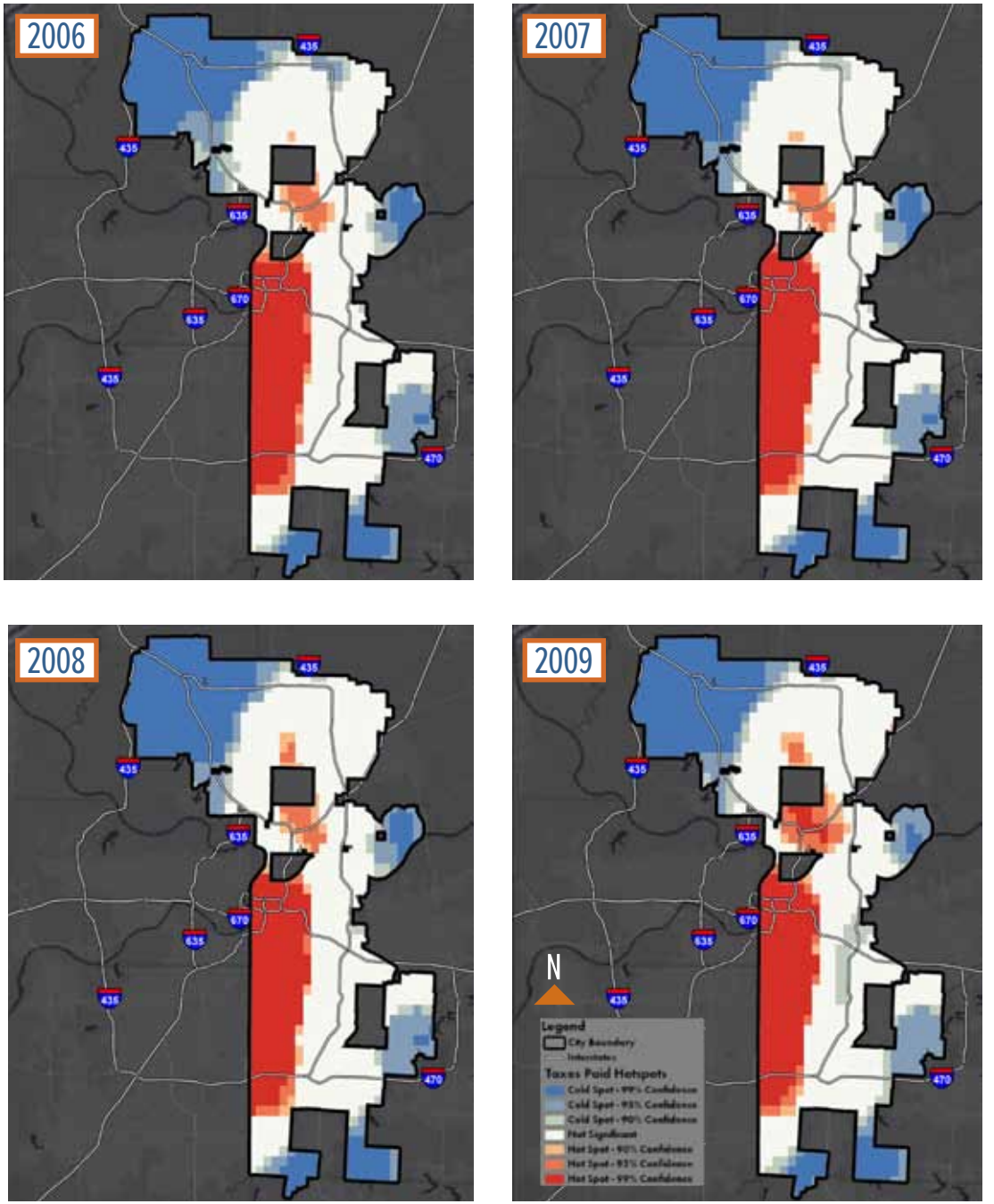


The cluster maps in the Real Property Taxes Paid series shown in Figure 51 exhibited the greatest range of clustering activity, not only in terms of hot and cold spots, but also in terms of coverage over the KC study area. The reduction in white area and inclusion of blue and red areas indicate a more polarized distribution than other KPIs in the study. In general, the trend indicates hot spot clustering as a more centralized phenomenon in the study area, and cold spot clustering as a more peripheral phenomenon.

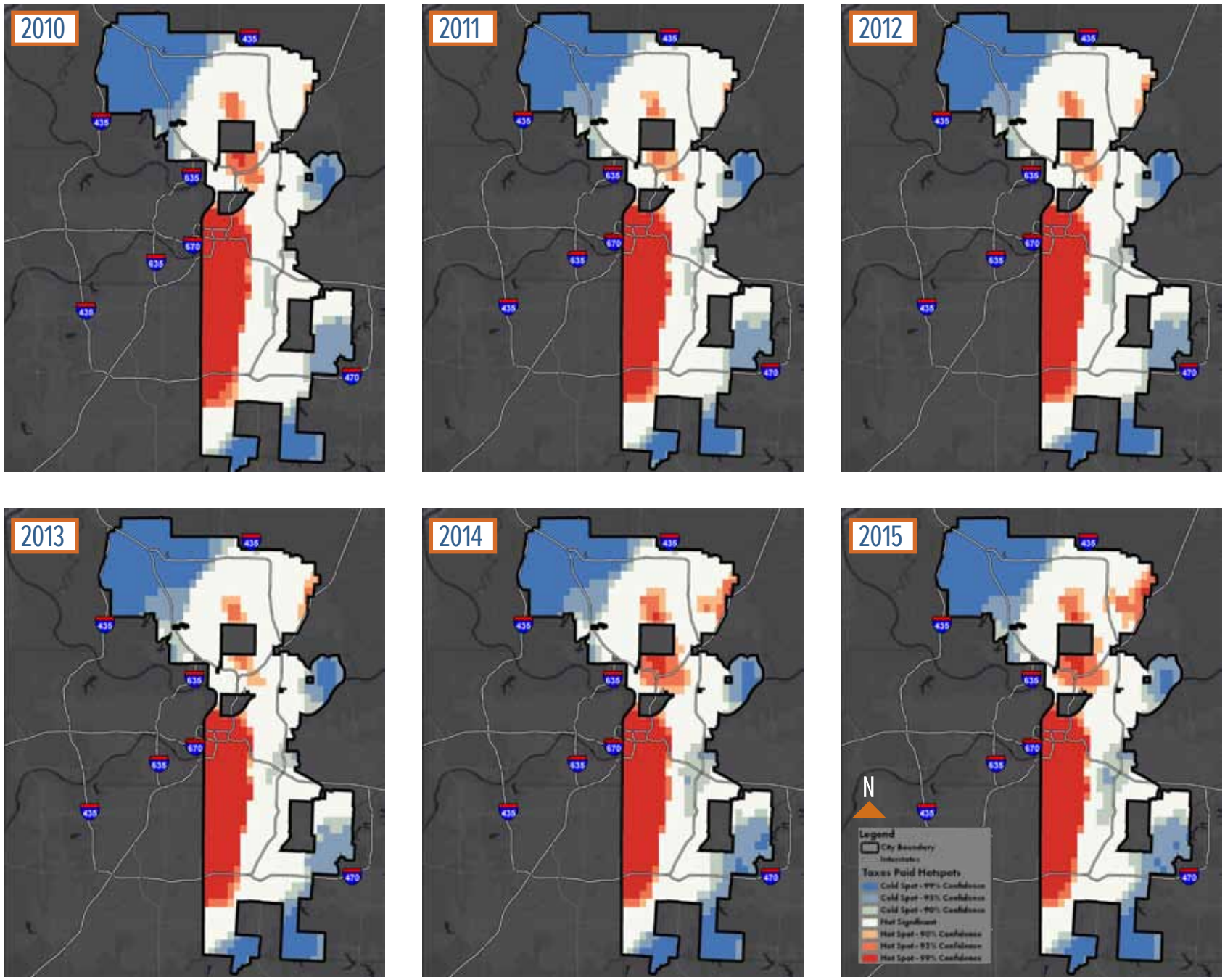
The clustering shapes and strengths do alter from year to year, and the hot spot clustering in the north and north east of the study area indicate an increase in real property taxes paid in these areas over time. When taken together with the building permit and value maps, which show low value but high permit counts for these northern areas, a trend of increasing development becomes apparent.

Another area to note is a cold spot located to the east of the downtown. This cold spot area is not only strengthening, as evidenced from the increasing shades of blue over time, but also growing in size (compare 2009, when the cold spot first appears, to 2015, where it is larger with darker shades of blue).

FIGURE 51: CLUSTER MAP SERIES 3 – REAL PROPERTY TAXES PAID, 2006–2015



(CONTINUED) FIGURE 51: CLUSTER MAP SERIES 3 – REAL PROPERTY TAXES PAID, 2006–2015



FINDING: ***Building Permit Activities are Concentrated in Downtown and Trending to the North***

Building permit activity shown in Figure 52 indicated the presence of no cold spot clustering activity, only hot spot activity. Overall, the cluster maps indicate several prevalent trends:

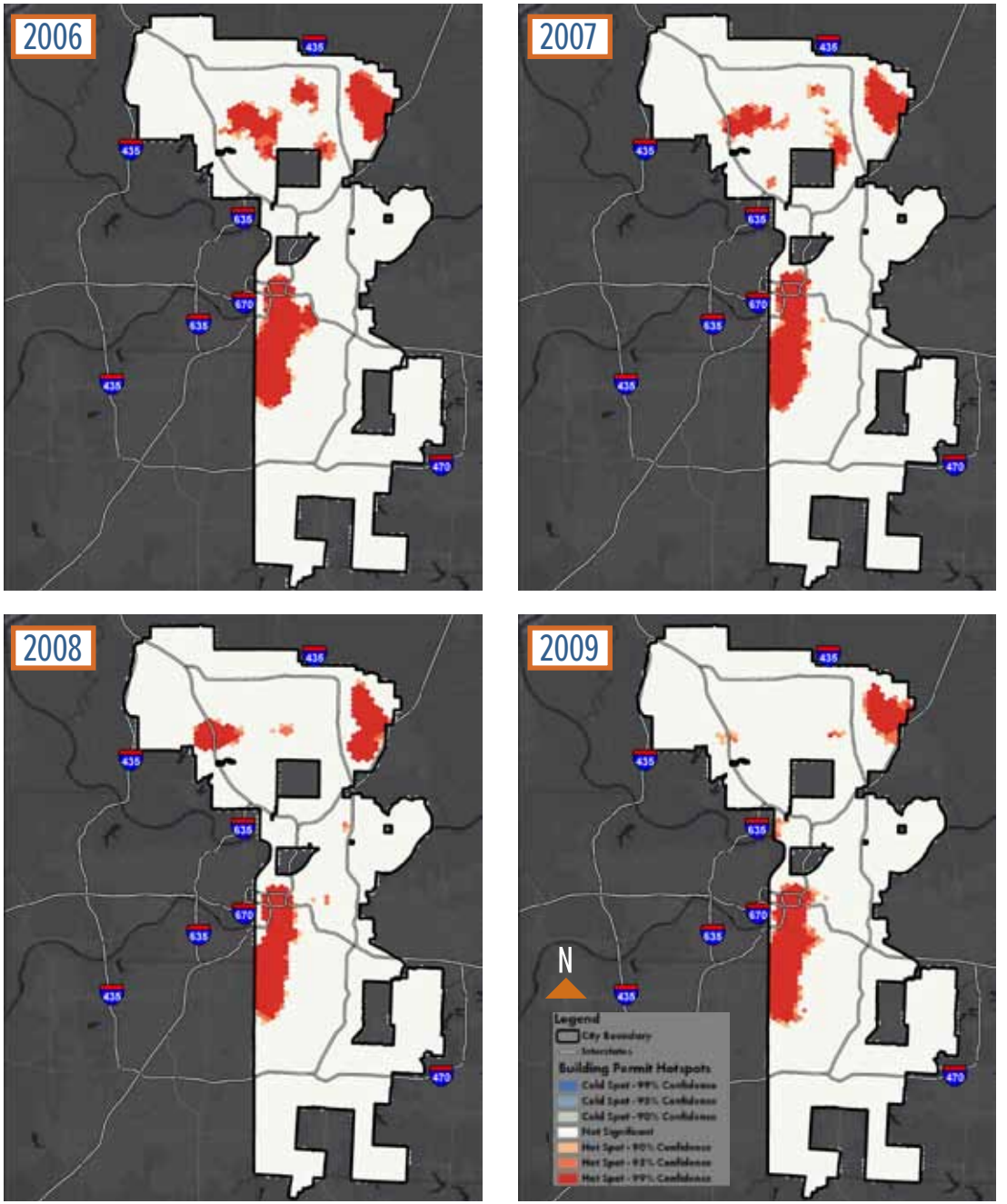
Concentrated and prominent hot spot clustering activity of building permits occurs around the downtown area and remains throughout all of the building permit maps, indicating a prominent role that the downtown plays in investment.

A trend of northward activity throughout the study years indicates that the northern portion of the city is experiencing clustering groups of building permits over the study period.

The building permit cluster maps indicate nominal clustering activity in the southern portion of the study area, suggesting uneven development occurring in the study area.

Hot spot activity was very pronounced, with most clusters reporting at the >99% confidence interval. The Building Permits Value exhibited no cold spot

FIGURE 52: CLUSTER MAP SERIES 4 – BUILDING PERMITS (NEW CONSTRUCTION AND ADDITIONS)



// FIGURE 52: CLUSTER MAP SERIES 4 – BUILDING PERMITS (NEW CONSTRUCTION AND ADDITIONS)

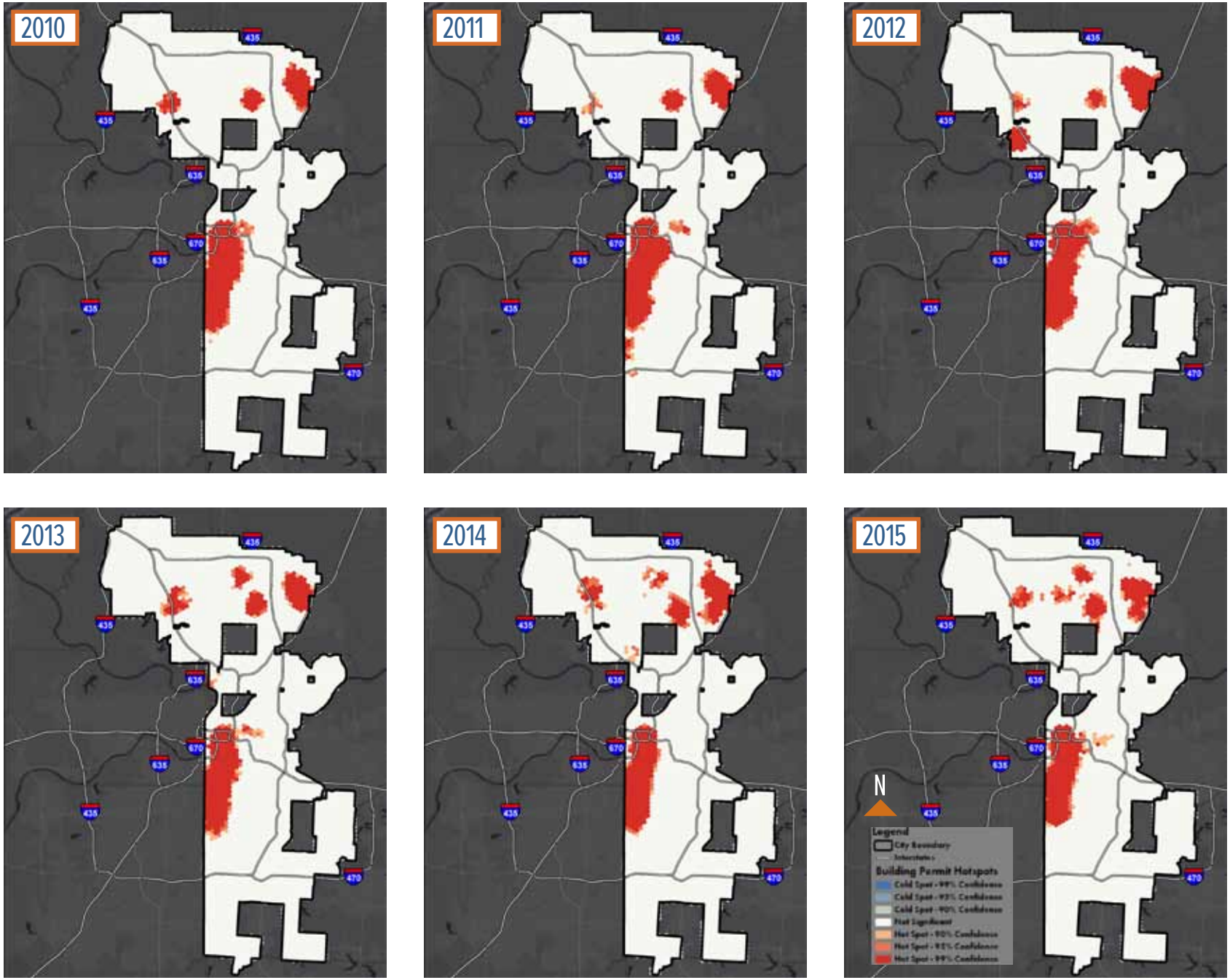
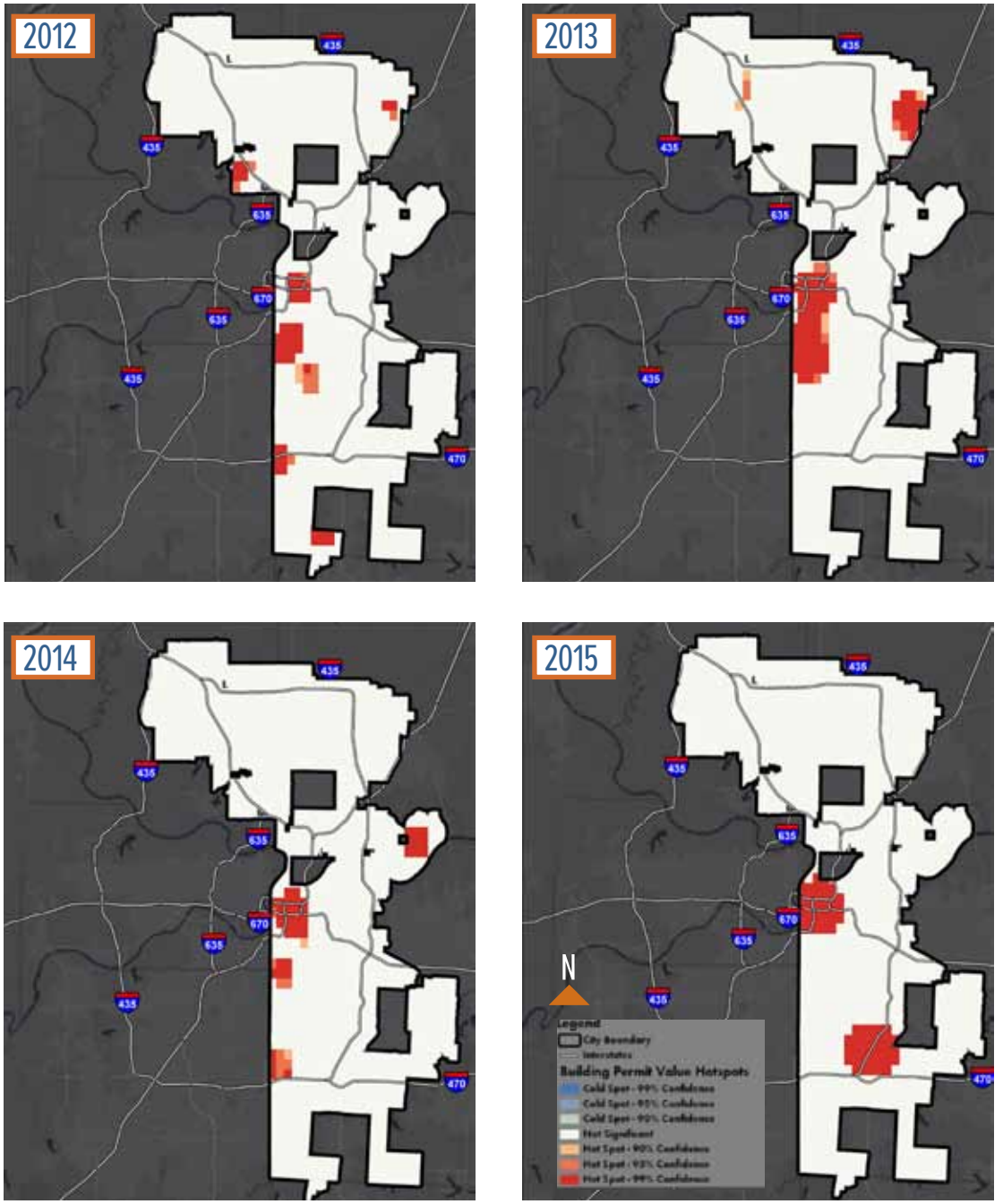


FIGURE 53: CLUSTER MAP SERIES 5 – BUILDING PERMIT VALUE (NEW CONSTRUCTION AND ADDITIONS)

(CONTINUED) FIGURE 53: CLUSTER MAP SERIES 5 – BUILDING PERMIT VALUE (NEW CONSTRUCTION AND ADDITIONS)



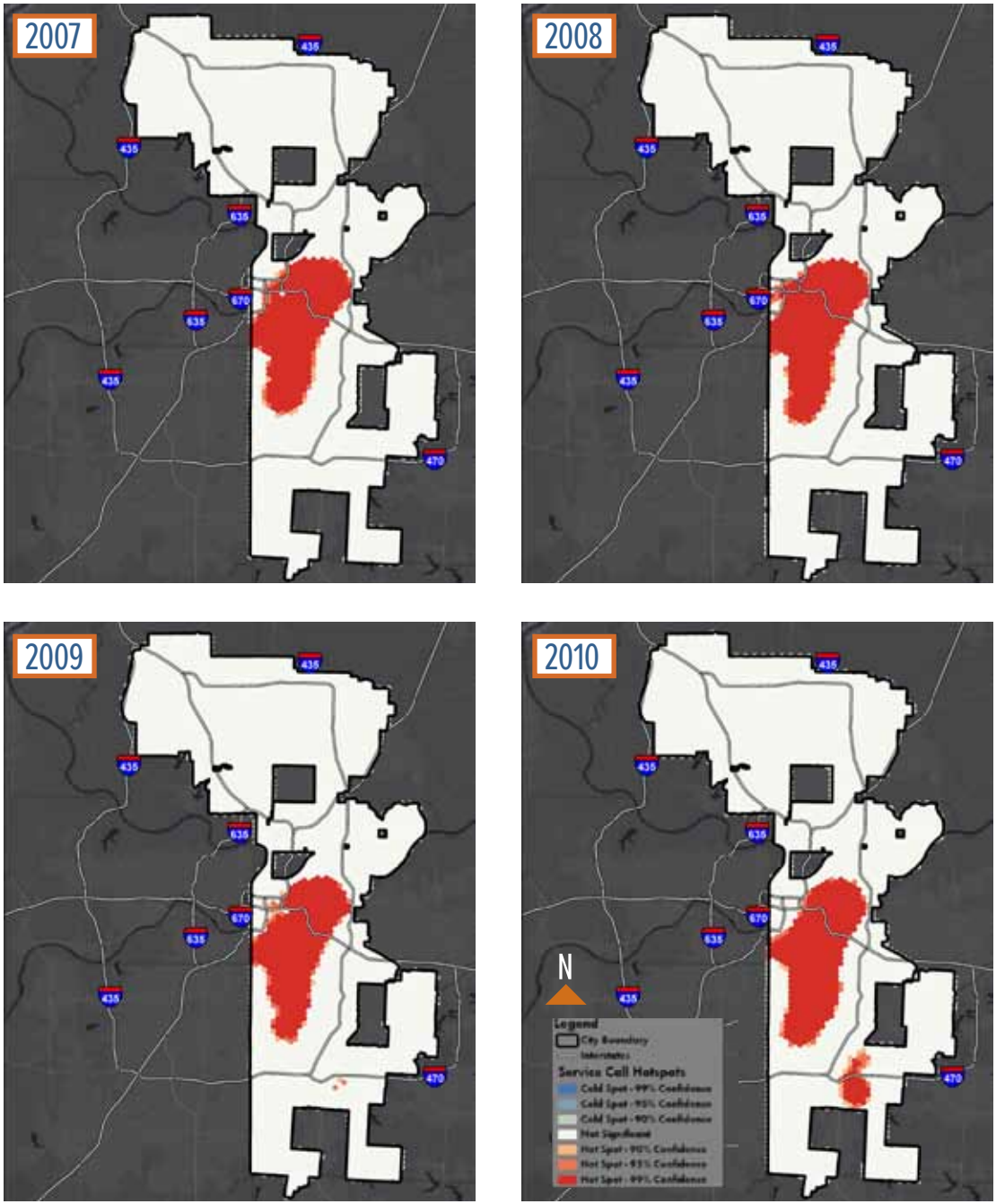
activity. Additionally, the patterns of these clusters varied from year to year, indicating a random placement of high clustering activity throughout the study area. However, there is one southernmost cluster which appears in 2011, which is unusually pronounced in comparison to the other mapped years, indicating the installation of a high-value project in this area. In general, these maps indicate that high-value building activities are located throughout the study area.

Service Calls shown in Figure 54 exhibited weak (90% confidence interval) cold spot clustering and tended to locate around the periphery of the study area. Hot spot activity was generally at the >99% confidence interval throughout all the Service Call maps. The hot spot clustering activity initially exhibited a centrally-located concentration of clustering. As time passed, two additional clusters began to emerge:

- One started in the south, as seen in the 2009 map.
- A second cluster started in the north, as seen in the 2013 map.

Both of these hot spot clusters grew in size over time, further indicating an entrenchment of these two new Service Call hot spots in the city. It is important to note that data for 2006 was not available for this KPI.

FIGURE 54: CLUSTER MAP SERIES 6 – SERVICE CALLS (BLIGHT-RELATED)



(CONTINUED) FIGURE 54: CLUSTER MAP SERIES 6 – SERVICE CALLS (BLIGHT-RELATED)

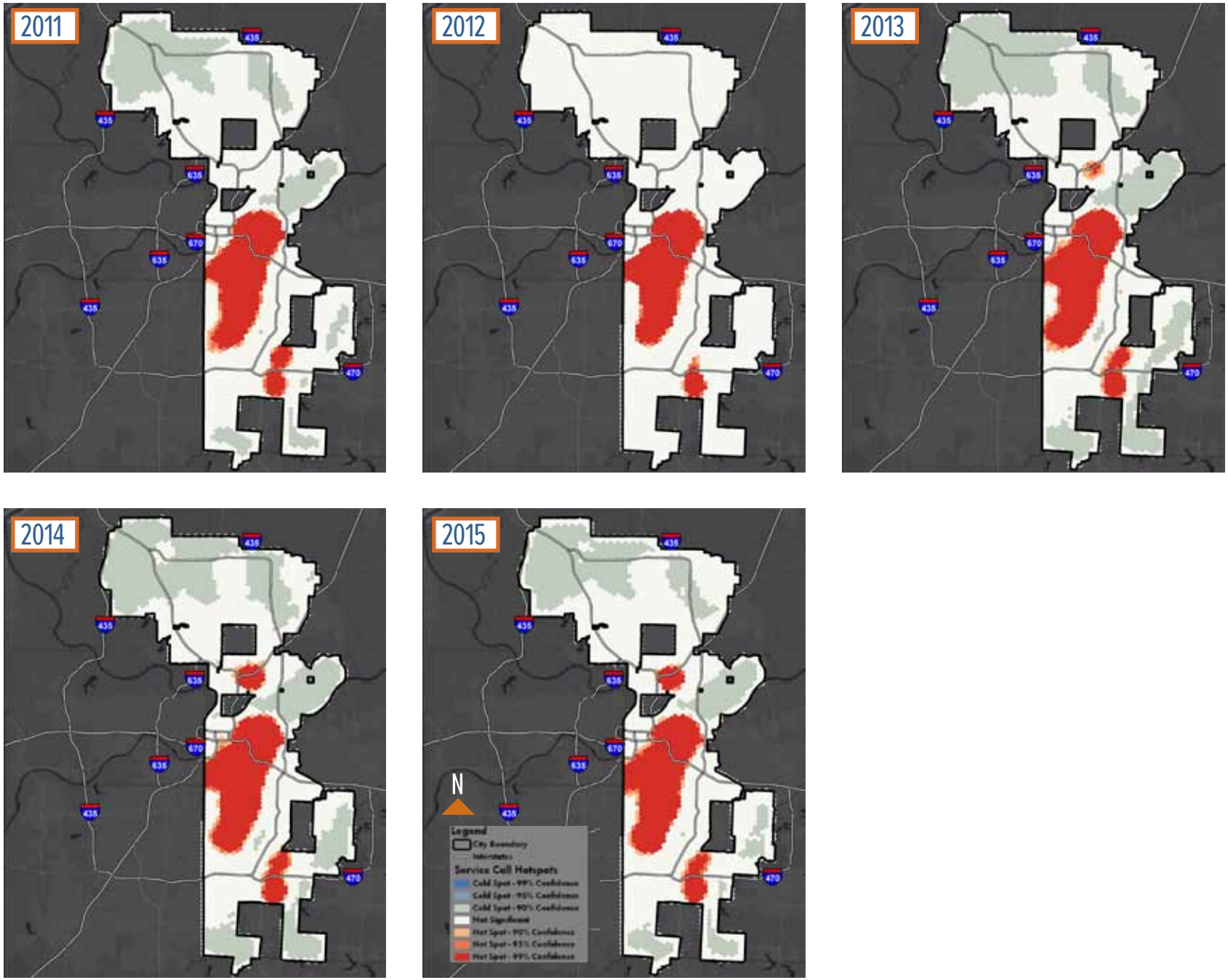
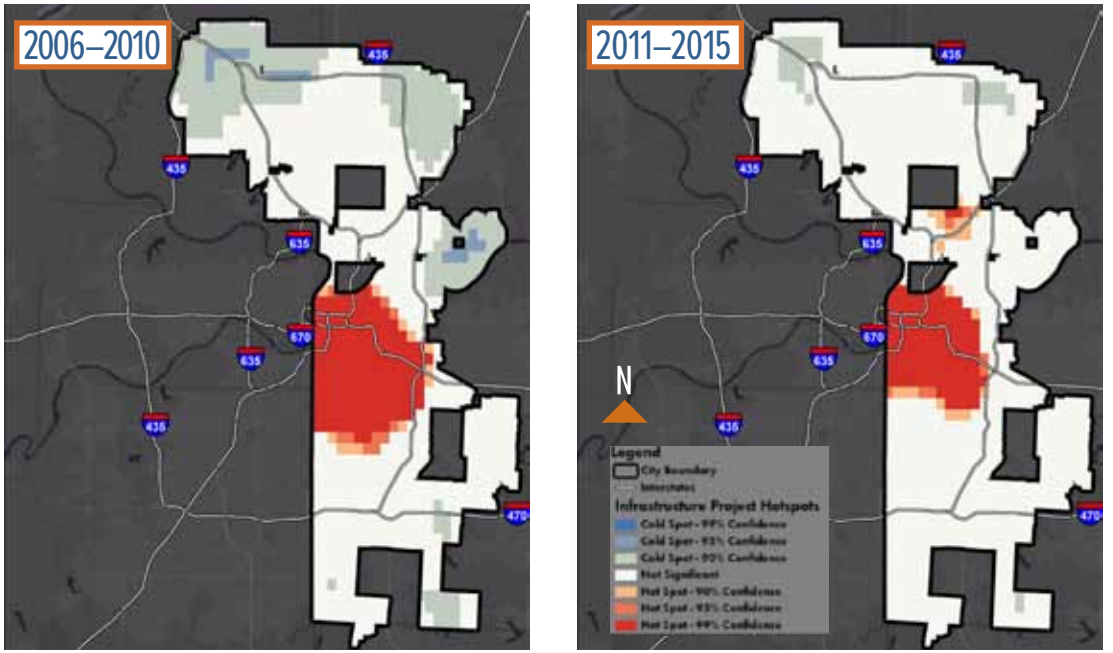


FIGURE 55: CLUSTER MAP SERIES 7 – INFRASTRUCTURE PROJECTS



Cluster maps of the Infrastructure Projects count exhibited the second greatest range of clustering activity among all maps. The cold spots in the 2006–2010 map were significant and faded in significance by the 2011–2015 map. Additionally, the footprint of the cold spot activity contracted. The largest centrally-located cluster of hot spot activity contracted over time, and in the 2011–2015 map, an additional hot spot can be seen to the north of the large hot spot cluster. When taken together, the maps indicate a progression from greater concentrations of clustering activity to lesser concentrations of clustering activity, which indicate a trend towards more uniformly distributed infrastructure project investment over the KC study area.

OVERALL FINDINGS

The maps had the following distributions of cold and hot spot activity:

Cold Spots

- Cold spot clusters were present in 3 variables: Service Calls, Infrastructure Projects Count, and Taxes Paid.
- Significant cold spot clusters at the >95% level were present in 2 variables: Infrastructure Projects Count and Taxes Paid.

Hot Spots

- Hot spot clusters were present in all the variables.
- Statistically significant hot spot clusters at the >95% confidence level were present in all the variables.

When comparing hot spots to cold spots, the cluster maps indicate a tendency for variables to exhibit hot spot clustering (instead of cold spot clustering) in the study area throughout all years and variables.

The variables also exhibit a pattern of polarization around the downtown area, with the downtown area causing pattern alteration throughout all of the maps. This indicates what one might expect with the strong effect of the presence of a sizeable downtown on KPIs relating to the urban environment. In this way, a generalization can be made of TIFs: those that locate downtown will have different degrees of KPI interaction than TIFs that locate outside of the downtown area. The cluster maps suggest that TIFs in the city may be better understood if downtown area ones – which experience greater hot spot clustering activity in all KPIs – should be compared separately from the non-downtown located TIFs, particularly since these downtown TIFs have different degrees of variable effects interacting with them.

TIF Value and Taxes Abated showed concentrations in the downtown area. Taxes Paid showed concentrations in the downtown area and intermittently in other parts of the city, particularly in the North. Building Permits Count was similarly concentrated in the downtown area and intermittently in other parts of the city, particularly in the North. Building Permits Value exhibited concentrations throughout the city particularly around various high-value projects.

Infrastructure Projects Count showed concentrations in the downtown area, with an even distribution throughout the rest of the city. Service Calls were concentrated centrally with a few more concentrations emerging over time.

CONCLUSION

Overall, there was a strong connection between the location of incentivized projects and high-value, high-tax generating parts of the City. There was a weak connection between incentivized projects and blight-related service calls. This indicates that areas that contained a high volume of service calls did not attract the same level of incentivized investment as areas with a low volume of service

calls. Also, the areas that contained a high volume of service calls experienced less building activity than areas that contained a low volume of calls.

Based on the cluster maps, the primary concentrations of real property taxes paid were in the downtown area, south of downtown, and several areas north of the city center. It is clear that the variation in real property taxes paid throughout the city is great. This is due to the wide variation in property value throughout the City. Concentrations of tax generation north of the city center were located around residential and commercial developments near major highway and interstate exits. Concentrations of building permit activity and value occurred in the downtown area, the area south of downtown, with isolated occurrences in developing areas. Although, overall building activity decreased dramatically during the Great Recession, it has nearly returned to pre-recession levels. Concentrations of building permits indicate areas that attracted private investment during the study period.

Infrastructure projects, large and small, occurred infrequently in comparison to building permits, blight-related service calls, and incentivized investment. The projects were dispersed throughout the city's neighborhoods and rural areas with the largest concentration in the downtown area. Evidence suggests that blight-related service calls were highly concentrated in the central part of the city and were largely absent in the downtown and the newer, northern and southern parts of the city. As expected, the calls occurred in areas with concentrations of buildings and residents, but they were not evenly distributed throughout populated parts of the city, as is indicated by the cluster maps. This indicates that some parts of the urban area were impacted more by blight-related calls than others.

The value of property and the cost of projects in the downtown was higher than in many other parts of the city; therefore, the dollar value associated with TIF and abatement incentives were likely to be higher in the downtown than areas with lower values. Concentrations of TIF investment occurred in the downtown and south of downtown. Also, small pockets of concentrated investment were spread throughout the rest of the city. Similarly, the primary concentration of real property tax abatement occurred in the downtown and south of downtown. Some smaller abatements were located in the northern half of the city, but nothing on the scale of the abatement found in and around the downtown.

Systems and Procedures for Managing Incentive Programs

KANSAS CITY INCENTIVES STUDY

An important component of the Kansas City Incentives Study is to evaluate the processes by which the City and its partners evaluate, approve and monitor economic incentives. This section outlines the current incentives management processes that the consulting team evaluated during the study period. Further sections provide takeaways for the City to consider as it looks at ways to increase transparency and accountability in their economic incentive programs.

The consulting team assessed the key incentive programs and then developed a measuring tool to determine their effectiveness. The data and findings outlined in the Economic Impact and Geographic Analysis sections demonstrate the performance of the incentives programs during the study period. The Systems and Procedures section was completed in the context of foundational policy and programmatic reports that have guided the City's efforts at economic development. This section is informed by how the City measures and documents outcomes related to the overall AdvanceKC strategy, along with other key policy goals.

A primary objective of this section is to contribute protocols that will improve the transparency and accountability of the City's incentive programs. More specifically, suggested protocols for data collection, performance reporting, and public reporting and outreach will be considered. Each of these management protocols emphasizes obtaining and sharing information on economic and community benefits related to incentivized activity. Each can play an important role in enhancing transparency and accountability across Kansas City's incentive programs.

CONTEXT

In order to evaluate the systems and procedures for managing incentives programs and to produce key takeaways for transparency and accountability, the consulting team was led by Business Development Advisors and benefited from input from staff at the City and the Economic Development Corporation throughout the project. The City and EDCKC provided flowcharts and process summaries prepared in 2008 and 2016 for these incentive programs. Additional flow charts that appear in the report were provided in February 2018. The flow charts generally begin with project interest or application and conclude with project or plan approval, but some conclude with a reference to annual reports or project monitoring.

The consulting team also reviewed incentive program forms, report documents, and incentive program policies and procedures from both the City and EDCKC. Some of these items were provided to the team for review, and others were obtained directly from City or EDCKC websites between November 2016 and April 2017. Based on these documents, meetings, conversations, and the consulting team's experience managing incentives for transparency and accountability, a set of draft protocols have been developed for the City's consideration regarding data collection, management, and reporting activities.

ASSESSING INCENTIVE EFFECTIVENESS

Incentives should be used to accomplish community objectives – not just "win" a business relocation deal or complete a real estate transaction, although these activities are important to achieving broader community objectives. Reporting on transactions does not indicate whether incentives have been effective at achieving a community's economic development objectives. However, determining the actual (as opposed to expected) outcomes and effectiveness of incentive programs is not easy. Economic development programs across the country are stepping up their efforts to assess how well their incentive programs are working in order to be more accountable to citizens and elected officials. Still, "post-award evaluation poses daunting technical, management and political challenges.[6]" A recent report examining whether states even conduct evaluations of their tax incentive programs found that states "have made progress in gathering evidence on the results of their economic development tax incentives," but "all states still have room to improve.[7]"

Cities and other local forms of government are also striving to improve their understanding of how well their incentive programs work. St. Louis, Cincinnati, Columbus and Chicago are four Midwestern cities that have recently completed studies of their economic development incentive programs. Philadelphia has proposed conducting an incentives evaluation. Kansas City staff and the consulting team have held discussions with a half-dozen other interested cities that are determining how to proceed with analyses or evaluations.

While this is a welcome trend, in most places there remain significant challenges to conducting useful and high-quality evaluations. To name a few that have been encountered when conducting work in similar communities:

- Programs often lack clear goals or purpose statements, making evaluations of expected outcomes difficult because those expected outcomes have not been defined.
- While program rules often stay the same, economic development strategies are constantly evolving. Strategy language tends to be broad and expansive – meaning it can be difficult to match up what a program can actually accomplish with broader expectations.
- Many programs were set up with a focus on rules compliance and a transaction orientation, rather than monitoring and reporting on outcomes over time. Accordingly, it is very common to find a lack of good data tracking the results of incentivized projects.
- And, finally, there are serious methodological challenges associated with incentives evaluation – with timing of results relative to the investment and causality as just two examples.

[6] Harpel, Ellen, "Cost-Benefit Analysis of Investment Incentives," in *Rethinking Investment Incentives. Trends and Policy Options*, ed. Ana Teresa-Lehmann, Perrine Toledano, Lise Johnson and Lisa Sachs (New York: Columbia University Press, 2016) 244.

[7] The Pew Charitable Trusts (2017) "How States Are Improving Tax Incentives for Jobs and Growth.

Program evaluations help advance a city's understanding of incentive effectiveness, but they are best when seen as one step in a process. Studies frequently find that insufficient data exist to answer all questions about program effectiveness, resulting in recommendations to improve reporting and data collection. Another common finding is that program goals are not clear or are not tied to city-wide economic objectives. As in Kansas City, incentive studies should be considered starting points for enhancing ongoing reporting and evaluation.

Key Takeaways

- Kansas City is among a select group of cities undertaking the challenging process of conducting a historical analysis of its incentive use and striving to improve program effectiveness.
- Establishing or improving performance metrics, enhancing monitoring or tracking methods, and clarifying the connection between incentive and strategy are typical recommendations.

MANAGING FOR TRANSPARENCY AND ACCOUNTABILITY

For this report, the consulting team used the framework developed by Smart Incentives and the Center for Regional Economic Competitiveness (Figure 56) as the starting point to analyze how systems and procedures currently in place in Kansas City can be improved to make these programs more transparent and accountable to citizens. The steps in this framework represent a structure and an ideal – not the reality – for most economic development organizations. It is a useful construct for identifying gaps in procedure, and it can be used to home in on a set of specific areas related to the three requested protocols.

Set Goals and Define Terms & Metrics: The Key Performance Indicators reflect (albeit imperfectly) the expected outcomes for Kansas City's economic development effort and common objectives across incentive programs. The KPIs are aligned with AdvanceKC and incentive program goals, and they have been defined to facilitate data collection and evaluation. The Scorecard already in use in Kansas City includes standard definitions of terms related to the KPIs that can be used for metrics on an ongoing basis.

Collect Data: Performance data should be collected from incentive recipients to ensure they are meeting the terms of their contracts and to enable project monitoring and reporting. Consistent, reliable data across programs going back for the ten-year time frame required for the study period was not available from incentive recipients, so for this report the consulting team relied heavily on other data sources, including:

- County and City government departments that collect or maintain relevant incentive program data for other purposes
- Federal agencies (such as the U.S. Census and Bureau of Labor Statistics)

FIGURE 56: STEPS FOR MANAGING INCENTIVES FOR TRANSPARENCY & ACCOUNTABILITY

These resources provide valuable economic, demographic or market-based information that supplement project-specific data and provide insight into outcomes of interest. All of these sources, plus information obtained from the incentive recipients, should be the foundation of the City's ongoing data collection effort.

Manage the Data: Collecting, organizing and accessing data from these varied sources requires a commitment of staff and resources to sustain data sharing relationships across multiple jurisdictions and government departments and to import data from disparate systems into one "data warehouse" that will enable program monitoring and reporting. Without this step, Kansas City will remain hamstrung in its ability to answer fundamental questions from citizens and leaders about incentive program activity and outcomes.

Garner Support, Create Schedule, Monitor & Evaluate, Draw Conclusions: These steps represent the ongoing work that must be done to build support for program reporting and evaluation, establish an agreed-upon schedule for reports, and devote the staff time to conduct the analysis and prepare appropriate reports that provide useful inputs to decision makers.

Report Results: The team's standard recommendation is to report regularly on transactions, prepare an annual report related to project milestones and compliance, and conduct full evaluations on a multi-year cycle. Given the level of citizen interest in incentives, the consulting team suggests that Kansas City build on several existing reporting platforms to share results from incentive programs with multiple audiences in a variety of formats.

Explain Impact and Communicate Widely: These steps also represent ongoing work to have the hard conversations about what has been learned from the data collection and data management processes. It will take time and effort from both the City and interested stakeholders to use the information generated from this process to raise the level of conversation around incentive outcomes so that it is data-driven and productive.

PROGRAM EVALUATIONS

Evaluations are substantially different from audits in that they tend to focus on policy outcomes rather than on financial management and implementation. Thus, the distinction is important, because the question legislators ask is whether the economic development incentives and tax credits are meeting their policy objectives, not whether or not they are managed correctly.

Finally, evaluations should be best viewed as an opportunity to improve programs, rather than a "gotcha" exercise with alternative uses for the expenditures already planned before the ink is dry on the reports. A presumption that all economic development programs are wasteful only strengthens the resolve of program managers and recipients alike to avoid evaluations altogether, rather than risk having good programs destroyed by bad evaluations.

Source: Excerpt from Dr. Catherine Renault, https://www.innovationpolicyworks.com/blog/2015/05/worst-case-having-good-programs-destroyed-by-bad-evaluations/

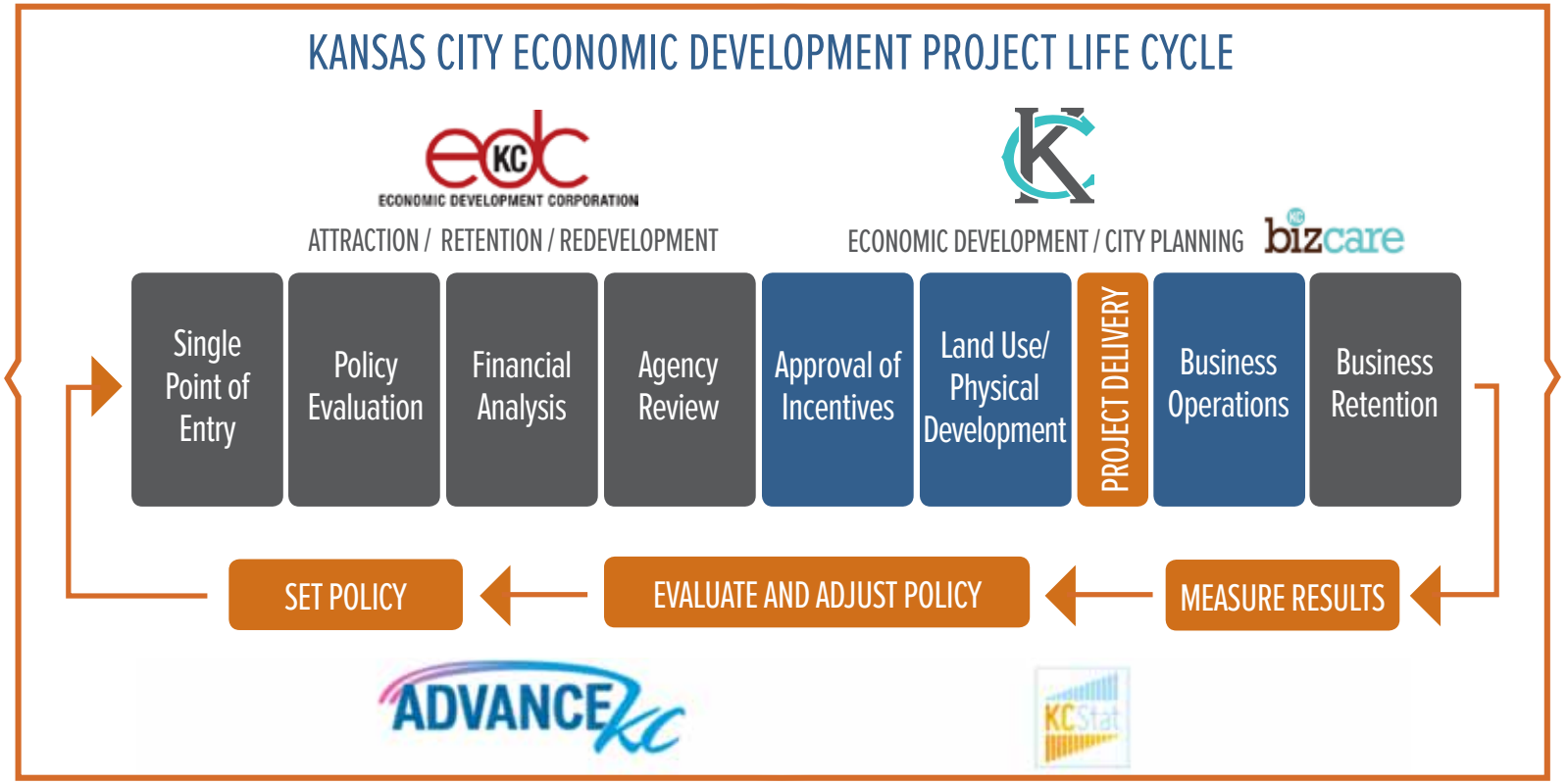
CURRENT PRACTICES (KANSAS CITY SYSTEMS AND PROCEDURES)

Kansas City has well-established processes in place guiding project application and approval for the incentive programs reviewed for this effort. For ease of presentation, this section uses the Advance KC Economic Development Project Life Cycle and Project Process Flow Charts for jobs-based projects and site-based projects.

Figure 57, which was provided by City staff, shows the high-level concept of how economic development projects are managed and how they are monitored and evaluated for alignment with Council policy objectives.

Figures 58 and 59, also provided by city staff, show the process from application through announcement for Jobs-Based and Site-Based projects.

FIGURE 57: CITY OF KANSAS CITY, MO ECONOMIC DEVELOPMENT PROJECT LIFE CYCLE



KANSAS CITY PROJECT PROCESS FLOW CHART – *JOBS-BASED PROJECT*

APPLICANTS: DEVELOPERS, BUSINESSES AND OTHER PROPONENTS

PROJECT INQUIRY RECEIVED BY BUSINESS DEVELOPMENT OFFICER

SINGLE POINT OF ENTRY AND ASSIGNED PROJECT MANAGER

INFORMATION GATHERING AND SHARING
(PIR, COMMUNITY IMPACT ASSESSMENT)

PROJECT EVALUATION AT EDC

MAYOR AND CITY COUNCIL DETERMINE PROJECT CRITERIA BASED ON THEIR PRIORITIES AND VISION FOR THE CITY.

1. Project overview by the EDC Project Evaluation Team: Representatives of the affected taxing jurisdictions shall be invited and their comments considered and stated in the staff report.
**Due to the time sensitivity of certain projects relating to job attraction/retention, it may be necessary to respond to requests for proposals prior to a typical project evaluation.*

2. Criteria review: determine to what degree the project merits public support based on an established criteria and incentives ranking system.

3. Analyze project application: determine the proper incentive tool on the basis of legal authority regardless of the merits of the project.

DEVELOPMENT INCENTIVES ELIGIBLE
(ZONE WORKS/EEZ, CH 100)

Standard local abatement proposal made by senior EDC staff
(Exceptions require authorization by the City Manager and Mayor's office.)

STATE INCENTIVES ELIGIBLE

Forward project information to MO DOD or MO Partnership

Receive State Proposal

SEND COMPLETED PROPOSAL, INCLUDING STATE INCENTIVES, TO THE CLIENT AND FOLLOW UP

CLIENT ACCEPTS PROPOSAL

CITY COUNCIL APPROVES OR REJECTS PROJECTS AND PLANS
(IF APPLICABLE PER STATUTE)

PROJECT ANNOUNCEMENT

FIGURE 58: CITY OF KANSAS CITY, MO PROJECT PROCESS FLOW CHART, JOBS-BASED PROJECT

KANSAS CITY PROJECT PROCESS FLOW CHART – *SITE-BASED PROJECT*

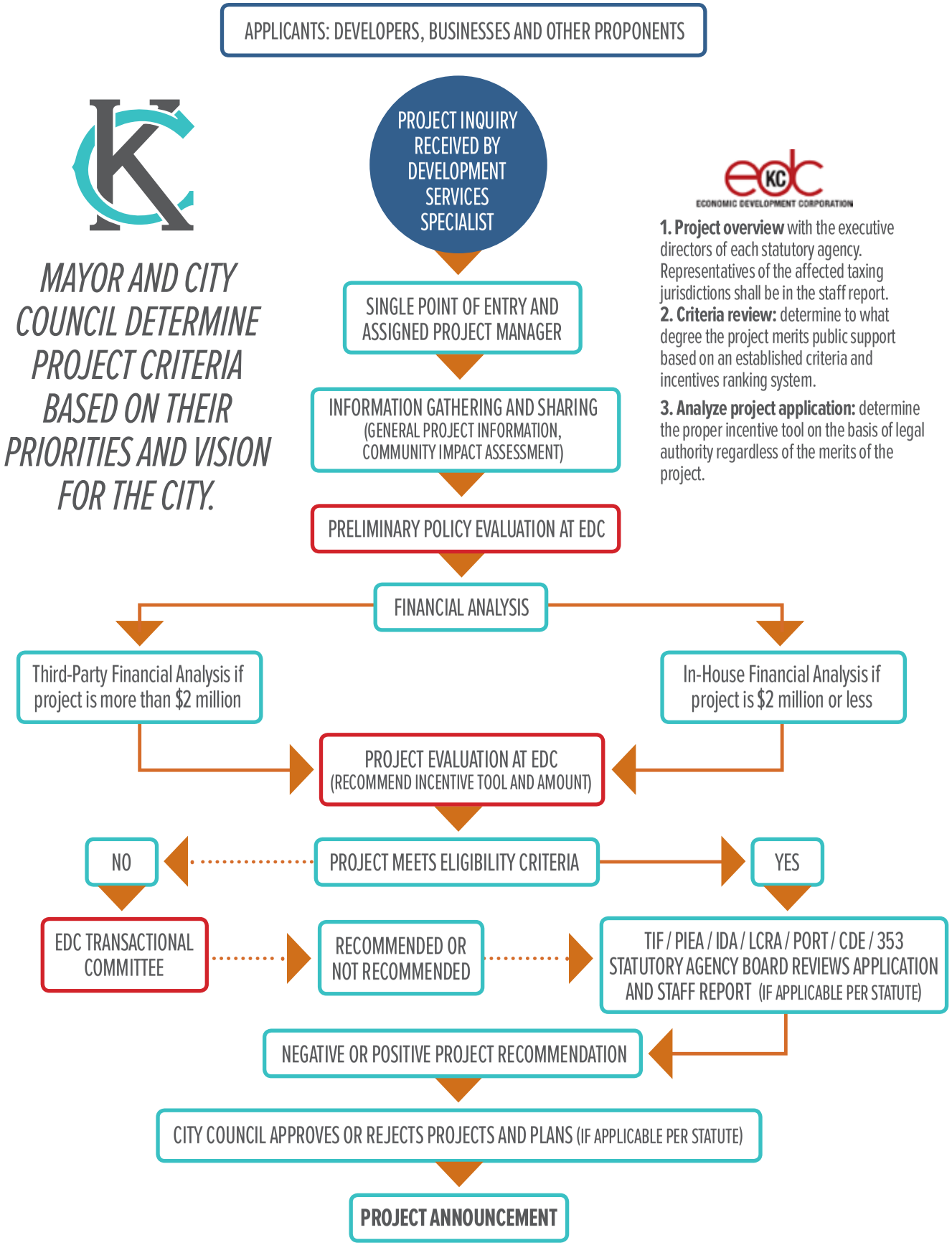


FIGURE 59: CITY OF KANSAS CITY, MO PROJECT PROCESS FLOW CHART, SITE-BASED PROJECT

DATA COLLECTION

In this section, the AdvanceKC incentive approval process is summarized, along with a discussion that emphasizes the process steps that either generate data or represent documentation that can be used for ongoing reporting and accountability to decision makers and the public. Public hearings, statutory agency review, and City Council readings and approval are also critical elements of transparency and accountability. The focus here is on the administrative processes that can be enhanced to facilitate project and program reporting.

AdvanceKC Approval Process

- Application – The process officially starts with the Universal Project Application. This application is used for Chapter 100, TIF, LCRA, PIEA, Port Authority and Chapter 353 projects. The Universal Application includes the following 12 sections: Applicant Information, Location of the Project, The Project (project description), Number of Jobs, Project Costs, Control of Property, Land Acquisition, Sources of Funds, Development Team, Financial Information, Bond Financing, Required Attachments, Bankruptcy Disclosure, and Certification of Applicant.

- Preliminary Policy Evaluation – The AdvanceKC process includes both a qualitative analysis (Scorecard) and a financial analysis (but-for).

  – Scorecard (Qualitative Policy Review) – In 2015, Kansas City began to use a Scorecard to facilitate the review process for City Council. The purpose of the Scorecard is "to assess the overall impact of a development project based on the degree to which the project aligns with the City Council's Economic Development and Incentive Policy [Ordinance 140031].[8]" It is intended to make sure projects are consistent with the AdvanceKC strategy and to provide a common framework for project review. The Scorecard distinguishes between Site-Based and Jobs-Based projects. The Scorecard is used for all Kansas City's incentive program projects.

  – Financial Analysis – The Financial Analysis includes the City's "but for" test. Financial analyses are completed by an independent third-party consultant. Projects with > $2M in investment may undergo in-house financial analysis. These analyses verify developer assumptions about anticipated revenues, expenditures and anticipated returns and compare them against current market experiences. Larger projects >$15M also receive more specific recommendations on deal structure and "right-sizing" of the incentive package to an amount necessary to fill gaps for making the project feasible.

[8] AdvanceKC Project Scorecard Update, presentation to Planning, Zoning & Economic Development Committee, August 24, 2016. (Put in Appendix)

- Cost Benefit Analysis – Chapter 100 and TIF projects also require a Cost Benefit Analysis,[9] which considers certain project-based costs and net new revenues by taxing jurisdiction.
- Agency Director Meeting – Project analyses are then disseminated to a group of impacted taxing jurisdictions including the City, School District, and County representatives for review and comments prior to consideration by statutory agencies.
- Blight Finding – In the state of Missouri, a finding of blight is necessary prior to the granting of redevelopment incentives. A blight study describes how a plan area, which can include one property or can include a larger geographic area, meets the statutory definition of blight, establishes boundaries for a proposed redevelopment area, and establishes factors that need to be remediated. The definition of blight varies by incentive program.
- Redevelopment Plan – Each program requires some form of redevelopment plan that varies in format but usually includes key project characteristics such as boundaries, redevelopment goals, redevelopment budgets, current assessed values, or other baseline indicators for future redevelopment.
- Statutory Board Review – Redevelopment projects and plans are also subject to consideration by a relevant statutory agency that either makes a policy determination or a recommendation depending on statutory authority regarding the level of incentives and based on the financial analysis, the scorecard analysis, and project presentations made to agency boards.
- City Council Approval – TIF, 353, and Ch. 100 plans and projects require additional City Council approval.
- Redevelopment Agreement – Once approved by the City Council or statutory agency for incentives, applicants then execute contracts or other forms of agreement with the City or appropriate statutory agency for TIF, Chapter 100, Super TIF, LCRA, and PIEA projects. The agreement sets the roles and responsibilities of the developer, the incentive granting agency, and establishes any associated reporting or performance requirements (such as development schedules, budgets, goals, financial obligations, community benefits, etc.).
- Clawback – Ch. 100 projects also require a clawback schedule pursuant to Ordinance 041033.

As in many communities, data related to outcomes of interest that occur after project approval and announcement have not been consistently collected in Kansas City over the long lifetime of the incentive programs, despite substantial transaction- and rules-based paperwork. The Scorecard (2015), EDCKC Annual Report, and

[9] CBA costs include costs for services and incentives. CBA benefits or revenues include sales, property and income taxes and "other." Source: Draft example of a TIF cost-benefit analysis prepared by Springsted in 2015.

Exhibit H Annual Assessment Form for TIF projects (2017) are good steps Kansas City has already taken to improve outcome reporting, and many of the suggestions later in the report show how the City can build on these efforts. More information on these and other data collection and reporting mechanisms are provided below in the section on Data Reporting.

DATA MANAGEMENT

Salesforce is the customer relationship management (CRM) software used by EDCKC. CRM software can help economic development organizations track projects, data and activities among businesses, partners and developers with which they work. EDCKC shared with the consulting team a list of nearly 120 Salesforce fields conveying data related to project identifiers, descriptive information, blight conditions and blight result, financial information, real and personal property, cost benefit analysis, site control, jobs, M/WBE compliance goals, and Advance KC score that it can track for incentivized projects. Many of the Salesforce fields are connected to the project documentation detailed in the previous section. It is the consulting team's understanding that data from these forms is entered into Salesforce by EDC staff from paper or online submittals.

DATA REPORTING

While the Site- and Jobs-Based Project Process Flow Charts (Figures 58 and 59) conclude with project announcements, incentive recipients continue to submit required forms and paper work during the life cycle of the incentivized project. These forms are (or can be) additional valuable sources of data on project outcomes related to economic and community benefits for the City. For example:

- Depending on the incentive program, developers may be required to submit financial and tax reports, such as the TIF Economic Activity Tax Summary Form, utility tax details, and Missouri Sales and Use Tax forms.
- Annual reports are required for some programs, including TIF. The Tax Increment Financing Annual Report includes a set of 45 questions that should be answered related to a description of the plan and project (including project status) and tax increment financing revenues. The form notes that the report should be sent to the Missouri Department of Economic Development.[10] The EDCKC website contains annual reports dating from 1989.[11]
- Exhibit H Annual Assessment Form requires information on TIF project improvements, annual payroll, elimination of blight, and property and business license tax information.

The EDCKC website contains a great deal of information on incentive program activity under the Agencies tab via both maps and documents. The website is a good starting point for stakeholders seeking details on Chapter 353, EEZ, LCRA and PIEA plans or

[10] Tax Increment Financing Annual Report EDCKC/60/ADM/ADMST/99/00136888.DOC / 2.
[11] http://www.edckc.com/agencies/tax-increment-financing-commission-tif/tif-documents/

FIGURE 60: EDCKC CONTRACT QUARTERLY PERFORMANCE INDICATORS

EDCKC CONTRACT QUARTERLY PERFORMANCE INDICATORS

AdvanceKC Strategy	Measure	FY2015	FY2016 YTD (Q3)
Target Sector Support	Announced Projects	31	19
	Jobs from Announced Projects	5,091	3,835
	Existing Business Visits (FY Target = 222)	245	188
	Investment for Business Development Activities	$156,516,810	$290,568,199
Urban Land Use and Revitalization	Approved Projects	28	30
	Jobs from Redevelopment Projects	2,250	447
	New Investment for Redevelopment Activities	$822,407,902	$817,331,408
Business Climate	Satisfaction with KC as a Place to do Business (Average, Good, Excellent)	93%	94%
	Local Tax Incentives Approved	$188,479,960	$250,214,099
	Ratio of Investments to Incentives	4:1	5:1
Innovation and Entrepreneurship	SBA 504 Loans Closed ($ and #)	$0 (0)	$272,000 (1)
	Revolving Loans Closed ($ and #)	$59,000 (2)	$34,000 (7)

Source: EDC KC

projects. The TIF Commission section of the website provides extensive information on TIF Plans and Amendments plus plan and project annual reports (found under TIF documents). Project listings under the Development tab and the News, New Development and Redevelopment links under the Categories sidebar provide additional information for interested stakeholders.

EDCKC prepares an Annual Report for the organization that provides some summary and descriptive information on projects approved over the past fiscal year. Using the 2015–2016 report as an example, summary statistics on jobs, payroll and investment are provided for all EDC efforts and summary land development statistics tallying private investment and incentive amounts are provided for LCRA, TIF, EEZ, Chapter 353, PIEA and Port Authority projects. It is the consulting team's understanding that these summary statistics on jobs, payroll and investment are based on projections for recently approved projects.

EDCKC also prepares detailed quarterly summary reports. These quarterly summary reports provide updates on characteristics of announced projects, investment from business development projects, and number of approved redevelopment projects and associated investment by incentive program, among other items. EDCKC also provides reports on individual announced projects, including project

score, and expected jobs, wages, investment, employer size and business sector. A sample of EDCKC reporting is provided in the Appendix.

Separately, a City Planning, Zoning and Economic Development report to City Council given to the consulting team provides information on EDC performance indicators related to target measures of success for each fiscal year.[12] Several of these metrics are relevant to incentive performance reporting and the proposed KPIs. The metrics include location of development projects and EDC data on new and retained jobs, new real and personal property investment, as well as the EDC's Contract Quarterly Performance Indicators (Figure 60).

What has been missing is an easily accessible and digestible summary of program accomplishments and actual (as opposed to projected) outcomes across time by incentive program. The consulting team believes that this lack of summary data has contributed to the perception that incentive use is neither transparent nor accountable, despite the plethora of documentation that is available. Other economic development organizations have encountered this frustrating situation, and the suggested reporting framework is designed to address it.

[12] KCStatPlanningZoningandEconDevpresentationApril2016.pdf. This presentation is an amalgamation of indicators and content from multiple departments (City Planning, City manager's Office, Aviation, Convention and Entertainment, Housing, and Mayor's Office), divisions (Office of Economic Development, Office of Creative Services) and agencies (VisitKC, EDC) that align with the City Council's Business Plan Priorities under the policy area of Planning, Zoning, and Economic Development.

SUGGESTED PRACTICES FOR CONSIDERATION

This section addresses how Kansas City can continue to improve the way it manages its incentive programs for transparency and accountability in meeting the City's economic objectives as measured by the KPIs. It builds on the valuable steps the City has already taken to deploy the Universal Project Application and Scorecard during the project review phase and building from the structure already established in the EDCKC's quarterly and annual reports. The consulting team also provides options for City staff to report on additional indicators on an ongoing basis, building from the structure and data provided in this study.

As discussed earlier in the report, the KPIs are intended to quantify and measure the essential outcomes of interest related to economic and community benefits generated in the City by incentivized projects. This section describes a process to collect and manage outcome data to enable better performance and public reporting on incentive program use.

Managing the flow of information throughout a project's lifecycle is complicated. The application and approval process may take several years, and projects may be active for up to 25 years. The projects and plans themselves are frequently complex reaI estate and financial undertakings with substantial ongoing reporting related to taxes, project expenses, and finances. Amendments and plan changes are common. Data collection, management and reporting in this environment are challenging but important ongoing tasks.

DATA COLLECTION

The data collection protocol describes steps Kansas City can take to obtain data relevant to incentive outcomes of interest. Kansas City's KPIs should determine the outcome data that is collected for program monitoring and effectiveness reporting. Agencies, of course, should also continue to collect data necessary to determine compliance with existing laws and agreements, enable financial reporting, and to comply with state requirements.

This report is built around a core set of agreed-upon KPIs that drive the analysis. Going forward, the City may choose to continue to use these KPIs, or it may wish to supplement this set with additional indicators. The section of this report on Additional Outcome Measures/KPIs for Consideration by Kansas City provides a menu of other indicator options. In either case, KPIs should be limited in number and clearly defined, with terms used consistently across forms and programs. The definitions for jobs and investment used in the Scorecard combined with the KPI definitions are a good place to start.

The data collection protocol describes the following three major source categories for economic development incentive indicator or outcome data and demonstrates how they can be implemented in Kansas City:

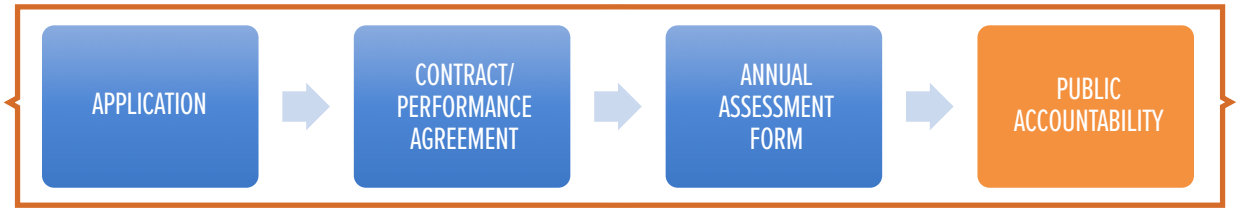
1. **Incentive Recipient**
2. **State, City and County Government**
3. **Federal and Private Data Sources**

1. Incentive Recipient

Incentive recipients are one source of information for certain program outcomes of interest. As described above, incentive recipients provide data to EDCKC and other government organizations throughout the project lifecycle. Figure 61 provides a simplified view of the process emphasizing three critical points at which data connected to the KPIs can be collected from incentive recipients: application, agreement and annual report or assessment.

In general terms, the application establishes the baseline information and economic rationale for the incentive, the contract or performance agreement defines the milestones the project is expected to achieve, and the annual report or assessment form provides regular updates on how well the project is performing relative to the milestones. Kansas City has updated both the application and elements of the annual

FIGURE 61: COLLECTING INCENTIVES DATA FROM INCENTIVE RECIPIENTS



reporting requirements since 2015, which will enable improved and simpler review of project outcomes for future years.

- Application – Establishing a baseline at the application stage is important for conveying the value of improvements that will be made through new development or business activity in Kansas City and could also help answer stakeholder questions about net new economic activity. The Universal Project Application already provides much of this important baseline project information and describes some projected outcomes, such as expected number of new jobs, their average salary, and projected personal property investment. One possible tweak to the current form would be to include a line for the number of current, existing jobs, which would establish a baseline for determining the number of net new jobs that results from the incentivized activity.[13] It is important to note that the Application necessarily provides baseline data and projected (not actual) outcomes, since the project has not yet occurred.

- Redevelopment Agreements – Based on a review of a sample of redevelopment agreements used in Kansas City's various incentive programs, relevant information that could provide outcome data includes (but is not limited to) a schedule of company obligations, a requirement to provide an affidavit that testifies to compliance with designated levels of jobs and/or investment, and details on important outcomes such as blight removal and meeting employment goals. Again, these would be projected, not actual, outcomes because the agreement predates the project itself. The point here is not to suggest what the terms of any of these agreements should be – that is always up to the City and EDCKC – but to demonstrate that the agreements can incorporate milestones or outcomes that reflect the indicators of interest to the City. The City may consider standardizing a small set of indicator terms and definitions across incentive programs to make it easier to track select expected outcomes from these agreements. It is worth pointing out that in some cases milestones in contracts or agreements related to KPIs may be enforceable; in other cases data should be collected for information purposes only. For example, developers should not be held responsible for certain types of job creation since they are not actually creating long-term jobs themselves but creating an environment in which jobs can be created. In these situations, the tracking and reporting of KPIs are critical for understanding the economic and community benefits of the incentivized project, but should not necessarily be used for determining compliance with the terms of the contract.

- Annual Reports or Assessments – The redevelopment agreements often require developers to provide an annual report on project activity. The City has made progress in ensuring that these reports are submitted. The EDCKC has also created an Annual Assessment Form (Exhibit H) for TIF plans that is a very good

[13] The form currently asks for number of retained jobs, which is not necessarily the same as the total number of current, existing jobs.

model for other incentive programs by requiring information to be provided on total investment, new and retained jobs, annual payroll, and blight elimination, among other factors. While not available in a consistent manner for the timeframe of this analysis, the annual reports and the Annual Assessment Form will serve as valuable sources of data on actual project outcomes going forward. Annual reports or assessments can become more useful tools for conveying progress on projects and, when aggregated, economic outcomes for Kansas City. Project-specific data can be compared to the baseline established in the application and the milestones established in the redevelopment agreement. The consulting team suggests that the emphasis here be on obtaining and sharing information for improving policy decisions. Other mechanisms exist for monitoring individual project performance and compliance with contract terms. The primary goal of this effort is to enhance the understanding of whether Kansas City's incentive programs are generating economic and community benefits.

The City must choose which indicators it wishes to track via documents submitted by the incentive recipient. The consulting team suggests beginning with jobs and investment since these are the outcomes that generate the most queries in most locations. However, the City can and should add other indicators as desired.

The City should provide specific and consistent definitions of the terms "jobs" and "investment" and use them for all stages of all incentive programs where these are outcomes of interest. For example, the definitions should be clearly stated in the application, the agreement and the annual reporting and assessment forms so that incentive recipients know exactly what needs to be reported. Collecting this data in a consistent manner across programs and throughout the lifecycle of each project will enable the City to report on these essential indicators. Tracking jobs, investment and other appropriate KPIs from application through agreement through assessment will improve project-based reporting and enable greater accountability for incentive programs.

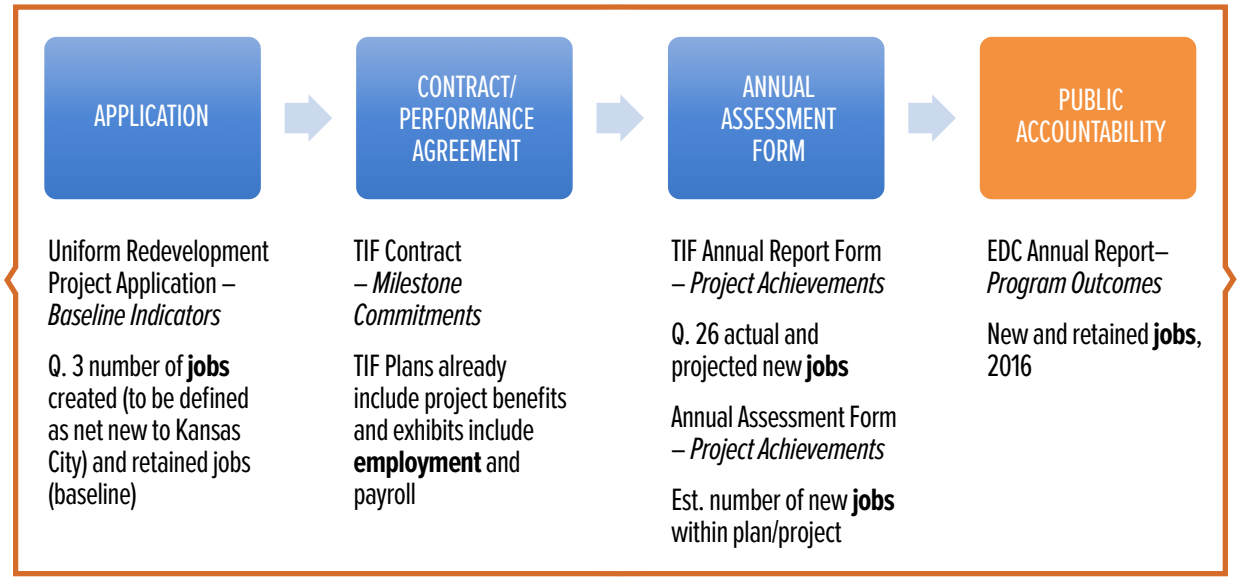
Figure 62 demonstrates how current documents used in Kansas City could be slightly modified and realigned for ongoing monitoring and reporting of key performance indicators, using jobs and the TIF program documentation as an example.

2. State, City and County Government

State, city and county governments already collect a great deal of data either directly or indirectly related to incentive programs and their outcomes. These types of administrative data records can support more rigorous analysis and evaluation of economic development incentive programs. Administrative data records are best used as a complement to, rather than a complete replacement for, data from incentive recipients.[14]

[14] It is important to note that administrative data and recipient-provided data are not likely to be completely consistent even when they share common terms (such as jobs or payroll) because they are collected at different times and for different purposes. Definitions may also vary. For this reason, they should be reported separately with clear source citations.

FIGURE 62: ONGOING MONITORING & REPORTING



Most of this report's historic analysis of KPIs such as construction spending, permitting activity and assessed property values relies on administrative data records from several City of Kansas City and Jackson, Platte and Clay County departments. Some of that data is accessible to the public (assessed values and permit activity, for example). Other data was aggregated and provided to the consulting team by City staff, both to facilitate data management process and to avoid sharing any confidential information. The consulting team is deeply grateful to the City and County professionals who spent hours determining data availability, accessibility, quality, and relevance to the KPIs, as well as making the actual data sharing happen in support of this project. These are not easy tasks, and this is often work that is above and beyond normal duties.

Kansas City could build on this effort by tasking City staff to continue to access City and County data sets that help monitor and report on the outcomes of its incentive programs. It is important to note that even though the discussion here refers to existing data within City and County government, sharing it for program evaluation is not without costs. It is not a seamless process to access and bring together disparate data sets, especially when multiple jurisdictions are involved.

Recognizing the challenges and the potential of data sharing to improve public policy outcomes, federal, state and nonprofit organizations are working on ways to help government leaders and researchers share administrative data in support of evidence-based policymaking. These organizations are identifying ways to overcome technical and resource hurdles in order to encourage safe and secure

data sharing. One such effort is the State Data Sharing Initiative, which provided technical assistance to five states to improve access to existing employment, wage and evaluation-relevant tax data for economic development program compliance and evaluation. Others include the Workforce Data Quality Initiative, Local Employment Dynamics, and the National Association of State Workforce Agencies Labor Market Information Committee Data-Sharing Initiatives. These are resources Kansas City can access as needed if it seeks additional technical guidance on this topic.

3. Federal and Private Data Sources

Many economic development dashboards and portals rely heavily on statistical data from the federal government to convey information about their state or local economy. These public data sets are invaluable because information is collected consistently and reliably, data are often available at multiple geographic levels (state, county, city, census tract or block level), and data access is free. The historic analysis and maps provided in this report draw on these resources to provide an overlay of several economic and demographic characteristics over time. The Mid-America Regional Council is a good resource for data specific to the Kansas City region and may be a valuable partner as Kansas City continues to track select KPIs.

Commercial real estate data is another example of useful third-party data. Tracking vacancy and absorption rates, rent trends, and property values can provide valuable insight into outcomes in areas with incentivized activity as well as patterns in surrounding neighborhoods or adjacent properties. CoStar is an example of a subscription service that is a commonly-used source for commercial real estate data. The Kauffman Foundation is an example of an organization that may be a good partner for data on business activity.

Summary: KPIs and Data Collection in Kansas City

The table on the next page summarizes how several proposed key performance indicators align with the three major data sources (Incentive Recipient; State, City and County Government; Federal and Private Data Sources). A data collection system that obtains data from all three is preferred because it 1) builds in a way to supplement recipient-provided data, 2) creates a sustainable platform for data collection that is not overly reliant on one source, and 3) can be more easily adapted as reporting needs evolve.

The previous sections described data that can be collected to report on outcomes of interest by incentive program or incentivized area within Kansas City. This is the approach taken for the Geographic Analysis section of this report. The City may also wish to model the fiscal and economic effects of incentivized activity on the City. This is the approach taken for the Economic Impact section of the report. To conduct this type of city-wide modeled impact analysis, more thorough data should be collected and made available. Based on analysis of the data available and discussions with various senior level City staff, it appears the City of Kansas City is collecting most of this data; however the data collection process is often not centralized and is subject to data confidentiality agreements.

OUTCOME	SAMPLE KPI	SUGGESTED SOURCE	SOURCE CATEGORY
Employment	Net new jobs	Annual Assessment Form	Incentive Recipient
Employment	Retained jobs	Annual Assessment Form (Recipient)	Incentive Recipient
Employment	Average wage of jobs created or retained (projected)	Application + Scorecard (Recipient, EDCKC)	Incentive Recipient
Employment	Payroll associated with project (actual)	EATs reports (City Finance Department)	City Government
Investment	Investment – Construction spending ($)	Annual Assessment Form (Recipient)	Incentive Recipient
Investment	Construction spending – M/WBE	B2GNow (City Human Relations Department)	City Government
Investment	Real Property Investment – Capital improvements value	Building Permit Data (City Planning Department)	City Government
Increased Property Value	Change in assessed property values	Assessment Departments (County Assessors)	County Government
Increased Property Value	Change in market value of properties	CoStar (Third-party source)	Private Data Source
Blight Remediation	Blight remediation – building permit activity by area over time (count & type)	Building Permit Data (City Planning Department)	City Government
Blight Remediation	Blight remediation – dangerous building counts by area	Dangerous Buildings (Open Data KC via City Neighborhoods and Housing Services)	City Government
Blight Remediation	Blight remediation – 311 service calls	311 Action Center (City)	City Government
Population Growth	Population trends by plan area	U.S. Census	Federal Data Source
Income Growth	Income trends by plan area	U.S. Census	Federal Data Source

Data Collection Takeaways

- Kansas City already has in place many process elements that can be adapted to support quality reporting on incentive program effectiveness.
- Modifying existing incentive recipient forms and reports to incorporate clearly and consistently defined KPIs can enable desired project and program reporting.
- The KPIs should be integrated into these existing process elements, from application through annual report. The TIF Commission's Exhibit H Annual Assessment Form is an example of how to this can be done.
- Enhancing Kansas City's data collection, data management and reporting procedures will make it possible to communicate project outcomes and program effectiveness.

DATA MANAGEMENT

This section addresses two main data management tools for organizing and using the collected KPI figures. The first is customer relationship management (CRM) software that is used primarily to track information collected from incentive recipients. The second is a "data warehouse" that builds on the master dataset created for this study. The data warehouse would incorporate all KPI data, including but not limited to the data tracked through the CRM, plus any desired socioeconomic data. In both cases, the approach is to build

on existing platforms and limit the need for substantial new system investments.

Customer Relationship Management Software

As previously stated, Salesforce is the CRM software used by EDCKC to track project details. With minor modifications, the Salesforce fields that were shared with the consulting team can be used to track data on actual project performance obtained from incentive recipients under the data collection protocol described in the previous section. The performance data can then be aggregated and reported by incentive program.

While Salesforce is certainly not the only CRM option available to economic development organizations, it is commonly used. Wisconsin, Virginia, Florida, Iowa and Michigan are among the states that use Salesforce to manage company and project data, including performance tracking. In Wisconsin, "Salesforce allows staff to access project information from opening discussions through termination dates, provided data entry is consistent. During each step of the award process, staff update a project's progress so everyone is apprised of the status of the award process and to provide a documented history of customer support." Florida's Department of Economic Opportunity uses Salesforce data to populate its client-facing portal for companies that are submitting claims and to view where awards are in the process. The Iowa Economic Development Agency uses Salesforce to develop aggregated reports relative to the state's economic development goals.[15] Michigan considers itself a "robust user" of Salesforce for tracking company milestones, disbursements and contract terms related to incentive programs and supporting the state's reporting process.

A lesson learned from other locations is that CRM software generally is not an off-the-shelf solution for many economic development organizations. These agencies have encountered a fairly steep learning curve and the need for substantial customization to take advantage of the software's potential. Implementation requires at least one staff member with expertise in the software as well as solid knowledge of the incentive programs. Finally, economic development professionals have expressed the need for both staff training to use the CRM system and management "enforcement" of procedures for consistent and proper use of the data so that internal and external audiences can be confident of the data's quality and validity.

Master Dataset

The master dataset created by the consulting team for this project is built on an ESRI ArcGIS platform. ESRI is a supplier of geographic information system (GIS) software and mapping and analytics technology. GIS systems enable the analysis and presentation of spatial or geographic data. Many of the questions related to Kansas City's incentive outcomes have to do with how the programs have

[15] WEDC Management Report, February 2016.

affected different parts of the city, so a GIS system is the appropriate way to conduct and present an incentives analysis.

The master dataset will be transferred to the City of Kansas City upon completion of the project. It currently includes the data supporting the KPIs that were obtained from city and county departments plus the demographic and socioeconomic data obtained from federal statistical sources. The team has provided a data key and definitions so it can be maintained and used by researchers and city staff. All of the data elements have a geographic component; that is they are each connected to a specific place within Kansas City. If Kansas City wishes to continue to monitor the KPIs and monitor the effects in different areas of the city, staff can continue to maintain, update and manage this GIS dataset.

The dataset should evolve into a data warehouse. Over time, the data will need to be updated and replenished from a variety of sources in order to be organized and "distributed" to interested citizens and leaders.

> *A data warehouse is a large store of data accumulated from a wide range of sources and used to guide management decisions.*

Much of the data in the master dataset should continue to be sourced from other city departments as well as county government. Going forward, it will be easiest for City staff, rather than the EDCKC, to manage these ongoing data sharing relationships. Further, it may make sense to house the data warehouse within the City's Department of Planning and Development, since they already have the staff expertise and systems to manage a GIS-based dataset.

If the data warehouse is maintained, it can be used on an ongoing basis for analysis and to answer common queries about incentive program use and outcomes across the City.[16] It can also be expanded to incorporate additional KPIs, other socioeconomic or demographic data elements, or any other information with a location component. KPI outcome information aggregated from the data warehouse can become the basis for regular economic development results reporting on the KCStat Dashboard, as addressed in the next section.

Data Management Takeaways

- City, County, federal and other third-party data sources can continue to be accessed to update the "data warehouse" provided as part of this study.
- Quality program monitoring, reporting and evaluation require commitment, often requiring dedicated staff for the data collection and management effort.
- Existing data and IT systems appear sufficient for the approach proposed in this study, but a review at the one-year mark of implementation to re-assess needs may be appropriate.

[16] It is possible – but would not be easy – to set up this system so it would be accessible to the public to conduct their own queries. However, it would likely require substantial resources to address the data and interface challenges to make the system work well for a wider audience, as opposed to a GIS specialist on city staff.

DATA REPORTING

This section addresses Kansas City's performance reporting for its incentive programs (what happened) and ongoing public reporting and outreach related to economic and community benefits (what has been accomplished) from incentivized activity as measured by the KPIs.

Performance Reporting

Performance reporting in this context refers to the process for obtaining and sharing information on actual outcomes from incentive programs. Data on actual outcomes will provide a good complement to the currently reported expected outcomes from announced projects. Kansas City can strengthen its summaries of program activity and accomplishments by slightly modifying its existing reporting processes.

A good performance reporting practice is to report actual outcomes by program on an annual basis. Actual jobs and investment that result from incentivized investment are the fundamental outcomes most stakeholders care about. Jobs and investment reporting on actual outcomes should be reported separately from recently approved projects and their expected outcomes in reports. The distinction should be clear to readers. The 2016 Annual Report for the Job Development Investment Grant from the North Carolina Department of Commerce is an example of a report that makes a clear and obvious distinction between expected outcomes from awarded projects and actual outcomes (grantee performance). Annual reporting on tax abatement results in Grand Rapids, Michigan, also clearly distinguishes between expected investment and jobs from and actual results. The reporting document also provides data on other outcomes of interest, in this case, yearly property income taxes abated and paid and ROI.

The EDCKC annual report is one option for presenting actual program outcomes related to the incentive programs under its purview. Data on actual outcomes would be a valuable complement to the currently published projected outcomes from approved projects. If the proposed data collection protocol is implemented (in all or in part), EDCKC will have a consistent source of information on fundamental indicators related to jobs and investment that can then be aggregated to the program level and reported.

Stakeholders may also value reporting on a summary of program outcomes across multiple years, not just single year results. As data on key indicators such as jobs and investment are collected consistently over time, it will be possible to also report on accumulated program outcomes in addition to single year outcomes. For example, Kansas City may choose to report actual jobs added in the past year plus total jobs added to date above the established baseline. Similarly, the City could report investments made in the past year plus total investment to date.

Another good practice is to report a consistent set of indicators across incentive programs in order to enable comparisons. Each of

Kansas City's incentive programs serves a unique purpose, but they also share some common characteristics and objectives. The KPIs used in this report were selected in part because they are relevant to multiple incentive programs. The EDCKC quarterly reports provide information on jobs and investment for TIF, LCRA, and PIEA, which are among the City's site-based programs. Therefore jobs and investment would be appropriate reporting indicators across both the site-based and jobs-based programs the City offers.

Presenting digestible information in a single report on new announced projects and expected outcomes, actual outcomes achieved among ongoing projects, and summary outcomes by program over time is difficult. To make reporting to stakeholders more effective, organizations need to use clear and specific language differentiating announced project data from actual outcome data, provide charts and other types of infographics to convey complex information, and provide text and pictures that offer context for all of those data points. Standalone project or financial information is often not very meaningful. Context that demonstrates the relative impact of a project or program and how it fits into the community can be extremely helpful.

The City of Lawrence, Kansas, Annual Economic Development Report meets many of these suggested good practices. For example, relevant to the approach proposed for Kansas City's consideration, Lawrence provides total projected real property investment and full-time employment, total actual real property investment and full-time employment, and a comparison of projected to actual for both indicators for each of the companies with active property tax abatements. The report also provides much more information on Lawrence's range of economic development programs and funded activities. Company profiles and accompanying photos, performance summaries, and other social impacts related to the environment and community engagement all provide useful contextual information that bring to life the economic and community benefits from the supported companies or projects.

Proposed Public Reporting and Outreach Protocol

Public reporting and outreach refers to the process by which the City tells the story of how incentives are used and what they are accomplishing in Kansas City. Public reporting involves a broader mission and wider audience than the more narrowly focused performance reporting.

The EDCKC Annual Report is an important public document that includes information on incentive use, but it need not represent the entirety of Kansas City reporting on incentive outcomes. This section proposes for consideration that the City Department of Planning and Development under the direction of the Office of Economic Development monitor and report on KPIs using the "data warehouse" transferred to the City as part of this project. The data warehouse can be updated and maintained in order to report outcome information to the public via KCStat and other venues as desired.

Reporting via KCStat

KCStat "is a data-driven, public-facing initiative focused on improving the efficiency and effectiveness of city services." Among its purposes is to monitor progress toward the City's strategic priorities. For both reasons, it makes sense to include reporting on incentive program outcomes on the KCStat Dashboard.

Since KCStat is tied to the City Council's annual business plan and does not include goals for incentive programs, the City has asked which goals the projects should be tied back to. The consulting team suggests that the KPIs, which are connected to the AdvanceKC strategy and individual incentive program objectives, become the basis for the KCStat dashboard reporting. Total and program-specific KPI data can help explain how (or whether) the incentive strategies Kansas City is using to promote economic growth are achieving desired outcomes related to jobs, investment and blight remediation. The data underlying the KPIs should be updated at least on an annual basis but more frequent updates may be desired if resources allow. Sharing data on KCStat will also allow interested citizens to pull summary data on KPIs for the city and by incentive program.

KCStat could continue to evolve to incorporate more economic development and incentives-related indicators beyond the core set of KPIs suggested in this study. The Performance Metrics platform from the Tennessee Department of Economic and Community Development is an example of how a comprehensive dashboard report could be modeled to share a wide range of economic development and incentive information. The Austin, Texas, open data portal is an example of dashboard providing access to actual (not expected) project outcome data by company within an individual incentive program. The portal provides very specific project data on "individual payments and compliance reports" for the Chapter 380 program. It includes original source data on companies' Certificates of Compliance plus the Independent Party Compliance Reports, as well as summaries of payments, existing jobs retained, cumulative new jobs created, and average annual compensation for completed projects.

Additional Outreach Options

Citizens and elected leaders have raised many questions about how Kansas City has used and continues to use incentives. Kansas City should be prepared to continue the conversation it has begun with these stakeholders, using this report as a starting point. The consulting team offers several ideas beyond those described above for the City's consideration:

- Prepare a yearly update on all KPIs. This update could be modeled after the executive summary of the historical analysis provided in this study. This suggested yearly update on all KPIs is different from the EDCKC Annual Report. Under the approach described in this study, the EDCKC Annual Report would provide aggregated data on actual jobs, salaries and investment based on inputs received from incentive recipients, as outlined in the data collection protocol. The City's yearly

update would also include information on the other KPIs, such as blight remediation, that are based on data obtained from city and county sources. Another option may be to coordinate this update with the City Planning & Development Annual Report, which is a good model for sharing project information via maps, photographs and summaries of essential data points.

- Communicate regularly. Prepare concise updates on a regular schedule on incentive topics, leveraging the data warehouse for content and taking the opportunity to address ongoing topics of interest to the community. One option would be to organize the updates as responses to a series of FAQs (e.g. 5 FAQs answered every 2 months). Another would be to share, for example, quarterly updates on select KPIs or project activity. These updates could be distributed through a variety of media designed to reach as many citizens as possible, including but not limited to speaking engagements and presentations, press releases, e-mail, newsletters, community or organizational listservs, and social media.
- Continue to engage directly with citizens and stakeholder groups. The City could build on the outreach conducted for this project to sustain the conversation around incentive program use in Kansas City. The stakeholder groups that were convened for this project – Taxing Jurisdictions, Community Organizations, Developers and Tax Incentive Administrators/Economic Development Partners (see Outreach Section) – could also be used as a starting point for convening future conversations, while also extending an invitation to participate to other interested individuals. The City may also consider holding town hall style meetings, for example, by neighborhood or district, to create the opportunity to engage with a wider group of interested citizens.
- Ongoing engagement could address many different potential topics of interest. One option would be to structure the first year of engagement to select additional indicators (see section on Additional KPIs for Consideration) that could be added to the City's ongoing reporting procedures. Doing so would provide citizens and other stakeholders the opportunity to articulate what's most important to them and their expectations for outcomes from incentive use in Kansas City. At the same time, it would be a good venue in which to share information from this report, establish parameters for choosing good indicators, and set sensible expectations about data access and quality. The objective would be to begin to build a realistic baseline, City-wide consensus on the expected economic and community benefits of incentive programs.
- All outreach regarding incentives should be coordinated between the City and EDCKC to ensure consistency and to avoid confusion over data and messaging. Since the City has been the driving force behind this analysis of the economic and community benefits of incentives, the City may be the appropriate lead on coordinating future communication and outreach.

- Create an informal committee for data partners. This committee would manage the process of ongoing data sharing related to the KPIs. Committee members, likely drawn from (but not limited to) City departments, County government, EDCKC, and researchers from MARC and/or UMKC, could also provide guidance on interpretation and reporting related to incentives and the KPIs.
- Consider establishing a partnership with, for example, the Missouri Valley Special Collections at the Kansas City Public Library to archive paper documents from completed incentive projects. Boxes of documents currently sit in City Hall. As public documents that also tell the story of development over the years in Kansas City, it may be useful to house them (and make them more accessible) in another setting. The City Clerk may provide another suitable option for incentive document storage and access.

The resources required to implement the data collection, performance reporting, and public reporting and outreach protocols depend on the choices Kansas City makes. A rough order of magnitude based on the suggestions provided in this section suggest that one or two full-time staff people in the Office of Economic Development would be needed to oversee the 3 protocols, manage ongoing city/county data sharing (including the GIS-based master data set which is the suggested core of the data warehouse), coordinate the relationship with EDCKC, prepare updates, and get the word out on outcomes to the public and partners. As indicated in the text, the suggestions were designed to build on existing systems and platforms to the extent possible but subsequent and detailed review by staff, statutory agencies and policy makers is strongly recommended.

Reporting Takeaways

- The KCStat Dashboard Report can be used to report on the full set of KPIs under the Economic Development Strategies tab.
- Outcome information can be aggregated by program and inform quarterly reports to the City and be included in the EDC Annual Report, PZED outcome reports to City Council, and on the EDCKC web site, which should all be consistent with each other.
- Jobs and investment reporting on actual outcomes achieved by active projects can be reported separately from recently approved projects and their expected outcomes in reports. The distinction should be clear to readers.
- Sustained communication and outreach can help answer ongoing resident and stakeholder questions regarding incentive use and outcomes. Multiple methods of communicating information will help get the word out.
- Working with community and stakeholder groups to select additional indicators may be a good way to build sustained engagement.

CONCLUSION

Quantifying the economic and community benefits of incentive programs is not easy for most cities because administrative systems and procedures were not typically created with an eye toward reporting on outcomes. The consulting team reviewed several incentive systems and procedures in Kansas City that affect the City's ability to manage incentives for transparency and accountability. Our finding is that Kansas City already has in place many process elements that can be adapted to support quality reporting on incentive program effectiveness. The review also revealed several opportunities to build on existing data collection and reporting activities to help Kansas City improve transparency and accountability in its incentive programs.

- Use the Scorecard definitions of jobs and investment and the descriptions of other KPIs provided in this study as the basis for establishing a limited set of clearly and consistently defined set of indicators that the City will track across incentive programs.
- Draw on three sources to collect data to quantify each of the selected KPIs to support reporting on incentive outcomes. These three sources are 1) the incentive recipient; 2) state, city and county government; and 3) federal and private data sources.
  - Incentive recipients provide EDCKC with project-specific information related to KPIs at the application, redevelopment agreement and annual reporting or assessment steps of the incentive process. Terms like jobs and investment can be consistently defined and incorporated into each of these steps across incentive programs to enable aggregate reporting on project and program outcomes.
  - City staff can obtain administrative data records on KPI topics such as assessed values and building permit activity (among others) from state, city and county government sources. These data records can be mapped to incentive plan areas and projects in the city.
  - City staff can access statistical data relevant to select KPI topics such as population and wage growth from the federal government. These data records would indicate how areas with incentivized projects are performing according to these broad socioeconomic indicators.
- Organize collected KPI data through the EDCKC's customer relationship management software program (for data provided by incentive recipients) and the master dataset (for the remaining KPIs that rely on data from city and county government and federal or private data sources). The master data set was created by the consulting team and will be transferred to Kansas City upon completion of the project.
- Update and manage the master dataset to serve as a "data warehouse" in which data would be updated and replenished from multiple sources in order to be organized and "distributed" – or reported – to interested citizens and public officials.

- Incorporate data on actual jobs and investment outcomes by incentive program into Kansas City's performance reporting. This data would complement the information already provided on expected outcomes for announced projects. The EDCKC annual report is one option for presenting actual program outcomes related to the incentive programs under its purview.
- Use KCStat to make data available to the public on additional KPIs of interest beyond jobs and investment outcomes. One option would be for the Department of Planning and Development under the direction of the Office of Economic Development to use the data warehouse to provide select KPI information to KCStat.
- Sustain communication and outreach to help answer ongoing resident and stakeholder questions regarding incentive use and outcomes. Options include yearly updates on KPIs not reported by the EDCKC, other updates or FAQs related to individual KPIs, continuing to convene the stakeholder groups that met for this study, and holding neighborhood meetings or town halls on incentive topics.

Additional Outcome Measures / KPIs for Consideration by Kansas City

KANSAS CITY INCENTIVES STUDY

This section of the report provides a menu of additional indicators that Kansas City can consider adopting if it wishes to expand its capability for assessing program outcomes. The purpose is to demonstrate the variety of indicator options available to the City. The section begins with a "bottom-up," program-oriented approach to selecting indicators focused on insights that can be gleaned from project and program documentation. The section concludes with a "top-down," conceptual approach to choosing metrics that considers what is desired to know about how economic development and "incentivized activity improve the City experience for residents, visitors and businesses". These "top down" conceptual approaches are called "aspirational indicators."

INDICATORS BASED ON ADVANCEKC AND INCENTIVE PROGRAM ANALYSIS

These indicators fall into the following categories:

- Business Enterprises
- Infrastructure
- Project Characteristics
- Socioeconomic Factors

[17] For example, the TIF Economic Activity Taxes Documentation & Collection Policy requires developers to provide a list of businesses located with the project area; Chapter 100 and EEZ are both considered jobs-based incentive programs offered to business enterprises.

BUSINESS ENTERPRISES

Some, but not all, of the incentive programs examined for this study include language related to increasing the number of businesses in Kansas City or in certain areas of Kansas City.[17] EDCKC's goals include retaining and growing Kansas City businesses and recruiting new businesses to Kansas City. Target sector support is one of the core elements of the AdvanceKC strategy. Interest in growth among business enterprises is also reflected in the Scorecard used for job based project evaluation. Finally, Kansas City has a policy regarding minority and women business enterprise utilization that affects TIF, 353, LCRA and PIEA projects. These business enterprise topics are all suitable for ongoing tracking and reporting if Kansas City chooses to do so.

NAICS/Target Sectors

Potential Metric

Number of business enterprises by target sector category receiving incentives or locating in incentivized areas of the city. This metric emphasizes businesses coming to Kansas City through incentivized projects (as opposed to all businesses) because the purpose of this assessment is to determine the economic and community benefits of incentives in Kansas City.

Data Source(s)

- The TIF Economic Activity Taxes (EATs) Documentation & Collection Policy requires developers to provide a list of

businesses located within the project area and certify that the list is accurate. Business names may also be provided as part of ongoing EATS reporting. From these lists it should be possible to research the NAICS code associated with each business and assign each as appropriate to the City's target sectors. This would enable reporting on distribution of business enterprises in TIF areas by target sector. A second source of information is Q25 on the TIF Annual Report requiring the name, address and primary business line of any businesses that have relocated to the redevelopment area.

- Chapter 100 project documentation includes a Municipal Annual Activity report to the Missouri Department of Economic Development in which Q5 in Part II (Characteristics of Business For Which Bonds Were Issued) requests the NAICS code of the beneficiary. A second source is the list of approved Chapter 100 projects, which includes company name and address. From this list it should be possible to research the business NAICS code and assign each as appropriate to the City's target sectors.
- A document provided to the consulting team called EEZ Project list includes business names and NAICS categories (but not NAICS numbers), so NAICS-based data is available for businesses participating in the EEZ program. Exhibit B-1 (Project Information Questionnaire) and Attachment A (Exhibit E EEZ Information) both request company name and NAICS code. Exhibit D (Application for Certificate of Qualification for Tax Abatement) includes a NAICS-based question on business activity.

The sources listed above make a direct connection between incentivized activity and NAICS code, which can then be linked to the target sectors.

A fourth option would be to use Kansas City business license data to tally all licensed businesses by NAICS code (incentivized or not) with addresses in certain incentive zones or plan areas in Kansas City. A fifth option is to access a private business reference data source such as Dun & Bradstreet or Reference USA to research or collect enterprise, address, and NAICS information for businesses located in Kansas City. These latter two sources would not provide information on business activity directly connected to incentives offered, but would provide insight into overall business dynamics in incentive zones or plan areas.

Number of New Businesses

Kansas City may also be interested in the total number of new business establishments each year regardless of whether they fall into one of the target sector categories.

Potential Metric

Number of new businesses located in a Redevelopment Area (TIF) or EEZ.

Data Source(s):

The TIF Annual Report (Q25) requires the name, address and primary business line of any businesses that have relocated to the redevelopment area. It appears that annual reports for the EEZ program (Exhibit G, EEZ Policies & Procedures 2016) should also include information on the number of new businesses each year.

It may also be interesting to track trends in the number of business establishments for all incentivized locations (not just TIF and EEZ) and across Kansas City for informational purposes. As with the previous metric, other options would be to use Kansas City business license data to tally all licensed businesses with addresses in certain incentive zones or plan areas in Kansas City or to access a private business reference data source to obtain enterprise, address, and NAICS information for businesses located in Kansas City. It is worth noting that business growth (trend in the number of business establishments by year for all of Kansas City) is one of the indicators tracked as part of the STAR Community Ratings, with data available on KCStat.

Minority and Women Owned Business (M/WBE) Participation – Professional Services

The City tracks contract spending for women- and minority-owned businesses in Kansas City associated with incentivized investments in the TIF, PIEA and LCRA programs. Kansas City also tracks professional services awarded related to these contracts and can add this indicator to its incentive reporting.

OPPORTUNITIES FOR USING BUSINESS LICENSE DATA TO TRACK BUSINESS ENTERPRISE ACTIVITY

It has been suggested that Kansas City's Business License information managed by the Department of Revenue could be a good source of new business establishment data and NAICS codes data for any licensed business.

"When operating a business in the City, you must obtain required City business licenses (occupational/cigarette/utilities) and register for payment of required taxes (convention and tourism, downtown arena fee, profits tax and withholding tax)." http://kcmo.gov/kcbizcare/business-resource-guide/licenses/

However, under Missouri statute many types of businesses or professions are exempt from municipal business licenses, including not-for-profits and several types of professionals, healthcare and financial businesses. Restaurants are also exempt from the requirement in Kansas City.[i] Businesses with multiple establishments may report corporate data rather than the location-specific data that would be of interest for this project. Further – but of great importance – data provided as part of the business license applications may be considered sensitive, although the name, address and NAICS code of the business would not fall into that category.

For these reasons, business license information was not used for this analysis, but it has potential as a good if not perfect source of information on business establishment activity in Kansas City.

[i] http://kcmo.gov/tax/tax-home/faq/business/

Potential Metric

Contract spending and number of M/WBE businesses with professional services contract awards associated with incentivized investments in the TIF, PIEA and LCRA programs AND the dollar value of their activity.

Data Source(s):

- The City's Human Relations Department prepares the Minority Women Business Enterprise Annual Report by fiscal year with summary professional services data for PIEA, TIF and LCRA. Contract data can also be accessed directly in HRD's B2G contract database (KCMO's DMWBE/Section 3 Management System).
- At this point, similar construction and professional service data is not available for the 353 and Chapter 100 programs, but the Human Relations Department is working to incorporate them into future reporting.
- The only reference to M/WBE within the EEZ Policies & Procedures document is a question about business ownership by women in the Missouri Works Program Notice of Intent form. Therefore, it does not appear that M/WBE participation would be an appropriate indicator for the EEZ program.

INFRASTRUCTURE

Infrastructure Development is one of ten strategic recommendations from the Advance KC strategic plan, which references roads, bridges, water and sewer systems, sidewalks, other physical infrastructure and fiber network. Transportation and Infrastructure is one of seven Council Goals in the 2017–2022 Citywide Business Plan[18] with an emphasis on water, sewer and stormwater; roadways; sidewalks and curbs; signals; streetlights; trees; parks; and multimodal transportation.

Infrastructure is embedded in several of Kansas City's incentive program guidelines as well. For example, the TIF program "is a financing and development tool that allows future real property taxes and other taxes generated by new development to pay for costs of public infrastructure and other improvements."[19] LCRA projects must be in Urban Renewal Area, and one of the benefits of Urban Renewal Plan Areas is "to install, construct or reconstruct streets, utilities, and site improvements,"[20] among others. Our understanding is that infrastructure may be but is not required to be part of LCRA funded projects. However, the LCRA Workable Program states that the LCRA shall monitor projects "to assure that the City realizes the benefits to its tax and employment bases and physical improvements ("Public Benefits") of the Project promised by the Applicant."[21]

Infrastructure is also implicit in other programs. For example, the 353 Ordinance (140306) requires project documents to address amenities (such as open space for recreation, streetscape, plaza areas and other similar visual effects); property for public agencies; and street changes. PIEAs created for the development of blighted, insanitary or underdeveloped areas can undertake

[18] Committee Substitute for Resolution No. 160646.
[19] http://edckc.com/about-edc/agencies/tax-increment-financing-commission/
[20] http://edckc.com/communitysolutions/urban-renewal/
[21] p. 4 LCRA Handbook C15 Workable Program

several types of activities, and plans "shall be sufficiently complete to indicate its relationship to definite local objectives as to appropriate land uses, improved traffic, foster employment, public transportation, public utilities, recreational and community facilities and other public improvements... ." The statute also notes that the authority shall consider whether proposed land uses generate certain benefits "including, among other things, adequate provision for traffic, ...provision of adequate transportation, water, sewerage and other public utilities, schools, parks, recreational and community facilities and other public requirements..."[22]

Q. 29 and 31 from the TIF Annual Report request expenditures for public infrastructure connected to total project costs funded by TIF and anticipated TIF reimbursable costs. It may be possible to cross-reference these figures with project-specific budget and certified cost documentation submitted to Cochran Head Vick, the consultant that manages TIF accounting.

Exhibit H Annual Assessment Form for TIF Plan/Project Performance Evaluation requests dollars invested and number of units related to lineal feet of road, stormwater, sanitary sewer, streetscape and utility relocation.

The consulting team's analysis shows that PIEA, LCRA and 353 have not required similar annual reports. In these instances, individual project documentation (applications, notices of intent, budgets, any type of reporting) would need to be reviewed to identify associated public infrastructure investments, which would then need to be cross-referenced by address with actual infrastructure counts and values within Kansas City's Building Permit database.

Infrastructure investments do not appear to be part of the purpose of the Chapter 100 or EEZ programs.

Potential Metric

Type and value of public or community-serving infrastructure associated with or resulting from incentivized investments

Data Source(s):

The consulting team was unable to identify a single, consistent source of data for infrastructure investments associated with Kansas City's incentive programs. This information would need to be collected for each individual project in each program from project or plan documents and budgets (or, in the case of TIF, the TIF project Annual Reports) and then aggregated for reporting.

PROJECT CHARACTERISTICS

Kansas City may also consider providing summary statistics on the types of projects that have been funded through Kansas City's various incentive programs. For example, the Redevelopment Project Application used for TIF, LCRA, PIEA and Chapter 353 and encompassing Chapter 100 projects categorizes projects by:

[22] Planned Industrial Expansion Law, Chapter 100 RSMO, 100.300-100.620.

- New Construction or Rehab/Expansion
- Residential, Commercial, Industrial, Retail, Mixed Use or Office
- Single Family/Duplex or Multifamily Housing

A table and/or chart listing either number or value of projects by type by incentive program could be illuminating and provide a simple, summary reference point for incentive use. The table could include projects approved each fiscal year and/or provide a running tally of all active projects. An example of similar reporting on Chicago's TIF allocations and redevelopment agreements is provided below.

If the City wishes, other project features could be highlighted in this manner. For example, the Site Based Project Evaluation Scorecard notes whether projects involve:

- Environmentally sustainable certified construction
- Historic restoration or preservation
- Brownfield remediation
- Infill development
- Food access in a designated food desert area
- Improve or increase the supply of affordable housing or public housing
- Include accessibility features to accommodate residents with special housing needs
- Accessibility by multiple modes of transportation
- Location in proximity to public services and retail establishments

Since this information is already collected in a consistent manner in the Scorecard and from supporting information provided with the Universal Application, it would be a simple process to tally and report on the number of project in each category by incentive program.

Both the Site Based and Job Based Scorecards also note whether projects are in non-distressed, distressed, severely distressed, or

CHART C: TIF ALLOCATIONS, PRIVATE PROJECTS

1983–2010, 100% = $1.8 billion

Since the inception of TIF in Chicago, the City has entered into 257 private development agreements, detailed in Table A.

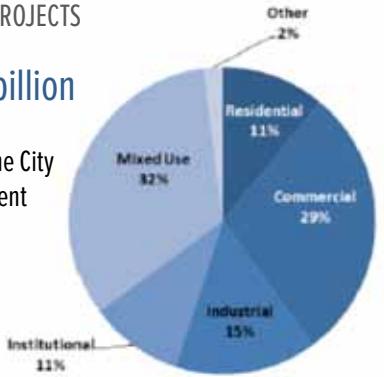


TABLE A: REDEVELOPMENT AGREEMENTS (RDAS) IN CHICAGO TIF DISTRICTS, 1983–2010

PROJECT DESCRIPTION	# FOR-PROFIT RDAS	# NON-PROFIT RDAS	TOTAL PUBLIC ALLOCATIONS
Residential	62	3	$209,878,504
Commercial	75	3	$523,967,470
Industrial	32	•	$282,145,026
Institutional	5	10	$187,242,617
Mixed Use	51	5	$596,844,440
Hotels/Other	8	1	$34,955,753

SOURCE: Findings and Recommendations for Reforming the Use of Tax Increment Financing in Chicago: Creating Greater Effeciency, Transparency and Accountability, August 2011.

continuously distressed areas. The consulting team did not see any summary reporting on the number of projects by incentive program in each of these categories but expect this would be of interest to stakeholders and readers of the EDCKC Annual Report.

Since blight remediation is one of the fundamental objectives of several of the incentive programs under review, Kansas City may also consider similar summary reporting on the number of projects meeting the various definitions of blight in each incentive program. Since the definition of blight is different across each program, numbers could not be aggregated across all programs, but it may be interesting, for example, to publicly report on the various subcategories of "blight":

- within TIF the number of projects that are designated as "blight, conservation or economic development" areas
- within PIEA the number of areas created for development of "blighted, insanitary or underdeveloped areas"
- within 353 the number of projects designated as blighted "by reason of age, obsolescence, inadequate or outmoded design or physical deterioration"
- within LCRA the number of projects that are in either a "blighted area" or "insanitary area"

The blight studies and/or redevelopment contract required as part of the process for these programs should be a good source of data for this indicator, in addition to the TIF Annual Reports provided by recipients.

OTHER SOCIO ECONOMIC FACTORS

This study addresses several social, demographic and economic factors. Crime data is a remaining category of interest to the City. Crime data for Kansas City that could be mapped by grid block is only available starting with June 2015 (via crimereports.com), which is outside of the study period. Historical data may be available, but the consulting team was not able to assess or access this information during the study timeframe. However, this information should be available to Kansas City from the Kansas City Police Department if it chooses to incorporate it into the KPI data set going forward.

ASPIRATIONAL INDICATORS

This section takes a bigger picture view of the type of KPIs Kansas City might deploy to assess its economic development efforts. "Aspirational indicators" reflect Kansas City's broader economic development interests, especially those related to equity and sustainability.

Given Kansas City's interest in sustainability and equity, this section begins with a description of Triple Bottom Line (TBL) indicators. TBL is an appropriate framework for considering KPIs because TBL encompasses economic, sustainability and equity objectives. The City has also been working on identifying broader economic indicators through the STAR Community Rating initiative (sustainability focus) and the Market Value Analysis

(equity focus). This section also addresses how these initiatives might connect to the incentive KPIs.

The information in this section should be used as a starting point for community engagement on residents' expectations for economic and community outcomes stemming from the City's use of its multiple incentive programs. Future KPIs can evolve from this process in concert with other KPIs to be selected by the City and EDCKC. The framework established here to assess metrics – alignment with strategy, consistency with program goals and rules, data availability, appropriate timeframe for evaluation, and enabling comparisons across programs – can help guide this conversation to a productive result.

TRIPLE BOTTOM LINE INDICATORS

The triple bottom line (TBL) refers to the economic, environmental, and social performance of investment. Triple bottom line economic development is differentiated from traditional economic development by its recognition that environmental, social, and economic factors are interrelated and by its commitment to create or retain jobs and wealth in ways that contribute to environmental, social, and economic well-being over time.[23]

[23] Hammer, J. & Pivo, G. (2016). The triple bottom line and sustainability in economic development theory and practice. Economic Development Quarterly, 31(1): 25-36.

Sustainability and the triple bottom line have been identified as priorities of the City of Kansas City. For example, sustainability is one of seven core values in the City's Five Year Business Plan:

> *"We pursue policies and practices that allow our City to support sustainability, which we define as making decisions and taking actions that simultaneously promote economic vitality, social equity, energy conservation, environmentally responsible transportation and land use policies, and strategies to mitigate the serious effects of climate change" (p. 26).*

Among the 63 objectives defined in the plan, priorities include blight removal, neighborhood revitalization with "special attention to sustainable development projects or projects in historically underdeveloped corridors and neighborhoods," pathways to economic mobility, reduced health disparities, community responsive arts and culture development, and continued implementation of the AdvanceKC Strategic Plan.

The AdvanceKC Plan itself organizes its key findings using the triple bottom line rubric of people, place, and prosperity. The Plan identifies the need to create amenity rich, quality environments that are attractive to businesses and workers and provides a framework for improving the city's employment and population growth, local incomes, and quality of life. The AdvanceKC Scorecard assesses potential projects' contribution to a limited number of TBL objectives including, for example, location in a

distressed area, infill development, green building, preservation or remediation, increased food access, and net new sales tax.

The following table offers a list of potential triple bottom line metrics that the City may consider using to evaluate investments made. The suggested metrics are primarily informed by the AdvanceKC Plan, Advance KC Scorecard, 2017–2022 Citywide Business Plan, KCStatPlan, STAR Community Index (national sustainability rating system), EDA Triple Bottom Line Tool (research-based, industry vetted tool to align investment with sustainability goals), B Lab's Impact Assessment (rating system for business sustainability), and IRIS (database of standard sustainability metrics).

The metrics include some that are appropriate for the company or project level as well as some that are appropriate for a neighborhood or plan area. They include output as well as outcome indicators. Several of these metrics are aligned with the STAR rating system (see below). Many of the metrics can be disaggregated by demographics (e.g., age, race/ethnicity, gender, educational attainment, MWSBE status, disability, and/or veteran status). Some metrics can be used to compare plan or project areas to citywide averages or to track changes over time. Some metrics are only applicable for jobs- or business-based incentives because they measure changes in firm activity, while others are appropriate for incentives intended to affect neighborhood or site characteristics. As with the other KPIs, the three primary data sources for these indicators will be the incentive recipient, city or county government departments, and federal or private data providers.

When selecting indicators it will be important to distinguish among those that can be tied directly to incentivized projects or incentive program use and those that represent overall conditions affected by many factors beyond the incentivized investment. Many of the TBL factors fall into the latter category. Both types, however, are useful for learning more about overall program effectiveness and the ability to move the needle on the economic development outcomes of interest to Kansas City.

OPPORTUNITIES TO LEVERAGE OTHER DATA COLLECTION AND REPORTING EFFORTS

Kansas City collects and reports on indicators that reflect economic and community well-being through multiple avenues. This study previously addressed KCStat as one way in which the City monitors progress toward its strategic priorities. Kansas City's STAR certification process and the Market Value Analysis are two other processes that are relevant to the City's economic development priorities and overlap with certain AdvanceKC strategies. The STAR and MVA are summarized below because there may be benefits to applying some of the same indicators and definitions from these initiatives to reporting on Kansas City's incentive programs.

FIGURE 63: POTENTIAL TRIPLE BOTTOM LINE (TBL) METRICS FOR EVALUATING INCENTIVE PERFORMANCE – FOR CONSTRUCTION

PEOPLE

- Jobs created and/or retained
- Median pay for jobs created and/or retained
- Percent of jobs with 3 or more benefits (paid sick days, paid family leave, flexible scheduling, teleworking, job sharing, childcare, retirement)
- Percent of jobs created and/or retained going to existing neighborhood and/or KC residents
- Diversity/representativeness of management
- Employee advancement (e.g., programs for career training and advancement among incentivized businesses)
- Jobs lost to project-related business closures or displacements
- Construction jobs including local hires, project labor agreements, and/or community benefit agreements

PLACE

- Median and mean commercial property value
- Retail, office and residential asking rent/median rent
- Retail, office and residential vacancy rate
- Median, mean and range of home values
- Housing affordability/housing cost burden for renters and homeowners
- No net loss of affordable housing
- Mortgage lending and characteristics
- Crime rates
- Change in neighborhood distress rating
- Remediation, restoration, conservation or enhancement of natural resources
- Conservation or addition of historic, civic, cultural or anchor resources
- Sustainable site design
- Green building certification
- Green power use/percent energy from renewables
- Enrollment in energy management program/Green Star
- Energy use or GHG per job created and retained
- Employee trip reduction (e.g., telecommuting, transit use)
- Resident average commute and mode split
- Percent participation in tenant environmental incentives
- Environmental quality complaints or violations regarding investee/project
- Participation in environmentally preferable purchasing/procurement
- Neighborhood satisfaction surveys – residents and businesses

PROSPERITY

- Payroll
- Number of business births and deaths in project area
- Average age of businesses in project area
- Certified minority and women-owned small business enterprises (MWSBE) in project area
- Area businesses closed and/or displaced due to project
- Median household income
- Project financing through locally owned and operated financial institution
- Banking with locally owned and operated financial institution
- Support for local business (e.g., program or policy to prioritize purchase of goods and services from local businesses)
- Tax revenues

SOURCE: Dr. Janet Hammer, The Collaboratory, for Business Development Advisors

Kansas City's STAR Certification (December 2016)

Kansas City demonstrated its commitment to sustainability during its recent attainment of a 4-STAR certification from the national STAR Community Rating System. Many STAR objective metrics are relevant to economic development and could also be used to assess the economic and community benefits of incentives.

A December 2016 presentation to City Council on Kansas City's STAR Certification acknowledged the contribution of 15 City Departments and 13 community partners to access data for the 516 outcome and action measures used in the evaluation for certification, demonstrating the power of data sharing among City agencies.

For example, indicators in the Built Environment and Economy & Jobs categories related to Infill & Redevelopment, Resource Efficient Buildings and Public Infrastructure, Business Retention & Development, Quality Jobs & Living Wages, Targeted Industry Development may be able to be adapted for incentives program reporting. It would also be interesting to compare outcome and activity measures in incentivized areas with the same measures for the whole city.

Many stakeholders and City leaders have expressed interest in equity indicators. The STAR program includes metrics in six Equity & Empowerment categories that may also be adaptable as KPIs for incentive program use in Kansas City. To take one as an example, the STAR metrics related to "ensuring equitable access and proximity to community facilities, services and infrastructure" are broadly consistent with the stated goals for public benefits within certain incentive programs.

If the STAR metrics will continue to be tracked and reported in Kansas City, identifying a small subset of those same metrics to understand outcomes in areas with incentivized projects may yield valuable insights.

Market Value Analysis

The Market Value Analysis developed by the Reinvestment Fund for Kansas City is another source of additional KPIs for the City's consideration.

The Market Value Analysis (MVA) is a tool to assist residents and policymakers identify and understand the elements of their local real estate markets. It is an objective, data-driven tool built on local administrative data and validated with local experts. With an MVA, public officials and private actors can more precisely target intervention strategies in weak markets and support sustainable growth in stronger markets.

MVA variable categories include property values, investment and stress, blight and vacancy, ownership and housing.

Similar to the analysis prepared for this study, the MVA variables can be mapped to show distribution or differentials across Kansas City.

Also similar to this analysis, the Reinvestment fund overlays select socio economic or property characteristics, such as dangerous buildings, job clusters and public investments, as well as resident satisfaction, public health outcomes and housing affordability. The MVA tool provides another strong model from which to draw potential KPIs for incentive program activity and modes of presentation of complex material.

TAKEAWAYS ON ADDITIONAL INDICATORS

- Kansas City can and should supplement the core KPIs from this study with a small set of additional indicators
- Indicator terms should be defined clearly and consistently across programs wherever possible
- Kansas City has the opportunity to engage citizens in the selection of "aspirational KPIs" to ensure the indicators reflect the outcomes that matter most to Kansas City residents
- Additional indicators should always be aligned with City economic development strategy, consistent with program goals and guidelines, and have a well-defined data source

Appendices

KANSAS CITY INCENTIVES STUDY

Appendix: PGAV Methodology

Descriptive Statistics and Background

Oftentimes it is beneficial to review the literature to see what variables other studies have used in similar themed analysis.

- Other studies have shown that the use of TIFs can return higher property values than areas that do not use TIFs: Man and Rosentraub (1999), Anderson (1990),
- Even in the presence of suppressive variables, like crime and blight, "…an aggressive TIF policy (can mitigate) …the suppressive effects on property valuation in the most problematic crime and brownfield-plagued geographical areas (Eger, p. 472, 2006)."
- Proponents believe that the incentives provided by TIF are effective in attracting business investment, thereby increasing economic activity, employment opportunities, wages, property values, and tax revenues (Carroll, 2006).

There are a number of studies[24] that evaluate TIF performance using property value as a primary variable in their analysis. Other literature has used assessed value (Carroll, 2008), and still others have used variables listed below:

- Property Taxes (or other tax as appropriate)
- Crime (property, personal, other)
- Brownfields (a common proxy to enhance the blight variable)
- Population
- Nonresidential property
- Shelters graduation rate
- Tax rate
- Revaluation
- Proximity to interstate
- Proximity to a library/number of libraries within a geographic unit
- Median assessed value of property
- TIF age (whether a TIF is new or towards the end of its duration)
- Lot characteristics (lot area, property structure age, improvements value, number of units, number of bedrooms, as examples)
- Land use (mixed land use, commercial land use, land use change, mercantile class, special mercantile class, mercantile apartments class, class change, owner occupied, as examples)
- Building violations
- Tax delinquency
- Location and neighborhood / accessibility
- Median neighborhood value
- Downtown location

[24] Anderson, 1990; Donaghy, Elson and Knaap, 1999; Dye and Merriman, 2000; Bartik, 1991; Persky, Felsenstein and Wiewel, 1997

The KPI variables used in this study are consistent with those that have been used in other peer reviewed studies. The indicators are listed below with their commonly used abbreviations in the data and the years that they encompass:

The following table lists the descriptive statistics for the variables used in the spatial analysis section of this report. The descriptive statistics are shown for all grid cells, 1,116 in total, and have been time-aggregated.[25] for each variable. Temporal aggregation is a data reduction technique that allows for trending in the data to become more readily apparent in analysis. Additionally, the collapse of the years into one unit for analysis dampens some of the skewing effects of the foreclosure crisis on the data by supplementing the data with additional (economic recovery) years, which in turn, provides a more realistic modeling of the current, non-foreclosure heightened, urban environment.

NAME OF INDICATOR	ABBREVIATED NAME IN DATA	TIMEFRAME
Real Property Taxes Paid	Tax2006, Tax06_15, etc.	2006 to 2015
TIF Incremental Real Property Taxes Paid	TIF2006, TIF06_15, etc.	2006 to 2015
Real Property Taxes Abated	AB2006, AB06_15, etc.	2006 to 2015
Building Permit Value	BPC2006, BPC06_15, etc.	2006 to 2015
Building Permit Value	BPV2006, BPV06_15, etc.	2006 to 2015
Infrastructure Project Count	CIC2006, CIC06_15, etc.	2006 to 2015
Infrastructure Project Value	CIV2006, CIV06_15, etc.	2006 to 2015
Service Calls (blight-related)	SC2007, SC07_15, etc.	2007 to 2015

In the table, variables in the study are listed along the left, while the descriptive statistic is listed along the top. The variable labels along the left follow the abbreviations that were described in the previous table. The abbreviation also contains an additional temporal naming convention appended to the variable to indicate the years that the variable covers. For example, in one-year formatted variables: BPC2006 denotes the Building Permit Counts that occurred in 2006. If more than one year formed the variable, than: BPC06_15 denoted the Building Permit Counts

Original Descriptive Statistics

Variable	N	Mean	S.E. Mean	Std Dev	Variance	Kurtosis	S.E. Kurt	Skewness	S.E. Skew	Range	Minimum	Maximum	Sum
Tax06_15	1116	$ 3,499,785.32	$ 186,812	$ 6,240,751	$ 38,946,978,696,170	39.42	0.15	4.99	0.07	$ 81,161,820	0.00	$ 81,161,820	$ 3,905,760,419
TIF06_15	1116	$ 258,378.09	$ 48,618	$ 1,624,146	$ 2,637,848,992,010	128.37	0.15	10.51	0.07	$ 25,783,208	0.00	$ 25,783,208	$ 288,349,951
AB06_15	1116	$ 225,926.62	$ 48,612	$ 1,623,961	$ 2,637,250,294,265	144.73	0.15	11.51	0.07	$ 24,662,329	0.00	$ 24,662,329	$ 252,134,112
BPC06_15	1116	16.13	1.42	47.54	2259.72	31.24	0.15	4.88	0.07	524	0.00	524	18005
BPV06_15	1116	$ 3,410,953.90	$ 496,447	$16,584,604	$ 275,049,095,417,132	112.91	0.15	9.61	0.07	$ 256,574,297	0.00	$ 256,574,297	$ 38,066,244,553
CIC06_15	1116	2.22	0.14	4.52	20.43	20.8	0.15	3.93	0.07	41	0.00	41	2479
CIV06_15	1116	$ 452,637.59	$ 45,908	$ 1,533,616	$ 2,351,979,223,774	94.3	0.15	8.17	0.07	$ 25,630,288	0.00	$ 25,630,288	$ 505,143,554
SC07_15	1116	158.89	10.71	357.76	127992.17	15.27	0.15	3.64	0.07	2798	0.00	2798	177319
Inc06_15	1116	0.31	0.01	0.46	0.21	-1.33	0.15	0.82	0.07	1	0.00	1	347

[25] Variables were recorded annually from 2006 through 2015 (2007 as the starting year for Service Calls – abbreviated as SC) for this study.

that occurred from 2006 to 2015. (All variables used aggregated count to grid cell as their mode of tabulation.)

Interpreting the descriptive statistics table:

The "N" indicates that all 1,116 observations, or grid cells in this case, were successfully counted in the descriptive statistics table, and are present in the descriptive statistic summary report. This count column is useful in ensuring that there are no null, uncounted, or dropped, entries in the data. The mean, a traditional measure of central tendency, is useful for indicating averages within the data. For example, the average population in any given grid cell was 410.83, in 2010, and 421.46, in 2015; an increase of 10.63 per averaged grid cell. Population density was 1428.06, in 2010, and 1475.58, in 2015; an increase of 46.52 per average grid cell. Both population metrics affirm population growth for the KC, and the table supports a general trend of population growth for KC from 2010 to 2015.

KC Dataset: Descriptive Statistic Summary Report

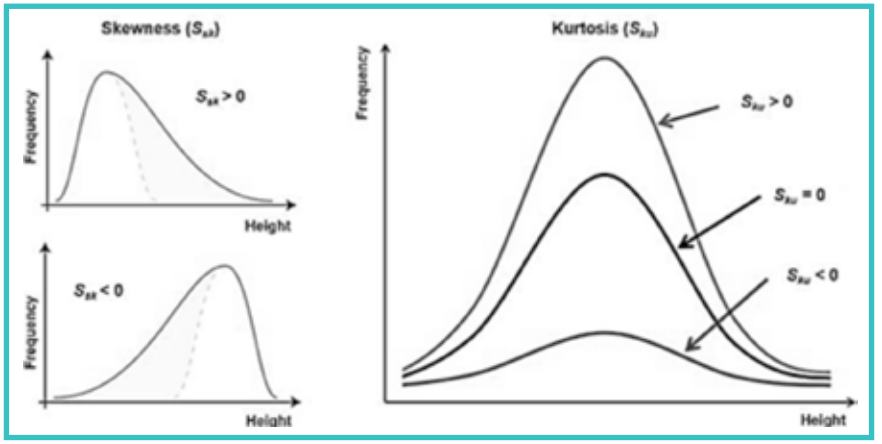
Notable variables with high kurtosis include:
TIF: TIF06_15
Abatement: AB06_15
Building Permit Value: BPV06_15
Housing Units Gained: BPG06_15
Housing Units Lost: BPL06_15
Infrastructure Project: CIV06_15

Notably skewed variables:
TIF: TIF06_15
Abatement: AB06_15

In returning to the table, the columns, SE Mean, SD and Variance, are useful for indicating mean and variation.[26] Skewing and kurtosis describe the symmetry of the data, and can provide clues about data spread. Numbers in this table that are closer to 0 are preferred.[27] Skewing in the data becomes easier to see when plotted, and histograms were generated for each KC variable, with interpretation of the results discussed below. In general, a histogram should be assessed for symmetry. The reader should compare how well the plotted variable data matches the superimposed, statistically normal, bell curve line. The graphic below helps the reader visualize the effects of skewing (sometimes referred to as right or left leaning) and kurtosis (sometimes referred to as flatness or peakedness).

[26] While presenting data, one should be aware of using adequate statistical measures. In biomedical journals, Standard Error of Mean (SEM) and Standard Deviation (SD) are used interchangeably to express variability; though they measure different parameters. SEM quantifies uncertainty in estimate of the mean, whereas SD indicates dispersion of the data from mean. As readers are generally interested in knowing the variability within a sample, descriptive data should be precisely summarized with SD. Use of SEM should be limited to compute Confidence Intervals (CI) which measures the precision of a population estimate (Barde, p.113-116, 2012).

[27] For the statistician, parametric statistical tests rely upon the assumption of normality – namely that the data conform to a normal distribution. The Kurtosis and Skewing tests are useful for an initial review of the data. A normal distribution will report a skewness and kurtosis closer to zero. When skewing is present in the data, as is the case here, further investigation of the data spread is needed to inform which tests are appropriate.



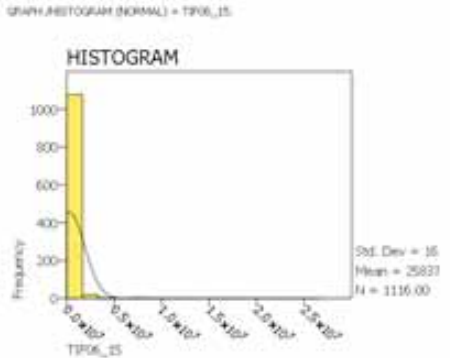
The histograms are good for showing frequency distribution, and the data generally exhibits right/positive skewing. Also notable, the variables do not exhibit multiple peaking, with the exception of Inc06_15. Inc06_15 exhibits this double peaking because it is a categorical variable with a binary assignment; or simply stated, the only values that should be present in this histogram are 0's and 1's which cause the skewing. Other skewing present in the other variables, may be a result of the areas within KC that do not exhibit characteristics of the typical built environment; including: parks, waterways, other open spaces, large infrastructure areas (airports, large highway interchanges, and rail yards), rural areas, or other features that cause zero counting, or the non presence of variable to be recorded in the data.

The histograms clearly reveal a presence of high zero counting, where many grid cells do not report the presence of a variable. Skewness in the data is problematic because many statistical tests require an assumption of normality in the data in order for the results from parametric statistical tests to provide reliable results. Common methods for standardizing data, include: performing logarithmic transformations on the data to dampen the effects of high and low outliers in a data set; increasing the N-counts of a dataset – through adding more data, more variables, increasing the years of the study, or any combination of these techniques to strengthen the N-count; or when normality cannot be achieved, than limiting tests to those tests that do not assume normality, otherwise known as non-parametric statistical tests, for analysis (Rogerson, 2010; Lee & Wong, 2005; Montello & Sutton, 2006).

In returning to the descriptive statistics table, the remaining columns (range, minimum, maximum and sum) are useful for reviewing the breadth and depth of the variable counts. For example, the minimum column indicates that the data contained positive values, contained no outliers, nor errors from data entry[28] – as reported by the value, 0.00. The maximum column initially looks suspect, with the "1" in the Inc06_15 row, however, as noted before, this variable is a binary/ordinal formatted variable, and thus, a one or zero are expected as the only acceptable results for this row.

The descriptive statistics were discussed in detail because an understanding of the data can be helpful in understanding limitations for statistical test selection and deficiencies in the data that need to be addressed. For this data, the skewing is likely to be problematic. One method for addressing skewing is to perform a log transformation.

[28] Common examples of erroneous data entry include blank cells, non-numeric cells in numeric columns, or negative number cells.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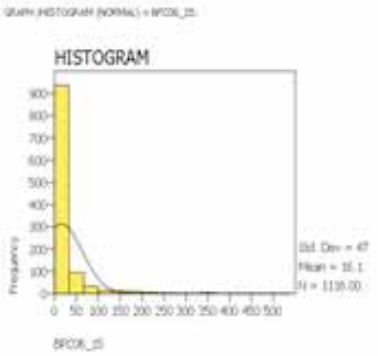
Std. Dev = 16
Mean = 25837
N = 1116.00
TSP06_15


HISTOGRAM
Std. Dev = 47
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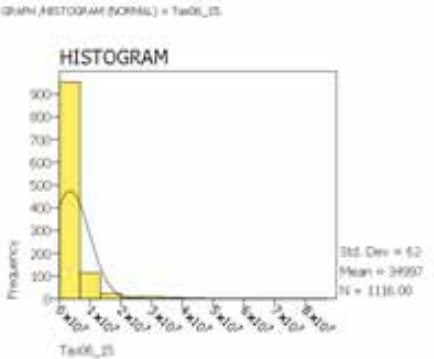
N = 1116.00
BIO06_15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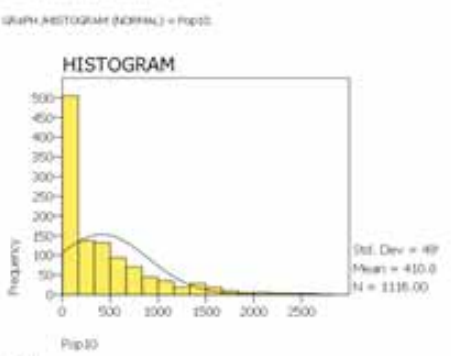
Tav06_15


HISTOGRAM
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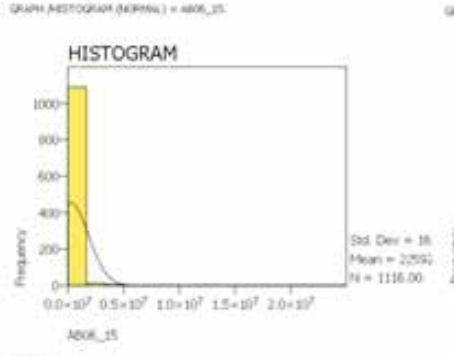
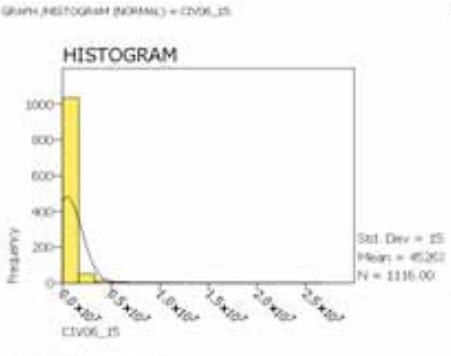
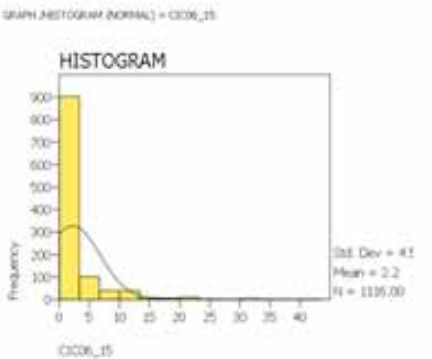
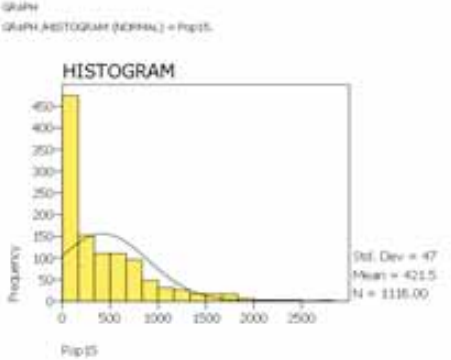
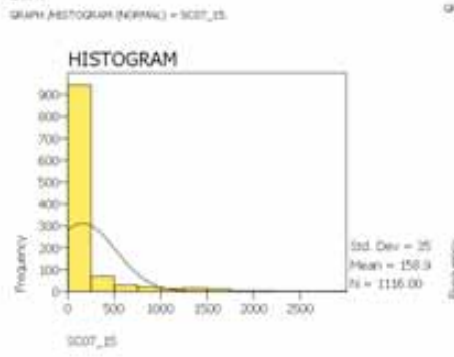
Mean = 410.0
N = 1116.00
Pop10

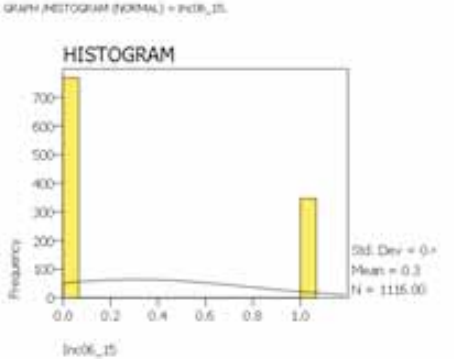

HISTOGRAM
Std. Dev = 16
N = 1116.00
A806_15


HISTOGRAM
Std. Dev = 15
N = 1116.00
CIV06_15


HISTOGRAM
Std. Dev = 4.1
Mean = 2.2
N = 1116.00
CCO6_15


HISTOGRAM
Std. Dev = 47
Mean = 421.5
N = 1116.00
Pop15


HISTOGRAM
Std. Dev = 25
Mean = 158.9
N = 1116.00
SC07_15


HISTOGRAM
Std. Dev = 0.4
Mean = 0.3
N = 1116.00
Inc06_15

Log Transformation

In skewed count data, oftentimes a logarithmic transformation is applied to transform data into a more normal distribution, and this is particularly useful in count types of data.

> Log transformation compresses high values and spreads low values by expressing the values as orders of magnitude. Log transformation is often useful when there is a high degree of variation within variables or when there is a high degree of variation among attributes within a sample. These are commonly true with count data (as is the case here) and biomass data. (McCune & Grace, 2002)

Some statisticians prefer log transformations, going so far as to state that "it is recommended that log transformed analyses should frequently be preferred to untransformed analyses…(Keene, 1995). A power log has been applied to the KC data in order to assess whether a log transformation would be beneficial in migrating the data into a more normal distribution. Excel's log10 function was employed to perform the transformation, and as recommended by the literature a (+1) was added at the end of the formula to address the high frequency of zeros that were present in the data.[29]

To log-transform data containing zero, a small number must be added to all data points. If the lowest non zero value in the data is one (as is common in count data), then it is best to add one before applying the transformations: by = log(xij +1). (McCune & Grace, 2002)

Specifically, in Excel, the following formula was used:

=LOG10(cell + 1)

The following illustrates for the reader how the LOG10 function alters data in Excel:

Formulas:

	A
1	=LOG10(100)
2	=LOG10(1000)
3	=LOG10(0.001)
4	=LOG10(25)

Results:

	A	B
1	2	$10^2 = 100$; Therefore, $\text{Log}_{10}(100) = 2$
2	3	$10^3 = 1000$; Therefore, $\text{Log}_{10}(1000) = 3$
3	-3	$10^{-3} = 0.001$; Therefore, $\text{Log}_{10}(0.001) = -3$
4	1.397940009	$10^{1.397940009} = 25$; Therefore, $\text{Log}_{10}(25) = 1.397940009$

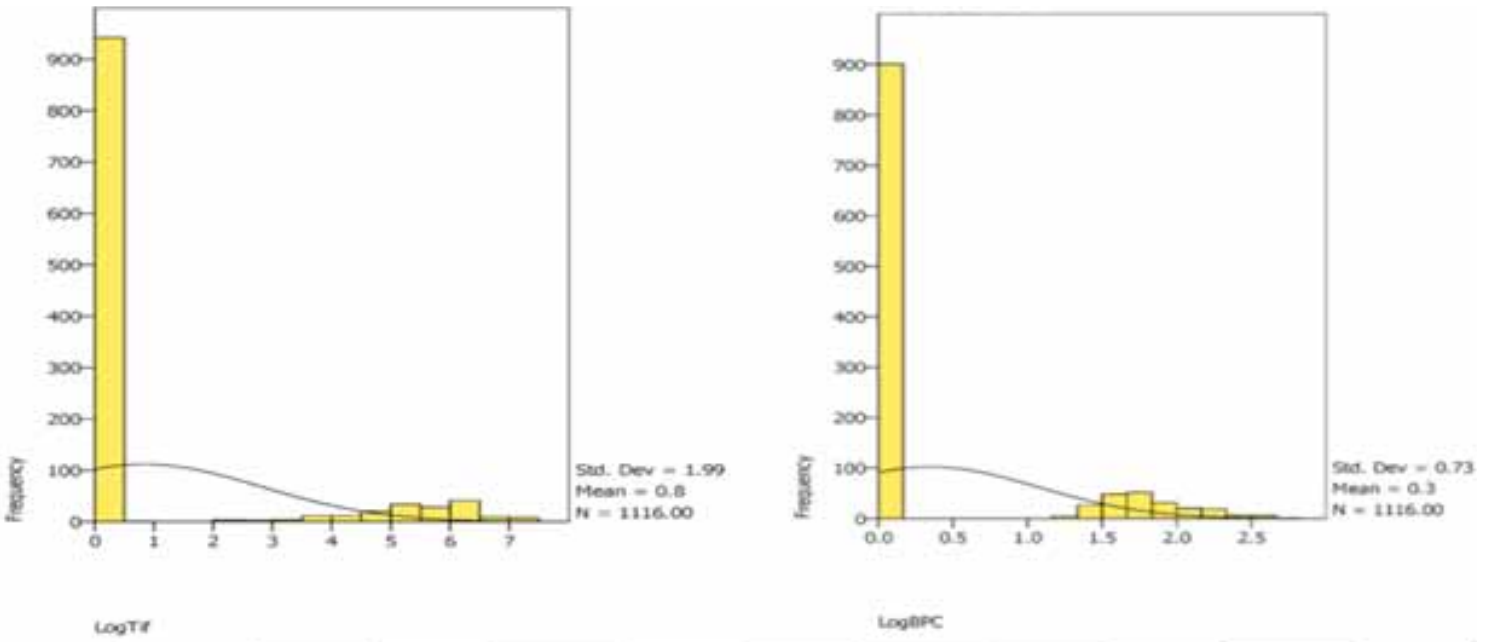
[29] Logarithmic transformations are actually a class of transformations, rather than a single transformation. In brief, a logarithm is the power (exponent) a base number must be raised to in order to get the original number. Any given number can be expressed as y to the x power in an infinite number of ways…Thus, log10 (100) = 2 and log10 (16) = 1.2…As the logarithm of any negative number or number less than 1 is undefined, if a variable contains values less than 1.0, a constant must be added to move the minimum value of the distribution, preferably to 1.00…in cases where there are extremes a base 10 is desirable, but when there are ranges that are less extreme, using a base 10 will result in a loss of resolution, and using a lower base (e or 2) will serve (higher bases tend to pull extreme values in more drastically than lower bases)(Osborne, 2002).

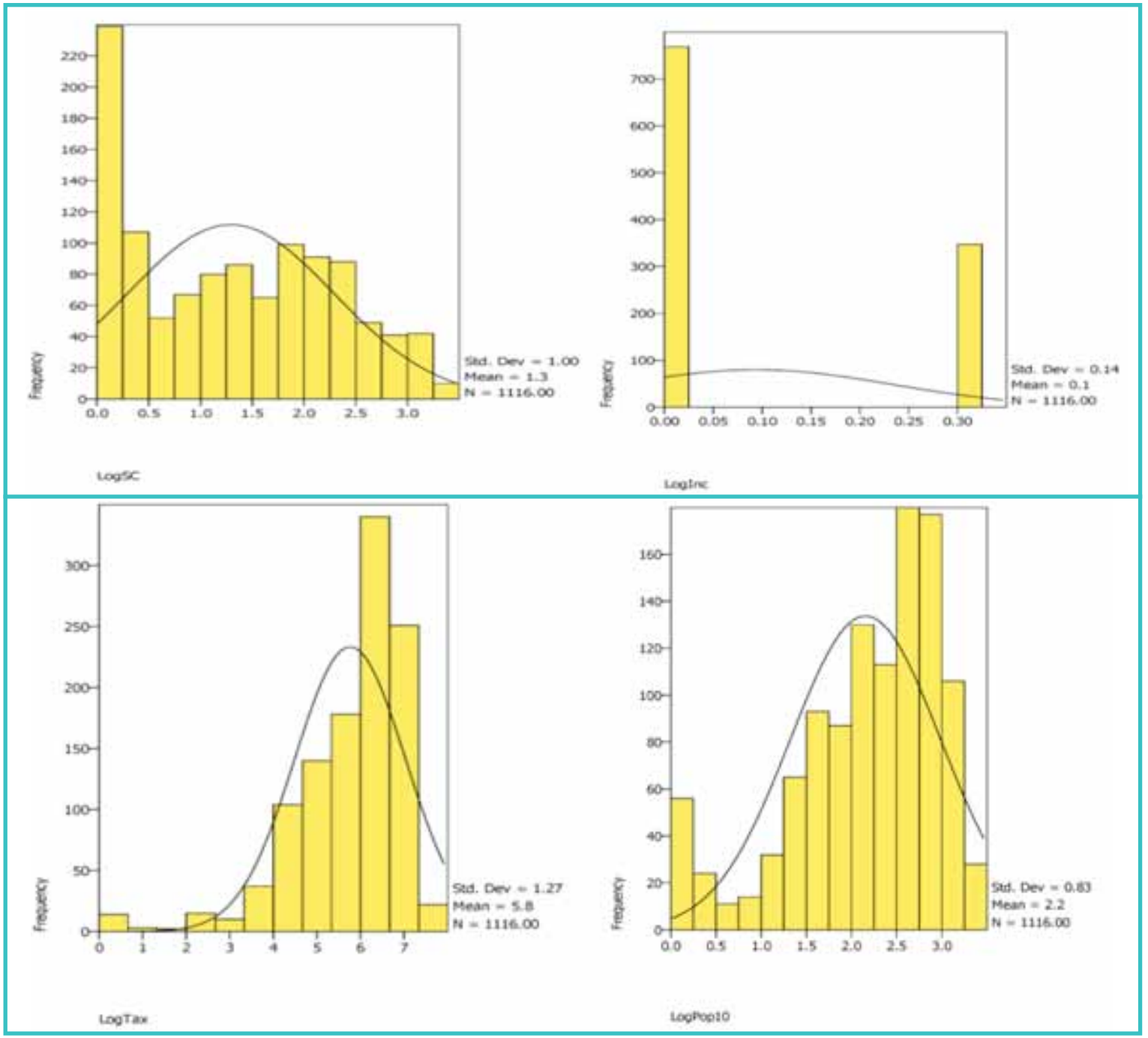
The results from the transformed data are summarized in a descriptive statistics table below. The original descriptive statistics table is provided for comparison. Data dampening is most prominent in the columns: range, mean, SE mean, and variance. When comparing between the two tables, the general ranking of the data remains in tact – as can be seen in the SE kurt and the SE skew, which report the same value between the two tables. The power of the transformation maintained correct proportions in the datasets and did offer some suppression of the outlier variables.

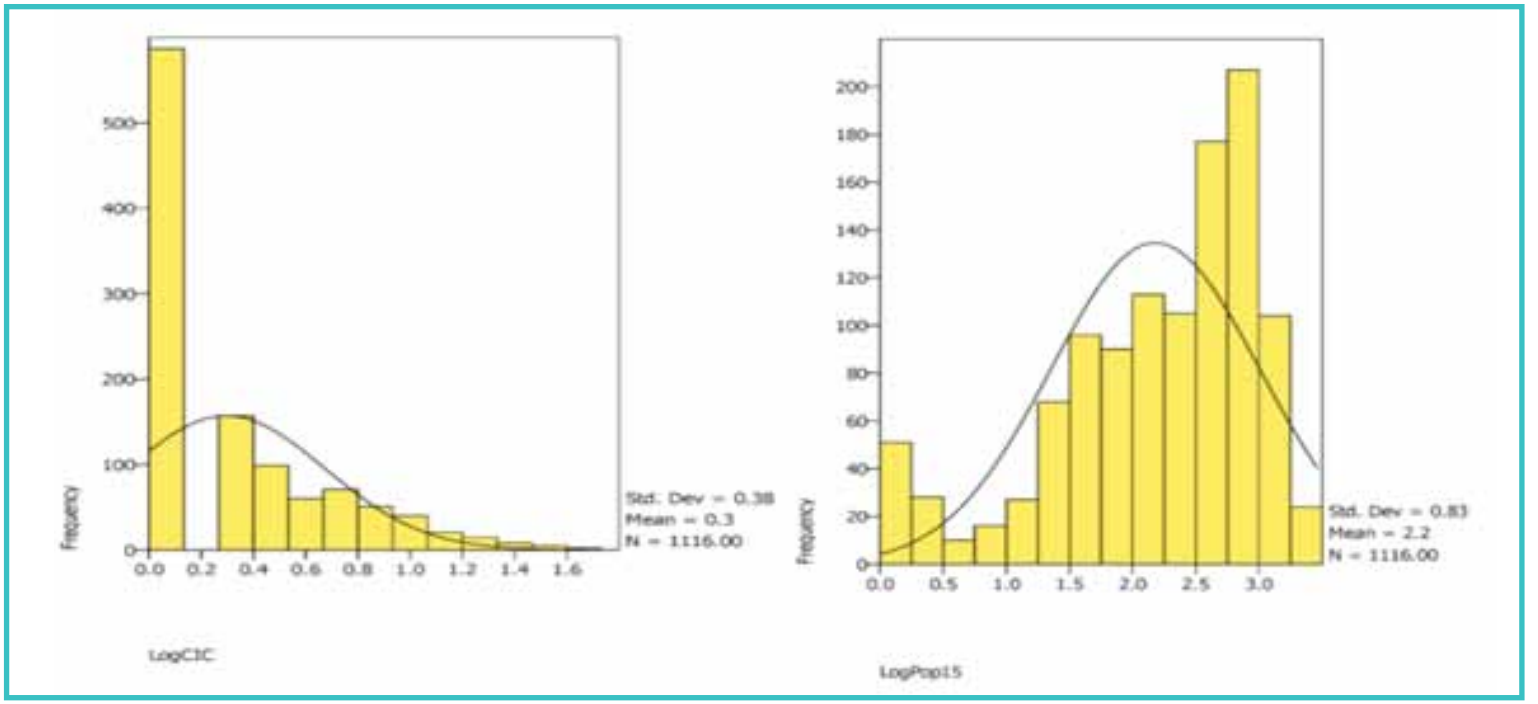
The logged variables were plotted on histograms to evaluate their frequency distributions and as a means to compare to the prior histograms and visualize the data transformation. In both histogram series, the variables are presented in the same order to facilitate ease of comparison. A softening of the data, evident in the flattened and reduced curvatures of the bell curves can be seen when comparing the original to the logged histogram sets. The logged data appears to be an improvement towards normalcy over the raw data.

Log Transformation Descriptive Statistics

Variable	N	Mean	S.E. Mean	Std Dev	Variance	Kurtosis	S.E. Kurt	Skewness	S.E. Skew	Range	Minimum	Maximum	Sum
Tax06_15	1116	5.76	0.04	1.27	1.62	4.49	0.15	-1.73	0.07	7.91	0.00	7.91	6428.55
TIF06_15	1116	0.83	0.06	1.99	3.96	2.55	0.15	2.08	0.07	7.41	0.00	7.41	929.69
AB06_15	1116	1.16	0.06	2.14	4.57	0.36	0.15	1.44	0.07	7.39	0.00	7.39	1293.09
BPC06_15	1116	0.35	0.02	0.73	0.53	1.13	0.15	1.70	0.07	2.72	0.00	2.72	388.53
BPV06_15	1116	1.32	0.08	2.71	7.33	0.62	0.15	1.60	0.07	8.41	0.00	8.41	1468.18
CIC06_15	1116	0.30	0.01	0.38	0.14	0.29	0.15	1.10	0.07	1.62	0.00	1.62	331.09
CIV06_15	1116	2.50	0.08	2.73	7.44	-1.78	0.15	0.27	0.07	7.41	0.00	7.41	2795.32
SC07_15	1116	1.29	0.03	1.00	0.99	-1.17	0.15	0.17	0.07	3.45	0.00	3.45	1442.92
Inc06_15	1116	0.09	0.00	0.14	0.02	-1.33	0.15	0.82	0.07	0.30	0.00	0.30	104.46


Frequency
Std. Dev = 1.99
Mean = 0.8
N = 1116.00
LogTif
Frequency
Std. Dev = 0.73
Mean = 0.3
N = 1116.00
LogBPC
Frequency
Std. Dev = 2.14
Mean = 1.2
N = 1116.00
LogAB
Frequency
Std. Dev = 2.73
Mean = 2.5
N = 1116.00
LogCIV


Frequency
Std. Dev = 1.00
Mean = 1.3
N = 1116.00
LogSC
Frequency
Std. Dev = 0.14
Mean = 0.1
N = 1116.00
LogInc
Frequency
Std. Dev = 1.27
Mean = 5.8
N = 1116.00
LogTax
Frequency
Std. Dev = 0.83
Mean = 2.2
N = 1116.00
LogPop10



Even after transformation, the geographic data still presents with skewing. It is recommended that future geographic studies increase N-counts by boosting sampling size either through increasing the time frame of the study, finding other data sources to supplement the existing data set, or by rephrasing a research question to remove binary data collections or ask questions that deal within a population instead of between populations; i.e. what are the differences among TIFs within the KC study area (or) what are the differences among property taxes paid within the KC study area?

As a means to test recombining variable to increase N-count, INCØ6-15 was created, which combined TIF and Abatement. If either variable indicated a record in a grid cell, the grid cell was assigned a 1. If there was no presence of the variable, the grid cell was assigned a 0.

TIF Value in grid cell: 174 / 1116 (16%)

No TIF Value not in grid cell: 942 / 1116 (84%)

Taxes Abated in grid cell: 269 / 1116 (24%)

Taxes Abated not in grid cell: 847 / 1116 (76%)

This improved the N-count from 16% to 31% in TIF, and from 24% to 31% in Abatement, respectively (see below).

TIF and Abatement in grid cell: 347 / 1116 (31%)

TIF and Abatement not in grid cell: 769 / 1116 (69%)

Limitations and Solutions

Limitations imposed on research can be introduced as a result of the data format, data availability, N-count/quantity of the provided data, the time frame of the data, the spatial unit that is used for data collection or aggregation, and the general spatial coverage of the data. This section summarizes some of these data-imposed limitations, as well as other limitations that were part of this study.

Limitations are important to note, because data input is critical not only for the results of a study, but also to inform data collection efforts and research/reports that use the same data. The limitations section is, therefore, intended to offer guidance on improving data collection, clearly outline what methods were done in treatment of the data, and to provide foundational information for subsequent researchers or analysts that want to work on this kind of research (or other urban themed research) for Kansas City in the future.

The Availability of Map-Ready Information

The amount and quality of historic map-ready information is often a limiting factor for geospatial studies. Here the term "map-ready" refers to information that is associated with a specific location, manipulation and analysis of the data via modern geographic software is possible. As new geospatial software is created, new storage database formats make old formats obsolete or unusable. Additionally, many historic datasets do not contain the proper coordinates, addresses, block numbers, etc. If they do, the coordinates may follow a different system or the addresses contain invalid house numbers.

Tax parcel assessment information is a commonly used dataset, but it can come with many limitations. There may be keystroke errors or places where some property values are reassessed for the given assessment year while others remain untouched. Additionally, the methods and format by which assessment information is stored often varies greatly from one assessment office to the next. It is especially challenging when columns are labeled with local shorthand headings that are inconsistent with their peer assessors or the shorthand changes from year to year.

Finally, it can be challenging to understand the contents of the various value columns in assessment databases. For example, does the recorded taxable value of a property include exemptions associated with tax increment financing and tax abatement? What is the base year for the incentive? What about special assessments? If the taxable value of a property does not include exemptions, are there other columns that will assist in calculating the exempt value? These are questions that must have clear and consistent answers for all records.

Other than handwritten notes, scanned documents might be the least useful format for a geospatial study. The information contained in the scanned documents must be digitized (or) tabulated before it is map-ready, and at that point it may contain additional limiting factors as previously discussed.

The study team encountered all of the limiting factors associated with the availability of map-ready information described above and more. The completion of the Geographic Information Collection Process, and subsequent tabulation efforts completed by Kansas City staff yielded adequate data for the geospatial component of the study.

The Granularity of the Map-Ready Information

A layer of points containing map-ready information is ideal for geospatial analysis because each piece of information is associated with a specific location. Polygons (squares, circles, hexagons, etc.) and lines can contain the same information as a layer of points, but the location of that information is less specific because polygons and lines cover larger areas. The study team made use of map-ready point layers containing information about infrastructure projects, building permits, and service calls. The team also used polygon and line layers containing information about TIF incremental real property taxes, abated real property taxes, and infrastructure projects. The study team was able to acquire one citywide parcel polygon layer from tax year 2016, a year that is outside the study period (2006 to 2015). This parcel polygon layer was used because the study team needed a way to link TIF incremental property taxes, abated real property taxes, and real property taxes paid to locations in the city. The study team, with input from city staff, formulated the Geographic Information Standardization Process, described in the Appendix, to overcome some of the data challenges (this process is described in more detail in the section called Methodology).

The study team transformed tax parcel assessment records into map-ready information for use in the study. A degree of granularity was lost during this process, but this was a necessary compromise in order to standardize the data. Had the study team acquired tax parcel polygons for each year in the study period, a more granular analysis would have been possible. The larger the scale of analysis (zoomed in) the more specific the results. In future studies, the City can improve intergovernmental partnerships and lines of communication to obtain more granular, historic map-ready information.

The Timeframe of the Geospatial Study

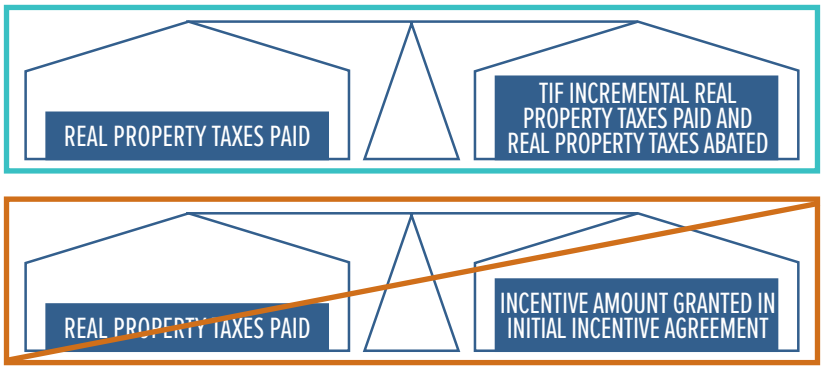
The study period (from 2006 to 2015) encompassed the most complete, consistent, and available map-ready information. The timeframe of the study is a limiting factor because incentive agreements often last longer than ten years (in the case of Missouri, TIFs can last 23 years) and the impact of construction projects is felt for several decades after their completion. The study team sought to compare the benefit (real property taxes paid) with the public investment (TIF incremental taxes paid and taxes abated). In light of the limited timeframe and map-ready information, the study team chose to calculate public investment based on the actual TIF incremental taxes paid and the actual taxes abated. An alternative method would be to use the amount of public assistance granted in an incentive agreement; however, the amount granted in agreements is not always fully realized and would not necessarily represent the actual level of public investment. Seeing as the study team planned to

use real property taxes paid, a figure with little margin of error, for the analysis, the use of this alternative method to identify a vague public investment figure did not make sense.

Instead, the study team used actual tax parcel valuation information and levy rates to calculate the amount of incremental real property taxes paid and real property taxes abated by each parcel annually. This method yielded an annual public investment figure that was a more appropriate complement to the benefit figure than the results of the alternative method, described above (see figure below).

The Specificity of the Geospatial Findings

Granular, map-ready information yields specific, geospatial findings. The team standardized map-ready information (described in the Geographic Information Standardization Process in the paragraphs above) so that all the information would fit into grid cells stored in the same database. In doing so, the point layers were aggregated into a less granular format (grid cells) while the polygons were aggregated into a more granular format (grid cell). The standardization and aggregation processes were necessary to analyze the available information, but it meant that the findings were less specific than they could have been with parcel layers from each year.



Getis-Ord Gi* Statistic

The Getis-Ord local statistic is given as:

$$G_i^* = \frac{\sum_{j=1}^{n} w_{i,j}x_j - \bar{X}\sum_{j=1}^{n} w_{i,j}}{S\sqrt{\frac{\left[n\sum_{j=1}^{n} w_{i,j}^2 - \left(\sum_{j=1}^{n} w_{i,j}\right)^2\right]}{n-1}}} \quad (1)$$

where x_j is the attribute value for feature j, $w_{i,j}$ is the spatial weight between feature i and j, n is equal to the total number of features and:

$$\bar{X} = \frac{\sum_{j=1}^{n} x_j}{n} \quad (2)$$

$$S = \sqrt{\frac{\sum_{j=1}^{n} x_j^2}{n} - \left(\bar{X}\right)^2} \quad (3)$$

The G_i^* statistic is a z-score so no further calculations are required.

ESRI ArcPro 2018

The Hot Spot Analysis tool calculates the Getis-Ord Gi* statistic (pronounced G-i-star) for each feature in a dataset. The resultant z-scores and p-values tell you where features with either high or low values cluster spatially. This tool works by looking at each feature within the context of neighboring features. A feature with a high value is interesting but may not be a statistically significant hot spot. To be a statistically significant hot spot, a feature will have a high value and be surrounded by other features with high values

as well. The local sum for a feature and its neighbors is compared proportionally to the sum of all features; when the local sum is very different from the expected local sum, and when that difference is too large to be the result of random chance, a statistically significant z-score results. When the FDR correction is applied, statistical significance is adjusted to account for multiple testing and spatial dependency...The Gi* statistic returned for each feature in the dataset is a z-score. For statistically significant positive z-scores, the larger the z-score is, the more intense the clustering of high values (hot spot). For statistically significant negative z-scores, the smaller the z-score is, the more intense the clustering of low values (cold spot).

Appendix: REMI Methodology

About REMI

REMI is an independent company with offices in Amherst, MA and Washington, DC that provides non-partisan economic analysis and models to clients globally. Clients include federal and state government agencies, state governors, non-profit organizations, and private companies. REMI models have been applied to various policy areas including taxation, environment, economic development, health care, transportation, energy, and immigration.

REMI models are most commonly utilized to evaluate government policy, infrastructure and other 'what if?' scenarios. The model is utilized within Missouri by the Mid-America Regional Council and by the Missouri Department of Economic Development to simulate similar types of incentive programs and for other ongoing dynamic macroeconomic regional analysis.

Municipal, regional and state governments commonly evaluate the economic and fiscal impacts of incentivized projects, programs and other investments to better ensure public dollars are being put to good use. The use of dynamic, integrated models is important to evaluate how policy may influence economic, demographic and fiscal impacts overtime.

In order to calculate the macroeconomic impacts of a given scenario, REMI PI+ incorporates information on supply chain relationships, dynamic economic behavioral responses, and economic geography factors such as agglomeration effects. The model can show a wide variety of impacts, including various results associated with employment, industry output (sales), personal income, consumption, and capital investments. These impacts include not only the direct effect of a policy change but also the resulting changes in the supply chain and in the economy more widely.

REMI built a three-region model for this analysis. The first region reflects Kansas City, Missouri; the second region represents the rest of the Kansas City metropolitan area; and the third region covers the rest of Missouri. The model includes an underlying regional and national forecast. The REMI model utilizes publicly available data interlinked with peer-reviewed theories to develop a dynamic economic and demographic structure. This structure provides historic data and a forecast out to 2060 on the regional and national economy.

REMI utilized a three region model for this analysis. Region one reflects Kansas City, region two reflects the rest of the Kansas City metropolitan area and region 3 reflects the rest of Missouri. The REMI model utilizes publicly available data to understand the regional economic and demographic structure of the regional and national content. The model is utilized within Missouri by the Mid-America Regional Council and by the Missouri Department

of Economic Development to model similar types of incentive programs and for other ongoing analysis that requires the use of dynamic macroeconomic regional analysis. For more information on the REMI model, please see Appendix PI+ Model Overview.

Breaking down the organizations into their various programs necessitated some modifications to the analysis for the Consulting Team. For example, each of the various statutory agencies and organizations that managed incentive programs have been using separate methods for collecting and storing data. As the Study necessitated bringing the program data together to provide for a citywide analysis, we had to compile and sifted through as much of the data provided to us by the various programs of the EDC, in order to establish the most comprehensive approach possible in analyzing the economic impact of tax incentives given by the EDC over the past 11 years (from 2005 to 2015). The following explains our methodology behind our analysis, breaking it down piece by piece, as well as our conclusion on the basic economic impact (on the revenue side) that the various tax incentive programs have had on Kansas City's economic development.

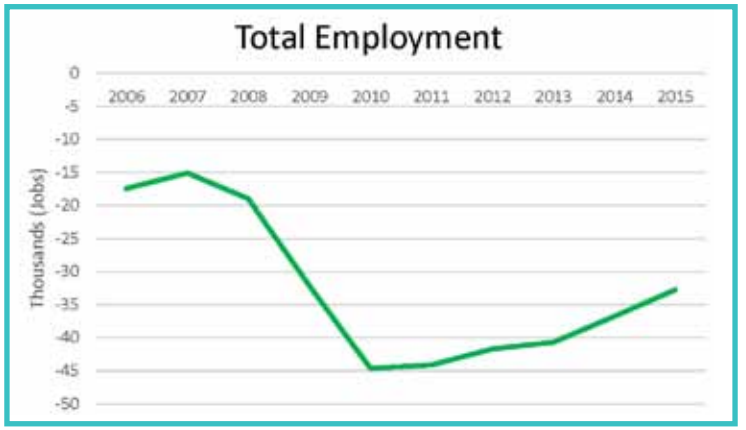
Economic Impact Analysis Methodology

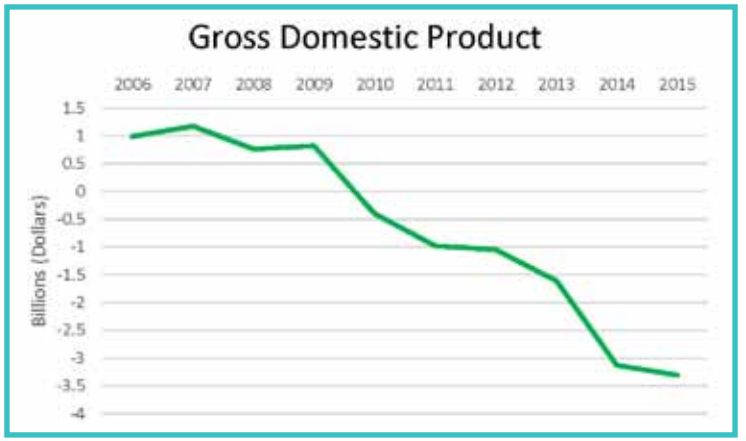
National & Regional Control Forecast Update

Because our model typically takes historic data, and then forecasts it on into the future, we usually start forecasting in the year 2015. However, since we are analyzing the historical economic impact of the various tax incentive programs in Kansas City, we had to recalibrate our model so that the year 2016 in our new baseline (the control for the experiment) is in fact representative of 2006 data. To effectively do this and ensure the data is reflective throughout the entirety of the model, we created a new "National Control". Under this new "National Control", we clarified (to the model) that we would be using an "alternative model specification (data)", and then updated both "Employment" and other "Macroeconomic" changes such as changes in "Private Fixed Investment" and "Imports/Exports of Goods and Services". After completing these updated changes to the "National Control", this in effect allows us to establish a new "National Control" that therefore becomes our new baseline to compare our subsequent forecasts (analyzing the incentive programs) to.

Following a similar logic of reasoning, we must then do the exact same, and update our "Regional Control" to ensure that this data reflects the historic data from 2006. To do this, we must again specify to the model we will be using an "alternative model specification", and then we are able to update the "Employment" and "Population" of the 3 specific regions of the model ("Kansas City", "Greater Kansas City", and the "Rest of Missouri"). Once we have finished updating these changes, we have effectively recalibrated the model to reflect the accurate, historical economic data in Kansas City and Missouri, which finally allows us to analyze the economic impact of the various tax incentive programs.

Following, we have provided some graphs that illustrate the effects of the changes we made to several of the most pertinent categories in the baseline data, such as "Total Employment" and "Gross Domestic Product".





The above graph, shows that our original regional control's "Total Employment" was inflated by 15,000 in our original baseline (set in 2015), and thus we lowered it to be 15,000 less in our new baseline. Additionally, by making this our new baseline, we negate any omitted variable bias in our regression that would occur in the middle of the years we are interested in analyzing, such as the 2008 recession. Therefore, this provides us with a "neutral" baseline, holding constant factors that vary with time, such as the recession.

Similar to the "Total Employment" graph, the following graph shows how "Gross Domestic Product" was in fact much lower, and has been since the recession. Therefore, we have now accounted for this in our baseline data, by making the year 2015 in our model aligned with data from 2006, thereby allowing us to remove time invariant variables from our regression and forecast with much less error.

Economic and Demographic Indicators

- Total Employment comprises estimates of the number of jobs, full-time, part-time and season, by place of work. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included. Employment and jobs are synonymous terms within this report.
- Private Non-Farm Employment is the same definition as total employment, less government and farm employment. Farm employment within Kansas City is not assumed to have not been affected from any segment of this analysis.
- Residence Adjustment Employment is total employment adjusted for place of residence.

FIGURE 67: ECONOMIC SUMMARY OF KANSAS CITY INCENTIVE PROGRAMS, 2006–2015

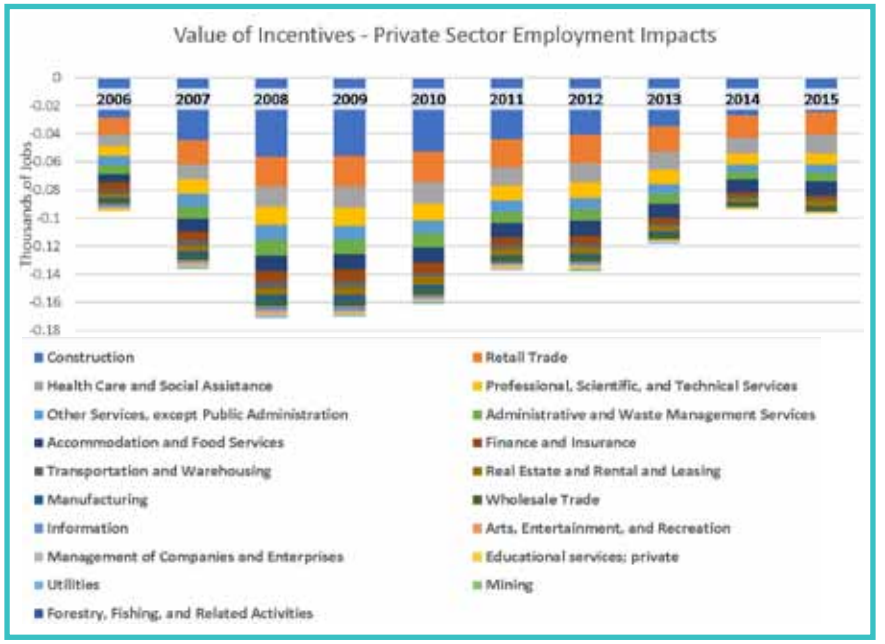
ECONOMIC SUMMARY–*UNITS ARE IN BILLIONS OF CURRENT DOLLARS AND INDIVIDUAL JOBS AND PEOPLE*

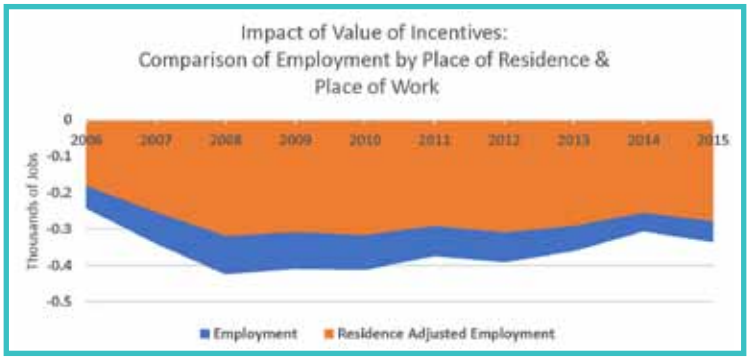
	TOTAL	AVERAGE
Total Employment	234,304	23,430
Private Non-Farm Employment	212,837	21,284
Residence Adjusted Employment	238,256	23,826
Population	280,080	28,008
Gross City Product (GCP)	$26.58	$2.66
Output	$47.46	$4.75
Personal Income	$22.92	$2.29
Real Disposable Personal Income	$23.83	$2.38

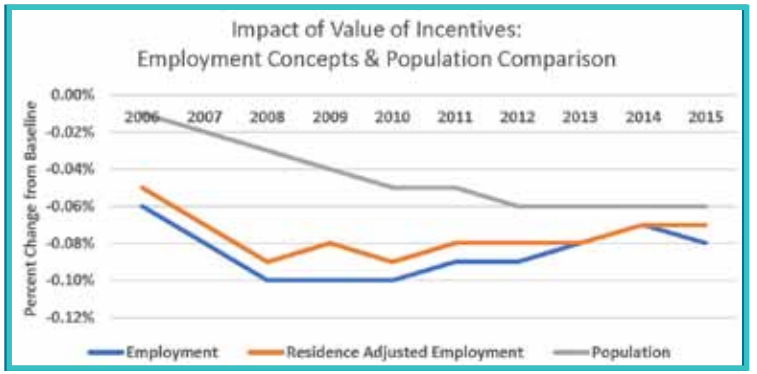
- Population reflects the total change in people, including survivors from the previous year, births, special populations, and three types of migrants (economic, international and retired). Within this analysis, the types of population groups that are assumed to have witnessed almost the entirety of the change are economic migrants (ages 18 – 64) and associated dependents ages (0 – 18).
- Gross City Product (GCP) is also referred to as economic activity, as it reflects the net market value of goods and services produced by labor and capital within the city. This is less than output, as it discounts intermediate goods coming from outside the region and flows of capital assumed to have left the city.
- The increases in Industry Output are synonymous with business sales, or business revenue.
- Personal Income reflects income received by persons from all sources of income.
- Real Disposable Personal Income reflects after-tax income received by persons, deflated by the Personal Consumption Expenditure (PCE) Price Index.

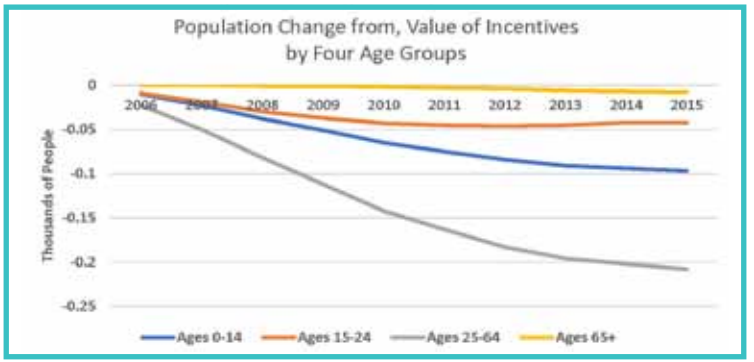
When reporting total changes in employment, it is recommended to include average change in employment, as one or multiple jobs can be held by the same person for many years.

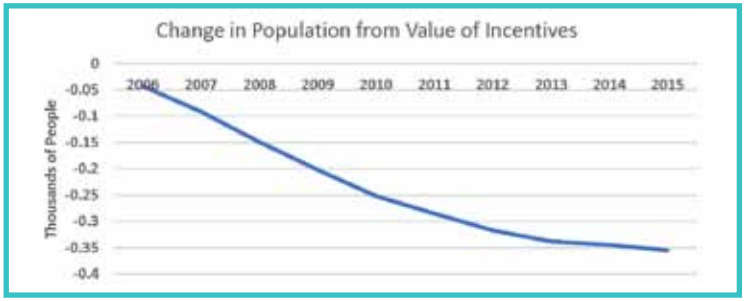
Additional Results: Value of Incentives

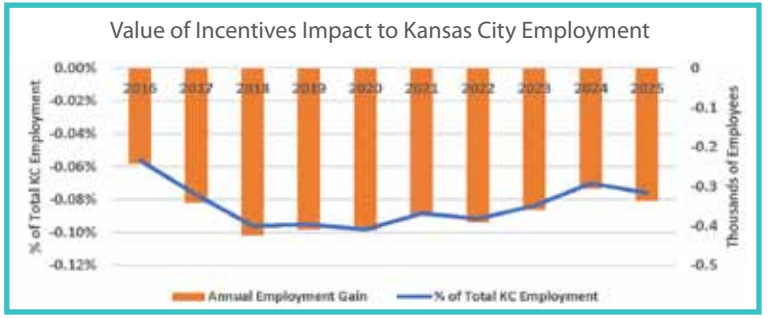


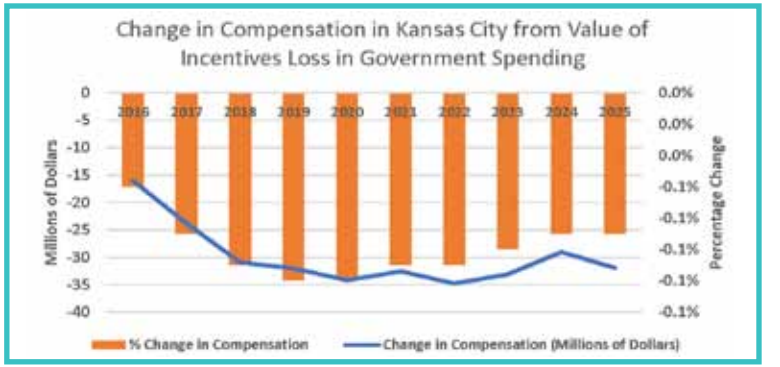

Impact of Value of Incentives:
Comparison of Employment by Place of Residence &
Place of Work
Thousands of Jobs
Employment
Residence Adjusted Employment


Impact of Value of Incentives:
Employment Concepts & Population Comparison
Percent Change from Baseline
Employment
Residence Adjusted Employment
Population

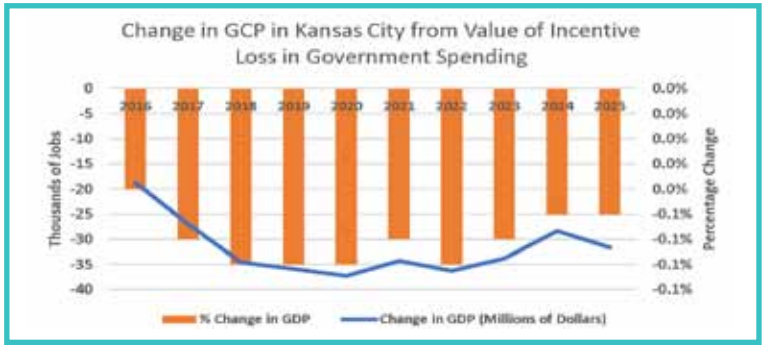

Population Change from, Value of Incentives
by Four Age Groups
Thousands of People
Ages 0-14
Ages 15-24
Ages 25-64
Ages 65+


Change in Population from Value of Incentives
Thousands of People


Value of Incentives Impact to Kansas City Employment
% of Total KC Employment
Thousands of Employees
Annual Employment Gain
% of Total KC Employment


Change in Compensation in Kansas City from Value of
Incentives Loss in Government Spending
Millions of Dollars
Percentage Change
% Change in Compensation
Change in Compensation (Millions of Dollars)


Change in Personal Income in Kansas City from Value of Incentives
Loss in Government Spending
Millions of Dollars
Percentage Change
% Change in Personal Income
Change in Personal Income (Millions of Dollars)


Change in GCP in Kansas City from Value of Incentive
Loss in Government Spending
Thousands of Jobs
Percentage Change
% Change in GDP
Change in GDP (Millions of Dollars)

PI+ Model Overview

REMI
REGIONAL ECONOMIC MODELS, INC.

PI+, a dynamic regional economic and demographic forecasting model developed by Regional Economic Models Inc., that stands apart from other commercially-available models. PI+ is a top down and bottom up model, accounting for national and regional data down to the county level. Over the last 35 years, the model has been continually developed; expanded client oriented applications and annually adjusted for changes to the regional and national economy. The model structure captures the full economic and demographic effects of policy changes and events including the spatial dimension of economic activity within and between different regions.

By accounting for spatial, industry, and macroeconomic connections, PI+ allows users to anticipate the way economic feedback and geography can influence key indicators over time. Users can forecast the flow of trade between regions and clustering of industries within a region, and see how compensation, prices, productivity, occupation specific labor force access and other indicators are impacted by direct changes. PI+ is solely available from REMI.

As REMI's leading modeling tool, PI+ offers a unique combination of modeling techniques, allowing users to produce unparalleled and complete economic impact analyses. PI+ applies economic theory in single- and multi-region simulations that forecast the effects of legislation, regulatory change, natural disasters, and other events. The model can be built from sub-county areas up to the full national economy using dozens of discreet yet fully-connected regions.

In contrast to static economic forecasting models, PI+ can simulate how the impacts of policies change over time, showing the effects each year through 2060. In addition to being dynamic, PI+ has other advantages that are not necessarily shared with other dynamic models. It can account for up to 160 industry sectors, break down effects by county, and evaluate how geographic connections can influence economies in both the short- and long-term.

To achieve its unique abilities, PI+ incorporates multiple, complimentary theories to create dynamic forecasts and impact analyses that are far more comprehensive and reliable than other models. The model has been assisting public agencies, universities, utilities, and consulting clients for more than 30 years.

BASED ON SOUND ECONOMIC THEORY

The model draws from peer-reviewed theories and proven methodologies:

- Annual input-output matrix through the year 2060
- Computable general equilibrium (CGE) theory
- Econometric application of mathematical and statistical methods and computer science

In addition to those elements, the PI+ model gains its spatial component by also incorporating theories about economic geography and the relationship of economic activities:

- New Economic Geography
- Economies of agglomeration

PI+ employs gravity modeling concepts to account for spatial distances in terms of labor access, access to intermediate inputs, and the ability to deliver goods to market. PI+ also uses the Cobb–Douglas production function to account for substitution preferences between labor, capital and fuel.

In addition to its unique model structure, REMI completes its models with thorough, up-to-date forecasts for every U.S. county and updates these annually as new data becomes available. REMI's economists continuously review the model's coefficients for their validity and timeliness. REMI also includes a survival cohort demographic component with 808 cohorts, three migration types, and consumer demand preferences customized by region and age.

PI+ has a well-developed graphical user interface and unlimited technical support and training is included in the price.

REMI has been reviewed in the past by the U.S. Army Corps of Engineers, and it was listed as the Corps' sole source preference in the past due to REMI's work with federal agencies and accuracy when modeling Hurricane Katrina's economic impacts. REMI's modeling tools are widely used throughout the U.S. by sub-state, state, regional and federal level entities. REMI currently builds international models for Canada, the United Kingdom, the European Union, China, Saudi Arabia, and South Korea.

BACKGROUND OF MODEL DEVELOPMENT

Since its founding in 1980, REMI has provided clients with distinctive modeling based on peer-reviewed research. As noted previously, the modeling tools are based on a hybrid of different methodologies.

REMI's modeling brings together four different approaches – input-output, computable general equilibrium (CGE), econometrics, and New Economic Geography – delivering results that are far more comprehensive than anything produced by models that rely on only one approach. PI+ is the core policy analysis tool of REMI's suite of models.

Comparing the dynamic results from PI+ to the outputs available from other modeling methods demonstrates the degree to which PI+ fully incorporates economic theory. Unlike models that depend entirely on input-output multipliers, PI+ captures market signals such as prices, wages, input factor substitution, induced investment flows, and labor migration. PI+ also accounts for macroeconomic changes in the economy's behavior as the economy responds to the shock represented by direct inputs. In contrast models that rely solely on CGE structures, PI+ does not assume a static economy or that product and factor markets clear every year with perfect foresight. In contrast to single-region national or regional models, PI+ allows for analyses across multiple regions simultaneously with full measurement of

trade and commuter flows between counties, states, and larger regions. Considering the above capabilities as a group, the results from PI+ uniquely provide accuracy and flexibility for year-by-year effects and "what-if" scenarios.

The special features of PI+ include:

Accuracy:

- Productivity and technical relationships forecasted for each year of a study to 2060
- Captures projected compensation, price, and productivity effects
- Captures investment as a stock adjustment process
- Feedback to compensation rates and composition of consumption
- In addition to all the features included in input-output models, the REMI model includes derived demand for factors of production, population migration response to expected earnings and amenities, full price and compensation determination, and changes in labor and input productivities and competitive market shares based on changes in agglomeration economics.

A wide range of outputs:

- Examples include
  - Personal income
  - Gross regional product both by detailed final demand and by value-added
  - Labor force and participation rates by age, race, and gender
  - Employment by demand source, detailed industry sector, and occupation
  - Output, exports, demand, self-supply, imports by sector

Dynamic and year-by-year simulations:

- Shows an annual time path for all endogenous concepts
- Shows growth of residential and nonresidential capital stock over time
- Calculates changes in trade flows and commuting patterns in response to economic changes
- Shows population growth and participation rate change by age, race, and gender

A large set of policy variables:

- Change in consumption for residents or non-residents by consumption category
- Change in employment, output, income, productivity, investment, sales taxes, personal taxes, fuel costs, migration, and much more
- Change in business costs (e.g. production costs, taxes, wage rates)
- Change in quality of life (e.g. consumer surplus from having greater choice of life options)

An easy to use model:

- A full Windows-based user friendly program with an extensive help menu
- Unlimited training and support from REMI's expert via telephone, e-mail, and web conference

Independent reviews of available models found distinct advantages in REMI's products:

AKRF Inc. concluded from its May 2013 comparison of models that REMI's advantages are:

- Dynamic - A dynamic general equilibrium model with multiple feedback loops, which can forecast into the future.
- Complexity - Combines the functions of an input/output model with additional equations that describe relationships between multiple economic variables such as employment, prices, and income.
- Time – REMI estimates the economic impacts that would occur each year over the analysis period.

Another report comparing models was written in 2010 by JiYoung Park of the University at Buffalo (State University of New York), ChangKeun Park of the University of Georgia, and Simon Choi, Southern California Association of Governments. The authors found that REMI has a number of advantages including:

- Dynamic module and long-term analysis option
- Interregional inter-industrial connections
- Commuting information, job relocation and population changes

In summary, REMI models combine aspects of multiple methodologies to provide a robust, accurate tool that captures regional and national economic and demographic effects of policy changes and other "what if" scenarios. PI+ is REMI's core model and is used across the world by clients with exacting standards engaged in high-visibility projects. PI+ is commercially-available and only provided by REMI.

Model Framework

PI+, Tax-PI and TranSight are structural economic forecasting and policy analysis model. The following core framework applies to all REMI model builds. The model integrates input-output, computable general equilibrium, econometric and economic geography methodologies. The model is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to compensation, price, and other economic factors.

The model consists of thousands of simultaneous equations with a structure that is relatively straightforward. The exact number of equations used varies depending on the extent of industry, demographic, demand, and other detail in the specific model being used. The overall structure of the model can be summarized in five major blocks: (1) Output and Demand, (2) Labor and Capital Demand, (3) Population and Labor Supply, (4) Compensation, Prices, and Costs, and (5) Market Shares. The blocks and their key interactions are shown in Figures 1 and 2.

The Output and Demand block consists of output, demand, consumption, investment, government spending, exports, and imports, as well as feedback from output change due to the change in the productivity of intermediate inputs. The Labor and Capital Demand block includes labor intensity and productivity as well

as demand for labor and capital. Labor force participation rate and migration equations are in the Population and Labor Supply block. The Compensation, Prices, and Costs block includes composite prices, determinants of production costs, the consumption price deflator, housing prices, and the compensation equations. The proportion of local, inter-regional, and export markets captured by each region is included in the Market Shares block.

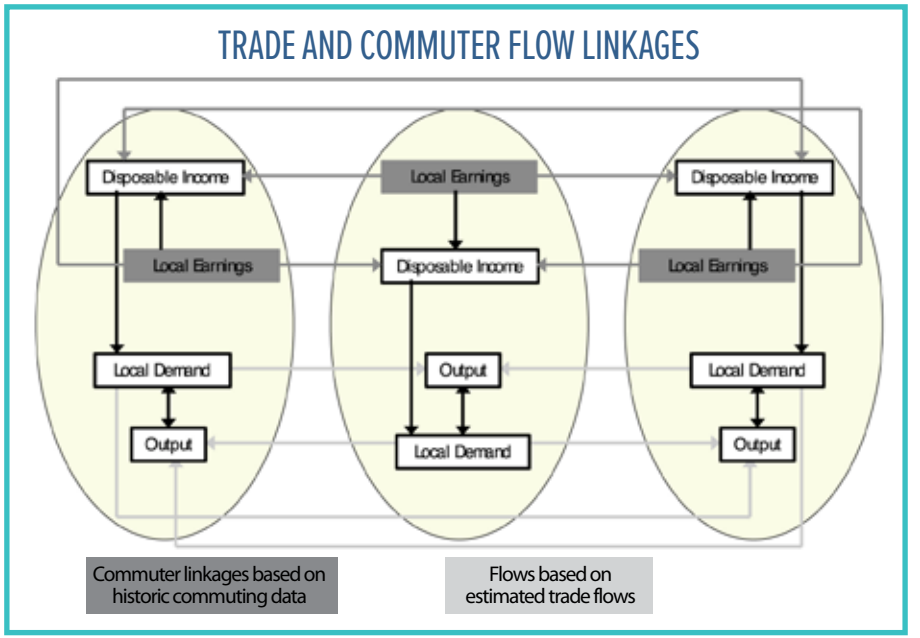
Models can be built as single region, multi-region, or multi-region national models. A region is defined broadly as a sub-national area, and could consist of a state, province, county, or city, or any combination of sub-national areas.

Single-region models consist of an individual region, called the home region. The rest of the nation is also represented in the model. However, since the home region is only a small part of the total nation, the changes in the region do not have an endogenous effect on the variables in the rest of the nation.

Multi-regional models have interactions among regions, such as trade and commuting flows. These interactions include trade flows from each region to each of the other regions. These flows are illustrated for a three-region model in Figure 3.

Multiregional national models also include a central bank monetary response that constrains labor markets. Models that only encompass a relatively small portion of a nation are not endogenously constrained by changes in exchange rates or monetary responses.

FIGURE 3: TRADE AND COMMUTER FLOW LINKAGES



Block 1. Output and Demand

This block includes output, demand, consumption, investment, government spending, import, commodity access, and export concepts. Output for each industry in the home region is determined by industry demand in all regions in the nation, the home region's share of each market, and international exports from the region.

For each industry, demand is determined by the amount of output, consumption, investment, and capital demand on that industry. Consumption depends on real disposable income per capita, relative prices, differential income elasticities, and population. Input productivity depends on access to inputs because a larger choice set

of inputs means it is more likely that the input with the specific characteristics required for the job will be found. In the capital stock adjustment process, investment occurs to fill the difference between optimal and actual capital stock for residential, non-residential, and equipment investment. Government spending changes are determined by changes in the population.

Block 2. Labor and Capital Demand

The Labor and Capital Demand block includes the determination of labor productivity, labor intensity, and the optimal capital stocks. Industry-specific labor productivity depends on the availability of workers with differentiated skills for the occupations used in each industry. The occupational labor supply and commuting costs determine firms' access to a specialized labor force.

Labor intensity is determined by the cost of labor relative to the other factor inputs, capital and fuel. Demand for capital is driven by the optimal capital stock equation for both non-residential capital and equipment. Optimal capital stock for each industry depends on the relative cost of labor and capital, and the employment weighted by capital use for each industry. Employment in private industries is determined by the value added and employment per unit of value added in each industry.

Block 3. Population and Labor Supply

The Population and Labor Supply block includes detailed demographic information about the region. Population data is given for age, gender, and race, with birth and survival rates for each group. The size and labor force participation rate of each group determines the labor supply. These participation rates respond to changes in employment relative to the potential labor force and to changes in the real after-tax compensation rate. Migration includes retirement, military, international, and economic migration. Economic migration is determined by the relative real after-tax compensation rate, relative employment opportunity, and consumer access to variety.

Block 4. Compensation, Prices and Costs

This block includes delivered prices, production costs, equipment cost, the consumption deflator, consumer prices, the price of housing, and the compensation equation. Economic geography concepts account for the productivity and price effects of access to specialized labor, goods, and services.

These prices measure the price of the industry output, taking into account the access to production locations. This access is important due to the specialization of production that takes place within each industry, and because transportation and transaction costs of distance are significant. Composite prices for each industry are then calculated based on the production costs of supplying regions, the effective distance to these regions, and the index of access to the variety of outputs in the industry relative to the access by other uses of the product.

The cost of production for each industry is determined by the cost of labor, capital, fuel, and intermediate inputs. Labor costs reflect

FIGURE 1: REMI MODEL LINKAGES

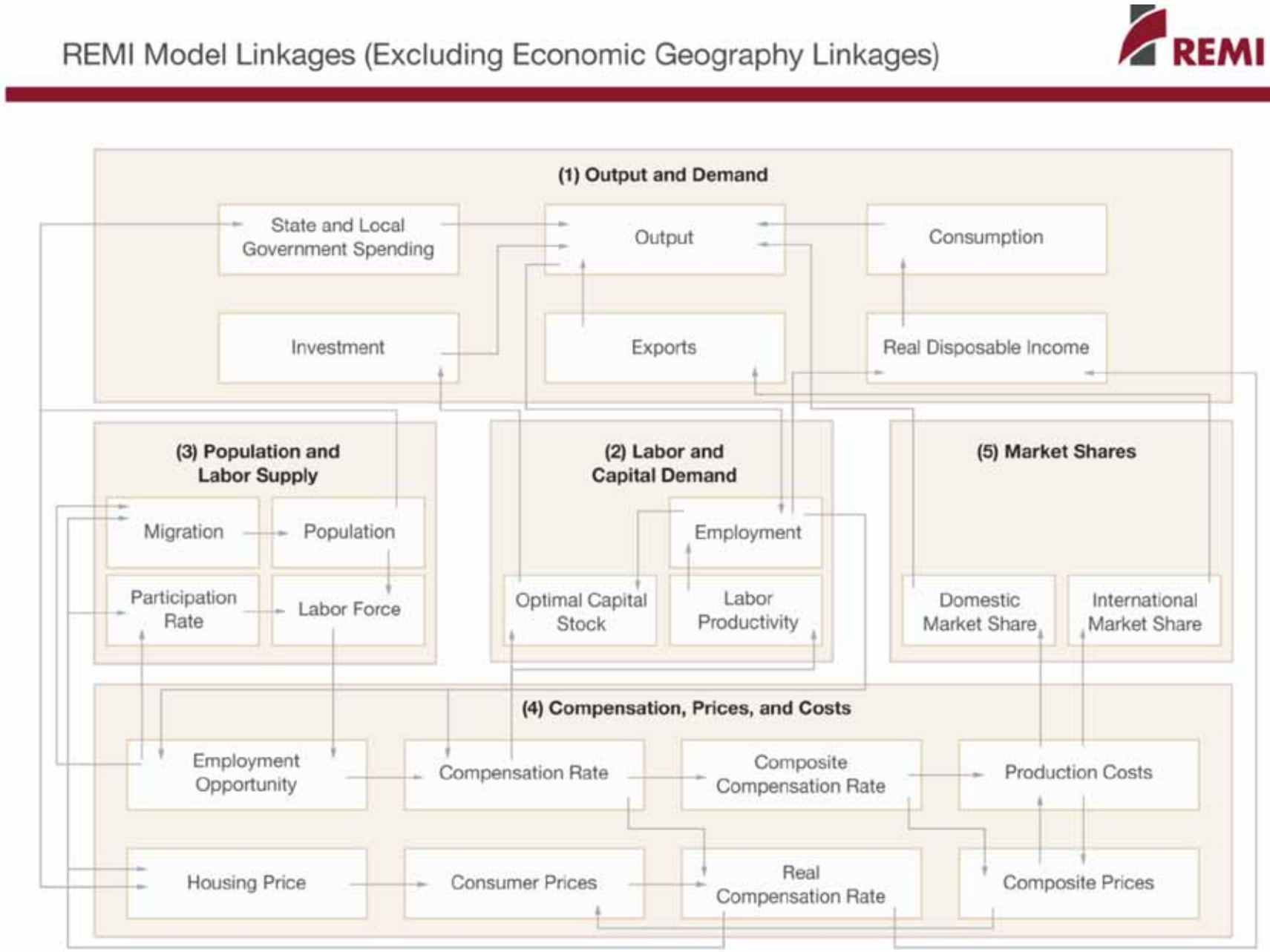
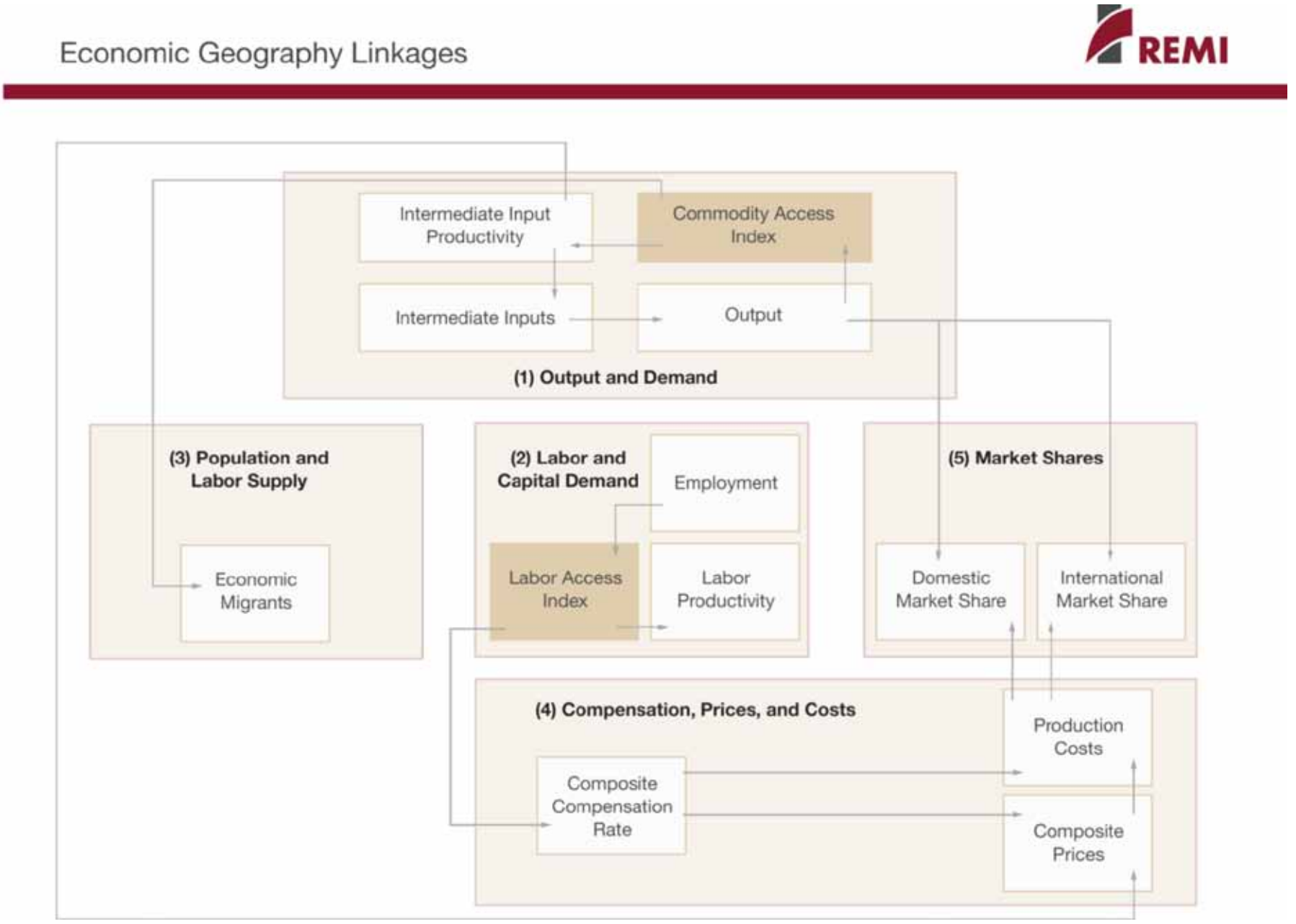


FIGURE 2: ECONOMIC GEOGRAPHY LINKAGES



a productivity adjustment to account for access to specialized labor, as well as underlying compensation rates. Capital costs include costs of non-residential structures and equipment, while fuel costs incorporate electricity, natural gas, and residual fuels.

The consumption deflator converts industry prices to prices for consumption commodities. For potential migrants, the consumer price is additionally calculated to include housing prices. Housing prices change from their initial level depending on changes in income and population density.

Compensation changes are due to changes in labor demand and supply conditions and changes in the national compensation rate. Changes in employment opportunities relative to the labor force and occupational demand change determine compensation rates by industry.

Block 5. Market Shares

The market shares equations measure the proportion of local and export markets that are captured by each industry. These depend on relative production costs, the estimated price elasticity of demand, and the effective distance between the home region and each of the other regions. The change in share of a specific area in any region depends on changes in its delivered price and the quantity it produces compared with the same factors for competitors in that market. The share of local and external markets then drives the exports from and imports to the home economy.

GLOSSARY OF ECONOMIC TERMS – REMI ANALYSIS

Compensation: The sum of wage and salary disbursements and supplements to wages and salaries (i.e. benefits).

Demand: The amount of goods and services demanded by the local region, which include both self-supply (i.e. locally produced goods and services) plus imports.

Disposable Personal Income (DPI): Total after-tax income received by persons; it is the income available to persons for spending or saving.

Employment: Estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors (i.e. self-employed), and active partners are included, but unpaid family workers and volunteers are not included.

Exogenous: Variable not solved for in the model; values are determined outside the model.

Exogenous Industry Sales: The direct amount of industry sales entered by the user into the industry sales/exogenous production policy variable.

Gross Regional Product (GRP): The market value of goods and services produced by labor and capital. It is equal to output excluding the intermediate inputs, and represents compensation and profits. GRP as a final demand concept is equal to Consumption

+ Investments + Government + (Exports-Imports). For cities, and within the report, the term "Gross City Product" (GCP) is used.

National Control: The baseline for the entire US, where changes can be made to employment, population, or GDP levels. Changes to the national control are made when the user has updated national data or when the assumptions on the national level need to be adjusted.

Non-Residential Capital Stock: The amount of non-housing structures in a region accumulated over time net of depreciation.

Output: The amount of production, including all intermediate goods purchased as well as value added (compensation and profit). Output can also be thought of as sales or supply. The components of output are self-supply and exports.

Personal Income: Income received by persons from all sources. It includes income received from participation in production, as well as from government and business transfer payments. It is the sum of compensation of employees (received), supplements to wages and salaries, proprietors' income with inventory valuation adjustment (IVA) and capital consumption adjustment (CCAdj), rental income of persons with CCAdj, personal income receipts on assets, and personal current transfer receipts, less contributions for government social insurance.

Population: The total change in people, including survivors from the previous year, births, special populations, and three types of migrants (economic, international and retired). Within this analysis, the types of population groups that are assumed to have witnessed almost the entirety of the change are economic migrants (ages 18–64) and associated dependents ages (0–18).

Production Cost: The combined costs of raw material and labor incurred in producing goods.

Real Disposable Personal Income: Total after-tax income received by persons adjusted for inflation; it is the income available to persons for spending or saving.

Residence Adjusted Employment: The net inflow of earnings from inter-regional commuters. Adjusting employment for place of residence is important to do when individuals commute between regions. The residence adjustment is calculated by subtracting the gross outflow of income and adding the gross inflow of income within a region.

Residential Capital Stock: The amount of housing structures in a region accumulated over time net of depreciation.

Regional Control: The baseline for one or more regions within the model can be adjusted by making changes to the regional control.

Quarterly EDC Summary Report FY2017					WD# 188033
	May - Jul 2016 Q1	Aug - Oct 2016 Q2	Nov 2016-Jan 2017 Q3	Feb - Apr 2017 Q4	YTD
Announced Projects					
Attraction	7	3	2	4	**16**
Retention/Expansion	5	5	3	7	**20**
TOTAL - ANNOUNCED PROJECTS	**12**	**8**	**5**	**11**	**36**
New Jobs Created (Attraction/Expansion)	818	511	719	998	**3,046**
Jobs Retained	830	283	473	490	**2,076**
TOTAL - NEW BUSINESS DEVELOPMENT JOBS CREATED & RETAINED	**1,648**	**794**	**1,192**	**1,488**	**5,122**
Employer Size					
2 - 99	6	5	1	6	**18**
100 - 249	4	3	2	2	**11**
250 - 999	2	0	2	3	**7**
1,000 - 2,499	0	0	0	-	**0**
2,500 - 3,999	0	0	0	-	**0**
TOTAL - EMPLOYER SIZE	**12**	**8**	**5**	**11**	**36**
Business Sector					
Health Sciences & Services	0	0	0	-	**0**
Financial & Technical Services	2	0	1	1	**4**
Design & Engineering	1	2	1	-	**4**
Supply Chain Management	3	3	1	-	**7**
Specialized Mfg.	0	2	0	2	**4**
Nonprofit Management	0	0	0	-	**0**
Arts	0	0	0	-	**0**
Technology	5	0	1	7	**13**
Other	1	1	1	1	**4**
	12	**8**	**5**	**11**	**36**
Number of Existing Business Visits	72	77	69	82	**300**
Investment from Business Development Projects					
Real Property *	$ 8,525,000	$ 9,830,024	$ 5,180,000	$ 30,019,000	$ 53,554,024
Personal Property *	$ 900,000	$ 34,662,447	$ 5,150,000	$ 17,148,000	$ 57,860,447
TOTAL INVESTMENT FROM BUSINESS DEVELOPMENT PROJECTS *	**$ 59,950,000**	**$ 53,992,885**	**$ 126,830,000**	**$ 47,167,000**	**$ 287,939,885**
***This may not include investment from State driven incentive projects or breakdown of personal/real property was not provided**					
Number of Approved Redevelopment Projects					
Chapter 100	0	0	0	-	**0**
LCRA	4	3	1	3	**11**
TIF	2	0	1	-	**3**
EEZ	0	0	0	-	**0**
Chapter 353	0	0	0	-	**0**
PIEA	3	1	2	2	**8**
Port Authority	0	1	0	-	**1**
TOTAL APPROVED REDEVELOPMENT PROJECTS	9	5	4	5	**23**
Redevelopment Jobs					
New Jobs Created	150	0	0	60	210
Jobs Retained	0	0	0	-	-
TOTAL - REDEVELOPMENT JOBS CREATED & RETAINED	**150**	**0**	**0**	**60**	**210**
Investment from Redevelopment Projects					
Chapter 100	$ 0	$ 0	$ 0	$ 0	$ 0
LCRA	$ 13,475,753	$ 33,441,361	$ 676,000	$ 76,233,871	**$ 123,826,985**
TIF	$ 78,823,416	$ 0	$ 12,765,000	$ -	**$ 91,588,416**
EEZ	$ 0	$ 0	$ 0	$ -	$ 0
Chapter 353	$ 0	$ 0	$ 0	$ -	$ 0
PIEA	$ 189,387,501	$ 58,000,000	$ 16,100,000	$ 92,176,747	**$ 355,664,248**
Port Authority	$ 0	$ 16,763,260	$ 0	$ -	**$ 16,763,260**
TOTAL INVESTMENT FROM REDEVELOPMENT PROJECTS	**$ 281,686,670**	**$ 108,204,621**	**$ 29,541,000**	**$ 168,410,618**	**$ 587,842,909**
Total Amount of Local Incentives Approved					
Chapter 100	$ 0	$ 0	$ 0	$ 0	$ 0
LCRA	$ 934,346	$ 1,369,863	$ 77,181	$ 6,663,114	**$ 9,044,504**
TIF	$ 67,681,701	$ 0	$ 12,765,000	$ 0	**$ 80,446,701**

EEZ	$ 0	$ 0	$ 0	*Pending*	$ 0
Chapter 353	$ 0	$ 0	$ 0	$ 0	$ 0
PIEA	$ 29,275,657	$ 4,606,924	$ 1,934,059	$ 9,763,174	**$ 45,579,814**
Port Authority	$ 0	$ 5,939,348	$ 0	$ 0	**$ 5,939,348**
TOTAL INCENTIVES FOR REDEVELOPMENT PROJECTS	**$ 97,891,704**	**$ 11,916,135**	**$ 14,776,240**	**$ 16,426,288**	**$ 141,010,367**
Ratio of Investments to Incentives					
Chapter 100	0	0	0	0	**0**
LCRA	14:1	24:1	9:1	11:1	**14:1**
TIF	1:1	0	1:1	-	**1:1**
EEZ	0	0	0	0	**0**
Chapter 353	0	0	0	0	**0**
PIEA	6:1	13:1	8:1	9:1	**8:1**
Port Authority	0	3:1	0	-	**3:1**
AVERAGE RATIO OF INVESTMENTS TO INCENTIVES	**3:1**	**9:1**	**2:1**	**10:1**	**4:1**
Industrial Development Authority					
Bonds Authorized	$ 0	$ 0	$ 0	$ 0	**$ 0**
Bonds Closed	$ 34,457,325	$ 0	$ 15,350,000	$ -	**$ 49,807,325**
TOTALS	**$ 34,457,325**	$ 0	**$ 15,350,000**	**$ -**	**$ 49,807,325**
EDC LC					
# SBA Loan Applications	1	3	2	2	**8**
# SBA Loan Approved	0	1	0	1	**2**
# SBA Loan Funded	0	0	0	1	**1**
SBA Total Amount Funded	**$ 0**	**$ 0**	**$ -**	**$ 1,432,000.0**	**$ 1,432,000**
# RLF Applications	2	3	2	2	**9**
# RLF Approved	1	0	1	0	**2**
# RLF Funded	1	0	0	1	**2**
RLF Total Amount Funded	**$ 85,000**	**$ 0**	**$ -**	**$ 70,000.0**	**$ 155,000**
AltCap					
# of Applications	4	3	2	-	**9**
Total Value of Investment	**$ 5,120,000**	**$ 127,600**	**$ 150,000**	**$ -**	**$ 5,397,600**
# of Closings	4	3	2	-	**9**
Total Amount of CDE Financing	**$ 3,720,000**	**$ 105,100**	**$ 125,000**	**$ -**	**$ 3,950,100**
Total # of Existing Jobs	67	7	4	-	**78**
Total # of New Jobs	0	1	8	-	**9**
Total # of Jobs	**67**	**8**	**12**	**-**	**87**

EDCKC BUSINESS DEVELOPMENT – PROJECT ANNOUNCEMENTS

Business Development - Project Announcements

ANNOUNCED PROJECT NAME	Project Score	New Jobs	Existing Jobs	Total Jobs	Average Wage	Investment			Employer Size					Business Sector									KCMO Address	State/Local Incentive
						Real Property *	Personal Property *	Total	2-99	100-249	250-999	1,000-2,499	2,500-3,999	HS&S	F&TS	D&E	SCM	SM	NM	Arts	Tech	Other		
May-Jul 2016 - FY2017 Q1																								
RETENTION/EXPANSION																								
Pinsight Media	15	125	84	209	$ 90,000	ND	ND	$ 5,340,000	0	1	0	0	0								1		929 Walnut/1100 Main St.	MO Works
Trozzolo Communications	N/A	12	0	12	$ 50,000		$ 400,000	$ 400,000	1	0	0	0	0									1	811 Wyandotte	MO Zone Wks.
Central States Beverage Distributors	N/A	3	172	175	$ 56,667	$ 8,000,000		$ 8,000,000	0	1	0	0	0				1						14220 Wyandotte	Zone Works, EEZ
Project Cypress	N/A	0	482	482	$ 128,739	ND	ND	$ 33,800,000	0	0	1	0	0				1						Downtown	MO Works
BNIM		20	92	112	$ 65,000	ND	ND	$ 1,000,000	0	1	0	0	0			1							2640 Grand Blvd.	MO Works
		160	**830**	**990**		**$ 8,000,000**	**$ 400,000**	**$ 48,540,000**	1	3	1	0	0	0	0	1	2	0	0	0	1	1		
ATTRACTION																								
Holmes Murphy & Assoc.		35	N/A	35	$ 65,000	ND	ND	ND	1	0	0	0	0		1								1828 Walnut	MO Works/Port KC
Office Products Alliance	N/A	25	N/A	25	$ 40,000	ND	ND	ND	1	0	0	0	0				1						2015 Washington	None
A.B. Pathfinder		18	N/A	18	$ 62,000	ND	ND	$ 560,000	1	0	0	0	0								1		Downtown	MO Works
Store Financial	N/A	132	N/A	132	$ 81,836	ND	ND	$ 2,975,000	0	1	0	0	0		1								8330 Ward. Pkwy.	IDA Finance
Virgin Mobile USA		84	N/A	84	$ 122,967	$ 525,000	$ 500,000	$ 1,025,000	1	0	0	0	0								1		Downtown	MO Works
SoftVu	N/A	78	N/A	78	$ 94,859			TBD	1	0	0	0	0								1		2029 Wyandotte	MO Works
Project Viktor (Alere)		286	N/A	286	$ 58,486	ND	ND	$ 6,850,000	0	0	1	0	0								1		8140 Ward Pkwy.	EEZ
		658		**658**		**$ 525,000**	**$ 500,000**	**$ 11,410,000**	5	1	1	0	0	0	2	0	1	0	0	0	4	0		
		818	**830**	**1,648**		**$ 8,525,000**	**$ 900,000**	**$ 59,950,000**	**6**	**4**	**2**	**0**	**0**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**5**	**1**		
Aug-Oct 2016 - FY2017 Q2																								
RETENTION/EXPANSION																								
ACI Boland		20	50	70	$ 75,000			TBD	1	0	0	0	0			1							1706-1710 Wyandotte	MO Works
FTC Equipment		10	30	40	$ 36,800	ND	ND	$ 5,000,000	1	0	0	0	0				1						1701 Winner Road	None
The Andersons		20	40	60	TBD	ND	ND	$ 2,700,000	1	0	0	0	0				1						3116 Wilson	MO Works/EEZ
Trekk Design Group	N/A	16	63	79	TBD	ND	ND	$ 500,000	1	0	0	0	0			1							1411 E. 114th Street	MO Works
KC Structural Steel		18	100	118	$ 45,000	$ 4,000,000	$ 1,000,000	$ 5,000,000	0	1	0	0	0					1					3801 Raytown Road	None
		84	**283**	**367**		**$ 4,000,000**	**$ 1,000,000**	**$ 13,200,000**	4	1	0	0	0	0	0	2	2	1	0	0	0	0		
ATTRACTION																								
Exide Technologies		80	N/A	80	$ 45,907	$ 5,315,024	$ 33,662,447	$ 38,977,471	1	0	0	0	0					1					7601 NW 107th Terr.	None
Florida Modification Specialists		247	N/A	247	$ 48,768	$ 515,000		$ 1,025,000	0	1	0	0	0									1	9200 NW 112th Street	MO Works
Total Qualifty Logistics (Proj. Arrowhead)		100	N/A	100	$ 60,400	ND	ND	$ 790,414	0	1	0	0	0				1						908 Broadway	MO Works + Training
~~Project Toto~~			N/A	0					0	0	0	0	0											
		427		**427**		**$ 5,830,024**	**$ 33,662,447**	**$ 40,792,885**	1	2	0	0	0	0	0	0	1	1	0	0	0	1		
		511	**283**	**794**		**$ 9,830,024**	**$ 34,662,447**	**$ 53,992,885**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**2**	**0**	**0**	**0**	**1**		
Nov 2016-Jan 2017 - FY2017 Q3																								
RETENTION/EXPANSION																								
VML		120	118	238	$ 84,000	ND	ND	$ 5,500,000	0	1	0	0	0									1	250 Richards Road	MO Works
Blount International	High	9	350	359	$ 65,000	$ 4,500,000	$ 2,200,000	$ 6,700,000	0	0	1	0	0		1								4840 E. 12th ST.	MO Works / EEZ
Next Page		30	5	35	$ 58,394	$ 530,000	$ 2,700,000	$ 3,230,000	1	0	0	0	0								1		8300 NE Underground	MO Works
		159	473	632		$ 5,030,000	$ 4,900,000.00	$ 15,430,000	1	1	1	0	0	0	1	0	0	0	0	0	1	1		
ATTRACTION																								
Project Toto (CVS)		460	N/A	460	$ 35,000	ND	ND	$ 111,000,000	0	0	1	0	0				1						Skyport	MO Works/Port KC
Alps		100	N/A	100	$ 55,000	150000	250,000	$ 400,000	0	1	0	0	0			1							333 W. 11th	MO Works
		560		560		$ 150,000	$ 250,000	$ 111,400,000	0	1	1	0	0	0	0	1	1	0	0	0	0	0		
		719	**473**	**1,192**		**$ 5,180,000**	**$ 5,150,000**	**$ 126,830,000**	**1**	**2**	**2**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**1**	**1**		
Feb-Apr 2017 - FY2017 Q4																								
RETENTION/EXPANSION																								
May Technology	Std.	50	120	170	$ 46,000	$ 7,000,000	$ 3,000,000	$ 10,000,000	0	1	0	0	0					1					2922 Washington	PIEA
Code Koalas		88	22	110				$ -	0	1	0	0	0								1		1217 Main	MO Works
AutoAlert		300		300	$ 80,245	$ 4,500,000		$ 4,500,000	0	0	1	0	0								1		downtown	MO Works
Alpha Energy & Electric	Std.	36	36	72	$ 76,581	$ 1,000,000	$ 250,000	$ 1,250,000	1	0	0	0	0								1		1100 E. 34th St.	MO Works & EEZ
Apex Engineers		2	26	28	$ 50,000	$ 830,000	$ 70,000	$ 900,000	1	0	0	0	0								1		1625 Locust	MO Works & EEZ
Project Tar	Std.	174	286	460	$ 74,928	$ 3,500,000	$ 6,500,000	$ 10,000,000	0	0	1	0	0								1		520 W. Pennway	EEZ
Project Fitbet (DST)		300		300	$ 45,000	$ 100,000		$ 100,000	0	0	1	0	0		1								downtown	Mega Works
		950	490	1,440		$ 16,930,000	$ 9,820,000	$ 26,750,000	2	2	3	0	0	0	1	0	0	1	0	0	5	0		
ATTRACTION																								
Spartan Motors	Std.	20	N/A	20	$ 38,000	$ 11,600,000		$ 11,600,000	1	0	0	0	0					1					9501 NE Parvin Rd.	EEZ
Native Digital		6	N/A	6	$ 55,000	$ 229,000		$ 229,000	1	0	0	0	0								1		301 E. Armour Blvd.	MO Works
Virbec Corp.	Std.	19	N/A	19	$ 37,058	$ 1,260,000	$ 1,328,000	$ 2,588,000	1	0	0	0	0								1		8300 NE Underground	none
WeWork		3	N/A	3	$ 60,000		$ 6,000,000	$ 6,000,000	1	0	0	0	0									1	1828 Walnut	MO Works
		48		48		$ 13,089,000	$ 7,328,000	$ 20,417,000	4	0	0	0	0	0	0	0	0	1	0	0	2	1		
		998	**490**	**1,488**		**$ 30,019,000**	**$ 17,148,000**	**$ 47,167,000**	**6**	**2**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**7**	**1**		
		3,046	**2,076**	**5,122**		**$ 53,554,024**	**$ 57,860,447**	**$ 287,939,885**	**18**	**11**	**7**	**0**	**0**	**0**	**4**	**4**	**7**	**4**	**0**	**0**	**13**	**4**		

* ***Some projects which are incented by the State of Missouri do not report to the City the amount of real and/or personal property investment for their project.***

ND = Real Property and/or Personal Property breakdown was not disclosed

City Contract Metrics Summary FY17 - 4th Quarter (188033-4)

TIF						
	APPROVED PROJECT NAME	Investment	Local Incentive Approved	Existing Jobs	New Jobs	Total Redevelopment Jobs
May-Jul 2016 - FY2017 Q1						
1	Platte Purchase	$ 63,879,000	$ 59,352,000	0	0	0
1	Linwood Shopping Center	$ 14,944,416	$ 8,329,701	0	0	0
2	TOTALS	$ 78,823,416	$ 67,681,701	0	0	0
Aug-Oct 2016 - FY2017 Q2						
	None					0
0	TOTALS	$ -	$ -	0	0	0
Nov 2016-Jan 2017 - FY2017 Q3						
1	Heart of the City	$ 12,765,000	$ 12,765,000	0	0	0
1	TOTALS	$ 12,765,000	$ 12,765,000	0	0	0
Feb-Apr 2017 - FY2017 Q4						
						0
						0
						0
0	TOTALS	$ -	$ -	0	0	0
3	YTD TOTALS	$ 91,588,416	$ 80,446,701	0	0	0

LCRA						
	APPROVED PROJECT NAME	Investment	Local Incentive Approved	Existing Jobs	New Jobs	Total Redevelopment Jobs
May-Jul 2016 - FY2017 Q1						
1	Morningstar Senior Apartments/2800 Prospect	$ 6,300,000	$ 465,189	0	0	0
1	Hemmingway Heights/3635 Warwick	$ 1,980,000	$ 110,544	0	0	0
1	Milliner Lofts (905 Broadway)	$ 4,329,247	$ 300,276	0	0	0
1	1707 Locust	$ 866,506	$ 58,337	0	0	0
4	TOTALS	$ 13,475,753	$ 934,346	0	0	0
Aug-Oct 2016 - FY2017 Q2						
1	Pendleton Flats/533 Brooklyn Avenue	$ 4,833,874	$ 49,700	0	0	0
1	600 Central Apartment/600 Central Avenue	$ 5,661,209	$ 403,206	0	0	0
1	Holtman Heights/701 & 708 E. 18th Street	$ 22,946,278	$ 916,957	0	0	0
3	TOTALS	$ 33,441,361	$ 1,369,863	0	0	0
Nov 2016-Jan 2017 - FY2017 Q3						
1	1010 - 1020 Project	$ 676,000	$ 77,181	0	0	0
1	TOTALS	$ 676,000	$ 77,181	0	0	0
Feb-Apr 2017 - FY2017 Q4						
1	Continental (Mark Twain Tower)	$ 60,819,786	$ 6,122,599	0	0	0
1	Blenheim School	$ 10,877,102	$ 273,085	0	0	0
1	Scholars Row/5522 Troost	$ 4,536,983	$ 267,430	0	0	0
3	TOTALS	$ 76,233,871	$ 6,663,114	0	0	0
11	YTD TOTALS	$ 123,826,985	$ 9,044,504	0	0	0

PIEA

	APPROVED PROJECT NAME	Investment	Local Incentive Approved	Existing Jobs	New Jobs	Total Redevelopment Jobs
May-Jul 2016 - FY2017 Q1						
1	Stuart Hall/HD Lee PIEA - Aparium Hotel Project	$ 37,600,000	$ 6,177,414	0	150	150
1	27th &McGee PIEA - Gallery Green Project	$ 88,696,594	$ 12,096,825	0	0	0
1	Ellison/Knickerbocker PIEA - Midtown Plaza Project	$ 63,090,907	$ 11,001,418	0	0	0
3	**TOTALS**	$ 189,387,501	$ 29,275,657	0	150	150
Aug-Oct 2016 - FY2017 Q2						
1	Central Industrial District PIEA - West Bottom Flats	$ 58,000,000	$ 4,606,924	0	0	0
1	**TOTALS**	$ 58,000,000	$ 4,606,924	0	0	0
Nov 2016-Jan 2017 - FY2017 Q3						
1	Troost Corridor PIEA - Wonder Lofts Project	$ 13,600,000	$ 1,809,059	0	0	0
1	Crossroads Arts PIEA - 2010 McGee	$ 2,500,000	$ 125,000	0	0	0
2	**TOTALS**	$ 16,100,000	$ 1,934,059	0	0	0
Feb-Apr 2017 - FY2017 Q4						
1	City Club Apartment	$ 70,214,438	$ 6,071,174	0	0	0
1	Airworld Hotel	$ 21,962,309	$ 3,692,000	0	60	60
2	**TOTALS**	$ 92,176,747	$ 9,763,174	0	60	60
8	**YTD TOTALS**	$ 355,664,248	$ 45,579,814	0	210	210

Port Authority

	APPROVED PROJECT NAME	Investment	Local Incentive Approved	Existing Jobs	New Jobs	Total Redevelopment Jobs
May-Jul 2016 - FY2017 Q1						
	None					0
0	**TOTALS**	**$ 0**	**$ 0**	**0**	**0**	**0**
Aug-Oct 2016 - FY2017 Q2						
1	Three Trails Building III	$ 16,763,260	$ 5,939,348	0	0	0
1	**TOTALS**	**$ 16,763,260**	**$ 5,939,348**	**0**	**0**	**0**
Nov 2016-Jan 2017 - FY2017 Q3						
	No Report Received					0
0	**TOTALS**	**$ -**	**$ -**	**0**	**0**	**0**
Feb-Apr 2017 - FY2017 Q4						
	No Report Received					0
0	**TOTALS**	$ -	$ -	0	0	0
1	**YTD TOTALS**	$ 16,763,260	$ 5,939,348	0	0	0

KANSAS CITY INCENTIVES STUDY