An Economic Analysis of the Impact of Kansas Repeal of Prevailing Wage Statutes in Sedgwick County, Kansas And Wyandotte County, Kansas

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Chapter I

Executive Summary

The repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas was based upon the claim that repeal will save dollars on total construction costs and will bolster state and local budgets. Utilizing data from the F.W. Dodge Company on construction costs in Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2016, my economic analysis has shown that repeal of the prevailing wage statutes in those two counties did not decrease total construction costs as claimed by proponents.

1. Opponents of prevailing wage statutes argue that prevailing wage laws increase the costs of public construction due to the impact of higher wage rates on total construction costs. Repeal opponents argue that the increased costs to states as a result of prevailing wage statues ranges from 10%-30% of total construction costs.

   Study Finding #1

   - The F.W. Dodge Company provided the bid price on 1,325 observations for the period 2005-2016 for Sedgwick County, Kansas and Wyandotte County, Kansas across thirteen different non-residential construction projects, of which 1,049 were for the period 2005-2013 and 276 were for the period 2014-2016.[1]
   - For the period 2005-2013, the dollar value of new non-residential construction was $3,929,050,800; total square feet of new non-residential construction 26,758,100; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $146.84.
   - For the period 2014-2016, the dollar value of new non-residential construction was $1,501,308,900; total square feet of new non-residential

construction 10,329,900; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $145.35

- For the period 2005-2016, the dollar value of new non-residential construction was $5,430,359,700; total square feet of new non-residential construction 146.42; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $146.42
- There is no statistical difference in the mean square foot cost of non-residential construction across 13 construction types in Sedgwick County, Kansas and Wyandotte County, Kansas for the periods 2005-2013 and 2014-2016, respectively.
- Given that labor costs account for approximately 23% of total construction costs according to the Census of Construction (2012) and have been decreasing over time, the claim of 15%-30% cost savings with the repeal of the prevailing wage statute is not possible.

2. Opponents of prevailing wage statutes argue that, by exempting school construction from the prevailing wage statute, four schools could be built for the price of three schools.

Study Finding #2

- For the period 2005-2013, the dollar value of new non-residential school construction was $958,215,400; total square feet of new non-residential school construction 5,478,300; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2013 was $174.91.
- For the period 2014-2016, the dollar value of new non-residential school construction was $332,243,800; total square feet of new non-residential

[1] These construction totals include new and additions only in the Dodge Data and Analytics data base. They do not include alterations which were provided in the data base for which there are no square feet

school construction 1,390,600; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $238.92.

- For the period 2005-2016, the dollar value of new non-residential school construction was $1,290,459,200; total square feet of new non-residential school construction 6,868,900; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $187.87.
- School construction costs were ***$67.01 per square foot cheaper*** in the period before repeal (2005-2013) of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for elementary (K-8) was $159.04 per square foot; for the period 2014-2016, the mean square foot cost of construction for elementary (K-8) was $162.16 per square foot; the square foot cost of construction for elementary (K-8) was ***$3.12 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for Secondary (9-12) was $218.13 per square foot; for the period 2014-2016, the mean square foot cost of construction for Secondary (9-12) was $287.59 per square foot; the square foot cost of construction for Secondary (9-12) was ***$69.46 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for College/University was $184.92 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $281.45 per square foot; the square foot cost of construction for College/University was ***$96.53 per square foot cheaper*** before repeal of

reported in the data base.

the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

- For the period 2005-2013, the mean square foot cost of construction for Rest of Education was $167.55 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $235.61 per square foot; the square foot cost of construction for College/University was ***$68.06 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- The repeal of the prevailing wage statute in Sedgwick County, Kansas and Wyandotte County, Kansas did not result in any cost savings in school construction costs as alleged by the opponents of the prevailing wage statutes.

Chapter II

Introduction to the Study

In April, 2013, Governor Sam Brownback signed a bill into law that would prohibit cities and counties from requiring contractors to pay prevailing wages on public projects. Section I (a)(3) of House Bill No. 2069 states that *No city, county or local government unit shall enact or administer any ordinance or law which requires an employer to: pay compensation or wages at any rate higher than the minimum wage unless the payment of higher compensation or wages is required by federal law*.

Sec 2 (a)(3) of House Bill No. 2069 states that *No city, county or local government unit shall enact or administer any ordinance, resolution or law that requires, nor shall any city, county, or local government discriminate against, favor, prefer or base any ordinance, law, policy, economic development program, agreement, grant or incentive on, an employer providing or not providing: compensation of wages at any rate higher than the minimum wage unless the payment of higher compensation or wages is required by state or federal law.*

Section 3 of House Bill No. 2069 states that *The administration, enactment or enforcement of any city ordinance which conflicts with Section 1 or 2, and amendments thereto, is hereby declared to be void and against the public policy of this state.*

Section 4 of House Bill No. 2069 states that *The administration, enactment or enforcement of any county resolution which conflicts with Section 1 or 2, and amendments thereto, is hereby declared to be void and against the public policy of this state.*

At the time of passage of House Bill No. 2069, Sedgwick County, Kanas and Wyandotte County, Kansas had prevailing wage policies that were voided by the legislation. The proponents of House Bill No. 2069 argued that the law would lower the cost of public projects. For the analysis of the impact on non-residential construction costs and school construction costs for Sedgwick County, Kansas and Wyandotte County, Kansas as a result of House Bill No. 2069, I have obtained from F.W. Dodge Company (Dodge Data and Analytics) non-residential construction costs across thirteen structure types for the period 2005-2016 to determine (1) any statistical reduction in non-

residential construction costs and (2) any statistical reduction in school construction costs since the implementation of House Bill No. 2069.

Studies that assert that prevailing wages increases total construction costs are based on a faulty, non-scientific assumption that prevailing wage laws increase wages and, therefore, must increase total construction costs. These savings estimates use a simple wage differential and conclude that prevailing wage laws increase total construction costs, with increased costs estimates ranging from 15%-30%. One reason why prevailing wages do not increase construction costs is that labor costs are a low and declining percentage of total construction costs; labor costs accounted for approximately 23% of construction costs in 2012.[2] In addition, as labor costs increase, general contractors reduce costs in other areas such as fuels, rental equipment, and scheduling flows and become more efficient in their management of projects. Additionally, gains in productivity from hiring a more highly trained and more skilled workforce offset any increase in wage levels.

The argument is frequently made that prevailing wage regulations raise wages and must, by default, increase construction costs. This argument makes the fatal assumption that, when wages increase, there is no impact on labor productivity. This assumption by the critics of prevailing wage is not supported by a large majority of the empirical evidence. It has been shown (Kelsay, 2011, 2016) and other literature that construction workers in prevailing wage states get more formal apprenticeship training and generate more value added per worker than those construction workers in non-prevailing wage states.

The arguments has been frequently made that prevailing wage laws increase school construction costs. Once again, empirical evidence has shown that not to be the case. In a study conducted by Dr. Peter Phillips (2006), a preeminent scholar on prevailing wage issues, on school construction costs in Kentucky, Ohio, and Michigan over the period 1992-2000, he found no statistically significant difference in the average square foot costs associated with the repeal of prevailing wage regulations. Dr. Phillips results are consistent with much of the empirical literature on costs associated with

[2]2012 U.S. Census Bureau, *Economic Census of Construction*, Construction: Geographic Area Series: Detailed Statistics for Establishments.

prevailing wage regulation (Sturgeon, and Pinkham, 2011, Kelsay, 2015, Kaboub and Kelsay, 2014, and Kelsay, 2016).

Kelsay (2015) found that in an examination of school construction costs in the State of West Virginia (a prevailing wage state) and the non-prevailing wage states of North Carolina, Ohio, and Virginia, there was no statistical difference in mean square foot costs in elementary and secondary school construction for the period 2006-2013.[3] For university school construction, the mean square foot costs of construction was ***$58.52 per square foot cheaper*** in West Virginia than in the non-prevailing wage states of North Carolina and Virginia and the difference is statistically significant. Duncan, Phillips, and Prus (2014) found, in an analysis of the public/private construction cost differentials for schools, that a strong prevailing wage policy was not associated with changes in the efficiency or productivity of construction that contributes to increased building costs. Kelsay (2016) found that (1) there is no statistically significant difference in the mean costs of construction for elementary schools between Missouri and the non-prevailing wage jurisdictions in the North Central Region, (2**)** there is no statistically significant difference in the mean costs of construction for secondary schools between the Missouri and the non-prevailing wage jurisdictions in the North Central Region, and (3) there is a statistically significant difference in the mean costs of construction for university construction between the Missouri and the non-prevailing wage jurisdictions in the North Central Region; school construction costs are cheaper in Missouri. The mean costs of construction was ***$34.35 per square foot cheaper*** in Missouri versus non-prevailing wage jurisdictions in the North Central States Region.

Prevailing wage regulation reduces the incentive to bid on public construction projects which focuses on strategies that rely on cheap, inexperienced, untrained and uniformed labor. Prevailing wage regulations decrease the incentive to cheat on safety by emphasizing competition based upon skills training and management organization rather than on competition based upon unskilled and cheap labor. The employment in many construction industry occupations is an extremely dangerous one. Unfair bidding

[3] For elementary school construction, the mean square foot costs of construction is $6.10 per square foot **cheaper** in West Virginia than in the non-prevailing wage states of North Carolina, Ohio, and Virginia; for secondary school construction , the mean square foot costs of construction is $22.37 per square foot **cheaper** in West Virginia that in the non-prevailing wage states of North Carolina, Ohio, and Virginia

processes may lead to an environment of untrained, uninformed, and inexperienced labor doing the most dangerous work which can make construction work deadly.

Opponents of prevailing wage regulations state that by keeping wages low, the costs of construction can be decreased. However, the negative impact from the weakening or repeal of prevailing wage regulations often results in the abandonment of health insurance, pension coverage, and payroll taxes that funds the unemployment system and the workers compensation system throughout the United States.

Workers compensation premiums and unemployment insurance premiums provide benefits for construction workers and their families. However, unscrupulous contractors sabotage the conditions for a fair and competitive marketplace. By misclassifying workers, unscrupulous contractors gain a pricing advantage over honest contractors which results in unfair competition in the marketplace. Firms that misclassify workers can bid for work without having to account for many of the normal payroll-related costs. If an employee is classified as an independent contractor, the "employer" is not required to pay and/or withhold a variety of payroll-related taxes, fees and benefits (e.g., Social Security and Medicare taxes, local, state and federal income taxes, unemployment insurance, workers compensation, pension and health benefits, etc.). This illegal practice can decrease payroll costs by as much as 10% to 20%. Not only are these costs shifted to the individual worker, the "independent contractor" is also not fully protected by various employment laws (e.g., minimum wage and overtime requirements, workers compensation protection, the right to form a union and bargain collectively, etc.) and may, incorrectly, believe that he or she is protected by unemployment laws. Prevailing wage regulations force bidders on public works projects to include all costs in their bids. This means that the construction worker living next to you can afford health insurance for their families, will receive a pension for his/her years of work, can buy rather than rent a home, can pay their taxes, and become members of the middle class.

A. Background on the Prevailing Wage Law and the Davis Bacon Act

Prevailing wage laws have been the focus of public policy debate in the United States at the federal and state levels since the turn of the century. Prevailing wage laws require that construction workers on public projects be paid the wages and benefits that are found by the Department of Labor to be "prevailing" for similar work in or near the locality in which the construction project is to be performed.

Three federal laws affect prevailing wages in the United States. One of these, the Davis-Bacon Act of 1931, applies to the construction industry.[4] Two similar laws apply to other industries.[5] The general intent of a national prevailing wage law is to stabilize local wages and industry standards by preventing unfair and/or unregulated bidding practices, etc.

Before passage of the Davis-Bacon Act, a number of states and cities had already acted to secure the economic benefits of having a prevailing wage law on the books. Prior to Davis-Bacon at the federal level, nine states had enacted their own such law for state-funded projects. Within four years of Davis-Bacon's passage, sixteen more states added a state-level prevailing wage law ("mini" Davis-Bacon acts). At one time or another, forty-two states and the District of Columbia have had a prevailing wage law (Table 1). Indeed, prevailing wage laws have consistently received strong support from both state and local business communities.

The fact that such laws tend to stabilize and support local economies and labor markets has earned bi-partisan favor among legislators. A former banker, Congressman Robert L. Bacon (R-NY), introduced the first version of the eventual Davis-Bacon Act in the pre-Depression year of 1927. He obtained crucial support in 1930 from newly elected Senator James L. Davis (R-PA), a former US Secretary of Labor under three Republican administrations. The combined Davis-Bacon bill received strong backing from the Hoover administration and easily passed both houses of Congress. Prevailing wage laws

[4] The Davis-Bacon Act of 1931 was subsequently modified in 1935 and 1964.
[5] The Walsh-Healy Public Contracts Act of 1936 covers employees in manufacturing and supply industries, and the Service Contract Act of 1965 applies to suppliers of personal and business services.

have come to enjoy widespread support among contractors, subcontractors and employee groups within the U.S. construction industry.

Table 1
Prevailing Wage Laws, by State

States Having Prevailing Wage Laws	Year Passed	States That Have Repealed Prevailing Wage Laws	Year Passed	Year of Repeal
Alaska	1931	Alabama	1941	1980
Arkansas	1955	Arizona[1]	1912	1984
California	1931	Colorado	1933	1985
Connecticut	1935	Florida	1933	1979
DC	1931	Idaho	1911	1985
Delaware	1962	Kansas	1891	1987
Hawaii	1955	Louisiana	1968	1988
Illinois	1931	New Hampshire	1941	1985
Indiana	1935	Utah	1933	1981
Kentucky	1940	Oklahoma[2]	1909	1995
Maine	1933			
Maryland	1945			
Massachusetts	1914	States Without Prevailing Wage Law		
Michigan	1965			
Minnesota	1973	Georgia		
Missouri	1957	Iowa		
Montana	1931	North Carolina		
Nebraska	1923	North Dakota		
Nevada	1937	South Carolina		
New Jersey	1913	South Dakota		
New Mexico	1937	Vermont		
New York	1894	Virginia		
Ohio	1931			
Oregon	1959			
Pennsylvania	1961			
Rhode Island	1935			
Tennessee	1953			
Texas	1933			
Washington	1945			
West Virginia	1933			
Wisconsin	1931			
Wyoming	1967			

[1] Invalidated by Court Decision in 1980 and repealed by referendum in 1984

[2] Invalidated by Court Decision in 1995.

B. Review of Previous Studies

Proponents argue that the prevailing wage statutes among the various states encourage the employment of a more highly skilled labor force in construction, improve workplace safety, provide economic incentives for quality construction, increase apprenticeship training and provide career opportunities in construction for citizens. In addition, prevailing wage regulations are said by proponents to induce contractors to provide health insurance, pension benefits, and other voluntary benefits that would not be otherwise provided in construction.

Critics offer a number of arguments against prevailing wage regulations. The primary contention of critics is that the prevailing wage laws increase the costs of public construction due to the impact of higher wage rates on total construction costs. Critics have argued that the prevailing wage statutes increase overall public construction costs by 10% to 30%. A closer look at the data shows this to be impossible unless labor is going to donate their work effort. An analysis of the wage component in the overall costs of construction shows that wage costs have only a moderate and relatively constant impact on the total costs. Indeed, labor costs have accounted for far less than a third of total construction costs. According to the Census of Construction, labor costs, including voluntary and required fringe benefits was 25.5% in 2002 and decreased slightly to 24.6% in 2007; it has decreased to approximately 23% in 2012.

The National Alliance for Fair Contracting has conducted two time series analyses of wages, productivity, and highway construction costs in the United States. Utilizing data from the Federal Highway Administration, the National Heavy and Highway Alliance commissioned a study to analyze the costs of building a mile of highway in the United States over the period 1980-1993. They updated their study in 2004 over the period 1994-2002.[6] For the period 1980-1993, labor costs per mile were 20.7% of the total costs of highway construction; for the period 1994-2002, labor costs per mile were 20.0% of the total costs of highway construction.

Utilizing this data from the NAFC studies, further analysis can be made of wage costs and the impact of productivity measures with respect to prevailing and non-

prevailing wage states. Critics of prevailing wage statutes couch their analysis in terms of wage differentials in a static environment. They assume that a reduction of wages in the construction sector has no impact on the number of hours of labor to be employed and that the productivity of labor is constant. Efficiency wage theory focuses on the impact of wages on incentives and worker productivity and suggest that higher than market clearing wages increase productivity and increase profits. On the other hand, if employers pay lower wages, they will get employees that do a lower quality of work and have lower productivity. Therefore, by the establishment of a wage rate that is "prevailing" in the market allows the public sector to attract workers of at least a prevailing productivity and training" to public projects. In addition, a wage premium decreases labor turnover costs, attracts a higher quality labor force, reduces shirking and absenteeism, and increases worker effort.

Furthermore, they ignore the "indirect" effects of wage reduction on spending and income generated in a state; hence, they ignore the effects on tax revenue collections. However, the evidence clearly demonstrates that the payment of higher wages attracts a more highly skilled labor force that is more productive. The increase in productivity can offset the higher wage rates being paid

In a report by the Center for Government Research (2008), it is estimated that prevailing wage laws raised construction costs by 36% in New York's metro regions.[7] Once again, these cost savings on total projects costs are not possible given the labor component share of total construction costs. Secondly, this study did not empirically test whether or not the increase was even related to prevailing wage regulations; they made the erroneous assumption in their study that their wages differentials fully transferred to government costs. Once again, this study assumed that productivity was constant, material costs were constant, and the labor share of construction was constant.

In a study conducted by Sarah Dunn, John M. Quigley, and Larry a Rosenthal (2005), they concluded that the expansion of the prevailing wage statute in California to cover low-cost housing would lead to a 9% to 37% increase in housing construction

[6] *Wages, Productivity and Highway Construction Costs.* Updated Analysis: 1994-2002. Prepared for Construction Industry Labor-Management Trust. By Construction Labor Research Council. March 2004.

costs.[8] Given they assume that the labor share of total construction costs ranged from 42.6% to 47.2%, the prevailing wage differential would have to be in excess of 60% to explain their high estimates. This is almost surely impossible.

The results of the majority of these prevailing wage studies have clearly demonstrated uniformly three primary findings: (1) there are no statistically significant measurable cost differences between similar structures as a result of prevailing wage laws, (2) there are significant measurable wage differences between public and private projects of a similar nature, and (3) the economic impact of a higher wage and more skilled workforce can be substantial, offsetting any increase in wages in the construction sector that might result from prevailing wage legislation. Further, these studies consistently find that repeal of prevailing wage laws in various states results in a less skilled workforce with reduced productivity, a decrease in apprenticeship and training programs, increased injuries and deaths in the construction industry, decreased wages and benefits, as well as adverse economic impacts for the states and their taxpayers.

In October, 2006, a study was released on the evaluation of the weakening or repeal of the prevailing wage statute in Minnesota (2006).[9] The authors concluded that the repeal or weakening of the prevailing wage statute would reduce income in the state between $382 million and $1.8 billion annually. In addition, they concluded that the repeal or weakening of the prevailing wage statute in Minnesota would (1) weaken apprenticeship training programs, (2) increase injury rates, weaken position of women and minorities in the construction industry, (5) increase project cost overruns, and reduce construction wages.

At the time of the Minnesota, study, the Minnesota Chapter of the ABC had argued that repealing prevailing wage requirements would save the stated 10%-30%. Mike Walter of the University of Minnesota empirically tested this claim by the ABC.

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[7] *Prevailing Wages in New York State: The Impact on Project Costs and Competitiveness.* Prepared for the New York State Economic Development Council. Rochester N.Y: Center for Government Research. 2008.

[8] Dunn, Sarah and John M. Quigley and Larry A. Rosenthal. *The Effects of Prevailing Wage Requirement on the Cost of Low-Income Housing.* Industrial & Labor Relations Review. Volume 50, Number 1, Article 8. 2006.

[9] Jordon, Lisa M., lead researcher. "An Evaluation of Prevailing Wage in Minnesota: Implementation, Comparability and Outcomes. October, 2006.

Walter concluded that "The potential savings of repealing the statute would translate roughly into 6.6% of labor costs or 1.8% of total costs.

Professor Kevin C. Duncan at Colorado State University (2011), , utilizing data from highway resurfacing projects in the State of Colorado, conducted an analysis of the Davis Bacon prevailing wage requirements on projects funded by the federal government. The results of his study showed that requiring prevailing wage requirements on highway resurfacing projects in Colorado were not associated with statistically significant higher construction costs. This confirms what many other credible peer-reviewed empirical studies have found; namely that there is a strong relationship between wages, labor productivity, and total costs in the construction industry.

In a study conducted by Frank Manzo, Alex Lantsberg and Kevin Duncan (2016), showed that prevailing wage laws result in positive additions to the tax base by increasing income tax collections and decreasing the reliance on various forms of public assistance.[10] For example, their study showed that blue collar construction workers in states with average and strong prevailing wage laws paid, on average, $3,289 in federal income taxes; in states with weak prevailing wage laws, they paid, on average, only $1,964 in federal income taxes.

[10] Manzo IV, Frank, Lantsberg, Alex and Kevin Duncan. "The Economic, Fiscal, and Social Impacts of State Prevailing Wage Laws: Choosing Between the High Road and the Low Road in the Construction Industry. February 9, 2016.

Chapter III

Economic Analysis of Impact of Repeal of Prevailing Wage Statutes in Non-Residential Construction Costs for Sedgwick County, Kansas and Wyandotte County, Kansas: 2005-2016[11]

Summary of Findings Based on Descriptive Statistics for Sedgwick County, Kansas and Wyandotte County, Kansas

- Total new construction projects from 2005-2016 were 1,325:[12] of which 1,049 were for the period 2005-2013 and 276 were for the period 2014-2016.
- Distribution of structure type (by percentage of projects) is essentially the same in the period 2005-2013 and 2014-2016 except for office and bank buildings which accounted for 27.3% of projects in the period 2005-2013 and only 10.8% in the period 2014-2016.
- For the period 2005-2013, the dollar value of new non-residential construction was $3,929,050,800; total square feet of new non-residential construction 26,758,100; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $146.84.
- For the period 2014-2016, the dollar value of new non-residential construction was $1,501,308,900; total square feet of new non-residential construction 10,329,900; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $145.35
- For the period 2005-2016, the dollar value of new non-residential construction was $5,430,359,700; total square feet of new non-residential

[11] All construction costs have been adjusted to 2016 prices. BLS Series ID PCU236211236211. New Industrial Building Construction

[12] These construction totals include new and additions only in the Dodge Data and Analytics data base. They do not include alterations which were provided in the data base for which there are no square feet reported in the data base.

construction 146.42; the mean cost per square foot of new non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas across all 13 non-residential structure types was $146.42

- Conclusion: There is no statistical difference in the mean square foot cost of non-residential construction across 13 construction types in Sedgwick County, Kansas and Wyandotte County, Kansas across the two time periods.

Summary of Findings on School Construction Based on Descriptive Statistics for Sedgwick County, Kansas and Wyandotte County, Kansas

- Total new school construction projects from 2005-2016 were 201:[13] of which 162 were for the period 2005-2013 and 39 were for the period 2014-2016.
- For the period 2005-2013, the dollar value of new non-residential school construction was $958,215,400; total square feet of new non-residential school construction 5,478,300; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2013 was $174.91.
- For the period 2014-2016, the dollar value of new non-residential school construction was $332,243,800; total square feet of new non-residential school construction 1,390,600; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $238.92.
- For the period 2005-2016, the dollar value of new non-residential school construction was $1,290,459,200; total square feet of new non-residential school construction 6,868,900; the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $187.87.

[13] These construction totals include new and additions only in the Dodge Data and Analytics data base. They do not include alterations which were provided in the data base for which there are no square feet reported in the data base.

- For the period 2005-2013, the mean square foot cost of construction for elementary (K-8) was $159.04 per square foot; for the period 2014-2016, the mean square foot cost of construction for elementary (K-8) was $162.16 per square foot; the square foot cost of construction for elementary (K-8) was ***$3.12 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for Secondary (9-12) was $218.13 per square foot; for the period 2014-2016, the mean square foot cost of construction for Secondary (9-12) was $287.59 per square foot; the square foot cost of construction for Secondary (9-12) was ***$69.46 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for College/University was $184.92 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $281.45 per square foot; the square foot cost of construction for College/University was ***$96.53 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for Rest of Education was $167.55 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $235.61 per square foot; the square foot cost of construction for College/University was ***$68.06 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

- Conclusion
  - The square foot cost of construction for elementary (K-8) was ***$3.12 per square foot cheaper*** for the period 2005-2013 than the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas
  - The square foot cost of construction for Secondary (9-12) was ***$69.46 per square foot cheaper*** for the period 2005-2013 than the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
  - The square foot cost of construction for College/University was ***$96.53 per square foot cheaper*** for the period 2005-2013 that the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
  - The square foot of construction for Rest of Education was ***$68.06 per square foot cheaper*** for the period 2005-2013 that the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

The Impact of Prevailing Laws on Total Construction Costs In Sedgwick County, Kansas and Wyandotte County, Kansas 2005-2013

Descriptive Findings

In this section we use simple descriptive statistics to compare the square foot construction costs for thirteen types of construction projects: (1) amusements, (2) dormitories, (3) government services buildings, (4) hospitals and other health treatment facilities, (5) hotels and motels, (6) manufacturing plants, warehouse, and labs, (7) miscellaneous nonresidential buildings, (8) office and bank buildings, (9) parking garages and automotive services, (10) religious buildings, (11) schools, libraries, and labs, (12) stores and restaurants, and (13) warehouses, excluding manufacturer owned. We examine data provided from Dodge Analytics for Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2016.[14]

The data used was obtained from the F.W. Dodge Company, a company that collects and disseminates data on construction projects for the industry. The F.W. Dodge data provides information on the start or bid cost of construction projects in Sedgwick County and Wyandotte County, Kansas on 13 primary structure types, location of project, project scale, and other technical characteristics of the project. This section examines total construction costs for non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2016. All data has been adjusted for inflation to inflation-adjusted 2016 dollars.[15]

Charts 1-3 provides a preliminary overview of construction costs for Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2016. Chart 1 shows inflation adjusted construction cost per square foot for private and public construction for

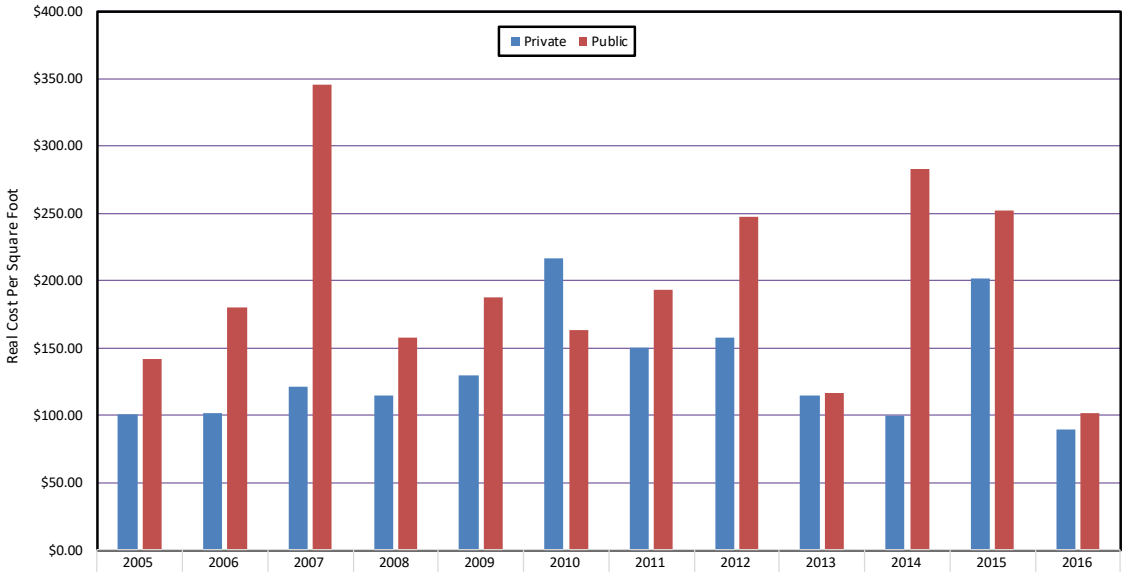
[14] The data for 2016 is thru September, 2016

[15] United States Bureau of Labor Statistics. Producer Price Index. Series ID PCU236211236211. New Industrial Building Construction.

the period 2005-2016 As expected, the chart shows the inflation-adjusted mean construction costs are lower for private projects than for public projects. Chart 1 also shows that the inflation-adjusted mean costs of public construction were higher in 2014 and 2015 (after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas) than in eight of the nine previous years.

Chart 2 makes the same type of comparison, but for private projects only. Chart 3 makes the same type of comparison, but for public projects. Chart 1 clearly shows that the costs of public projects are considerably higher than costs of private projects. Based on Chart 1, one would conclude that public projects are more expensive than private projects, but there are variety of reasons for that difference. As a result, these results are spurious. It could be the case that the public versus private construction cost differential arises because the public sector builds hospitals while the private sector built inexpensive warehouses

Chart 1
Cost of Private and Public Construction
Sedgwick and Wyandotte County, Kansas
Real Costs Per Square Foot: 2005-2016
(2016 Prices)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Private	$100.28	$101.29	$121.03	$115.00	$130.07	$216.33	$150.61	$157.38	$114.42	$99.59	$201.58	$89.63
Public	$141.50	$180.38	$345.50	$157.30	$187.54	$162.92	$193.61	$246.97	$116.59	$283.10	$252.16	$101.74

Chart 2
Cost of Private Construction
Sedgwick and Wyandotte County, Kansas
Real Costs Per Square Foot: 2005-2016
(2016 Prices)

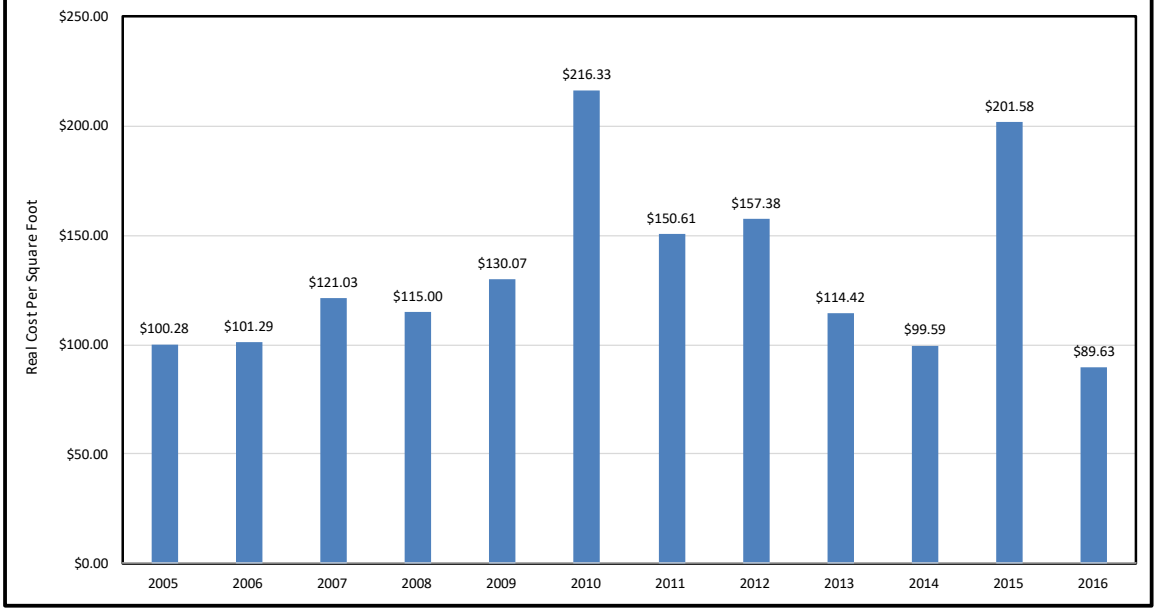


Chart 3
Cost of Public Construction
Sedgwick and Wyandotte County, Kansas
Real Costs Per Square Foot: 2005-2016
(2016 Prices)

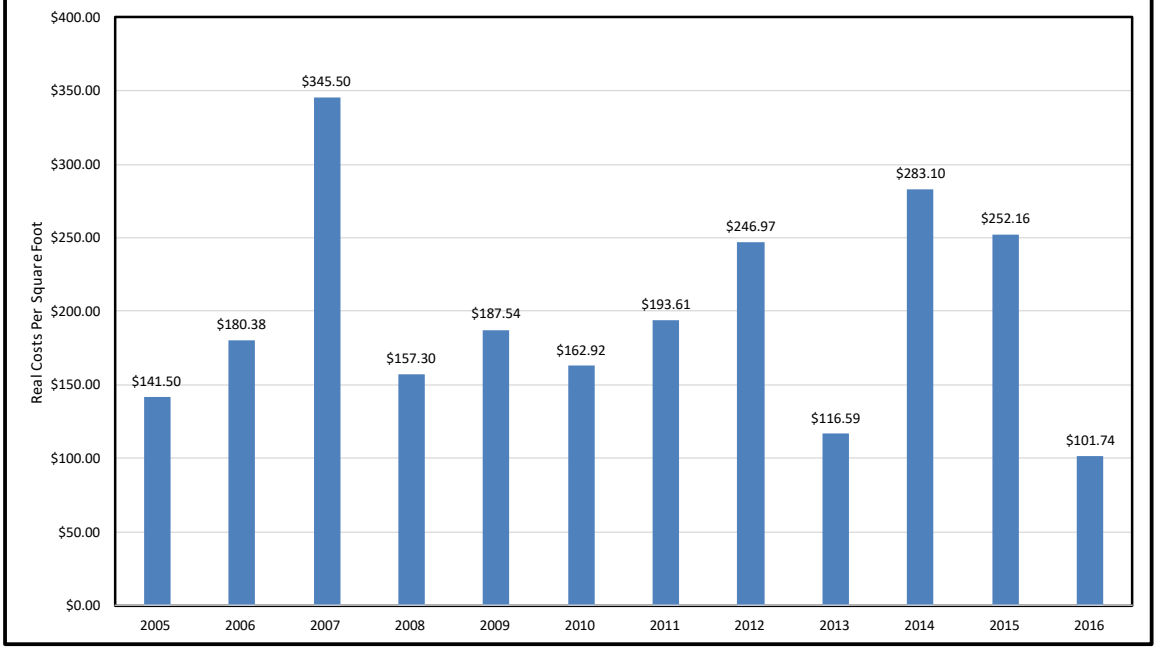


Table 2 presents the distribution of new construction spending by structure type for Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2016.

Table 2
Distribution of New Construction Spending by Type
2005-2016

Sedgwick County and Wyandotte County, Kansas	Count	%
Amusement, Social and Recreational Bldgs	58	4.4%
Dormitories	5	0.4%
Government Service Buildings	28	2.1%
Hospitals and Other Health Treatment	104	7.8%
Hotels and Motels	27	2.0%
Manufacturing Plants, Warehouses, Labs	42	3.2%
Miscellaneous Nonresidential Buildings	32	2.4%
Office and Bank Buildings	319	24.1%
Parking Garages and Automotive Services	56	4.2%
Religious Buildings	35	2.6%
Schools, Libraries, and Labs (nonmfg)	201	15.2%
Stores and Restaurants	307	23.2%
Warehouses (excl. manufacturer owned)	111	8.4%
Total	**1,325**	**100.0%**

There were 1,325 new/addition construction projects over the period 2005-2016. The largest number of projects in the region were office and bank buildings (319), followed by stores and restaurants (307, and schools, libraries, and labs, nonmfg (201). These four structure types accounted for 62.5% of all projects. Table 3 presents the distribution of new construction spending for Sedgwick County, Kansas over the period 2005-2016. Sedgwick County, Kansas accounted for 1,049 construction projects over the period 2005-2016. In Sedgwick County, Kansas, office and bank buildings, stores and restaurants, and schools, libraries, and Labs (nonmfg) accounted for 60.4% of all projects. Table 4 presents the distribution of new construction spending for Wyandotte

County, Kansas over the period 2005-2016. Wyandotte County, Kansas accounted for 276 construction projects over the period 2005-2016. In Wyandotte County, Kansas, office and bank buildings, stores and restaurants, and schools, libraries, and Labs (nonmfg) accounted for 70.0% of all projects.

Table 3

Distribution of New Construction Spending by Type

2005-2016

Sedgwick County, Kansas	Count	%
Amusement, Social and Recreational Bldgs	49	4.7%
Dormitories	3	0.3%
Government Service Buildings	27	2.6%
Hospitals and Other Health Treatment	93	8.9%
Hotels and Motels	22	2.1%
Manufacturing Plants, Warehouses, Labs	30	2.9%
Miscellaneous Nonresidential Buildings	30	2.9%
Office and Bank Buildings	233	22.2%
Parking Garages and Automotive Services	38	3.6%
Religious Buildings	30	2.9%
Schools, Libraries, and Labs (nonmfg)	171	16.3%
Stores and Restaurants	230	21.9%
Warehouses (excl. manufacturer owned)	93	8.9%
Total	**1,049**	**100.0%**

Table 4		
Distribution of New Construction Spending by Type		
2005-2016		
Wyandotte County, Kansas	**Count**	**%**
Amusement, Social and Recreational Bldgs	9	3.3%
Dormitories	2	0.7%
Government Service Buildings	1	0.4%
Hospitals and Other Health Treatment	11	4.0%
Hotels and Motels	5	1.8%
Manufacturing Plants, Warehouses, Labs	12	4.3%
Miscellaneous Nonresidential Buildings	2	0.7%
Office and Bank Buildings	86	31.2%
Parking Garages and Automotive Services	18	6.5%
Religious Buildings	5	1.8%
Schools, Libraries, and Labs (nonmfg)	30	10.9%
Stores and Restaurants	77	27.9%
Warehouses (excl. manufacturer owned)	18	6.5%
Total	**276**	**100.0%**

Table 5 presents the distribution of new construction spending by Type and Time period for the period 2005-2016. Table 6 presents the cost per square foot of new construction by type and time period. For the period 2005-2013, the mean cost per square foot across all structures for Sedgwick County, Kansas and Wyandotte County, Kansas was $146.84; for the period 2014-2016, the mean cost per square foot across all structures for Sedgwick County, Kansas and Wyandotte County, Kansas was $145.35; and for the entire period of 2005-2016, the mean cost per square foot across all structures for Sedgwick County, Kansas and Wyandotte County, Kansas was $146.42. There is no statistically significant difference for the mean cost of construction between the periods 2005-2013 and 2014-2016 at the 5 percent level of significance. What this means is that based on these data, one cannot conclude that there is any difference in the mean square foot costs of construction as a result of the repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas because the observed difference is not statistically significant from zero.

Table 5

Distribution of New Construction Spending by Type and Time Period [1]

2005-2016

	2005-2013		2014-2016		2005-2016	
	Count	**%**	Count		Count	%
Amusement, Social and Recreational Bldgs	44	4.1%	14	5.4%	58	4.4%
Dormitories	5	0.5%	0	0.0%	5	0.4%
Government Service Buildings	25	2.3%	3	1.2%	28	2.1%
Hospitals and Other Health Treatment	86	8.1%	18	6.9%	104	7.8%
Hotels and Motels	19	1.8%	8	3.1%	27	2.0%
Manufacturing Plants, Warehouses, Labs	28	2.6%	14	5.4%	42	3.2%
Miscellaneous Nonresidential Buildings	21	2.0%	11	4.2%	32	2.4%
Office and Bank Buildings	291	27.3%	28	10.8%	319	24.1%
Parking Garages and Automotive Services	41	3.8%	15	5.8%	56	4.2%
Religious Buildings	27	2.5%	8	3.1%	35	2.6%
Schools, Libraries, and Labs (nonmfg)	162	15.2%	39	15.0%	201	15.2%
Stores and Restaurants	232	21.8%	75	28.8%	307	23.2%
Warehouses (excl. manufacturer owned)	84	7.9%	27	10.4%	111	8.4%
Total	**1,065**	**100.0%**	260	**100.0%**	**1,325**	**100.0%**

[1] House Bill No. 2069 to ban prevailing wage rules for cities and counties was signed by Governor Brownback in April, 2013. The bill was to go into effect in July, 2013. For the purpose of this analysis, I have split the Dodge data set into two sub-year groups.

Table 6

Real Cost Per Square Foot of New Construction by Type and Time Period

2005-2016

2005-2013	Cost/Sq Ft.	2014-2016	Cost/Sq Ft.
Amusement, Social and Recreational Bldgs	$319.24	Amusement, Social and Recreational Bldgs	$143.63
Dormitories	$157.05	Dormitories	$0.00
Government Service Buildings	$200.45	Government Service Buildings	$162.45
Hospitals and Other Health Treatment	$211.96	Hospitals and Other Health Treatment	$388.21
Hotels and Motels	$102.70	Hotels and Motels	$96.90
Manufacturing Plants, Warehouses, Labs	$100.77	Manufacturing Plants, Warehouses, Labs	$89.43
Miscellaneous Nonresidential Buildings	$224.40	Miscellaneous Nonresidential Buildings	$264.49
Office and Bank Buildings	$163.75	Office and Bank Buildings	$167.55
Parking Garages and Automotive Services	$81.22	Parking Garages and Automotive Services	$63.90
Religious Buildings	$156.05	Religious Buildings	$132.08
Schools, Libraries, and Labs (nonmfg)	$174.81	Schools, Libraries, and Labs (nonmfg)	$238.92
Stores and Restaurants	$96.33	Stores and Restaurants	$107.16
Warehouses (excl. manufacturer owned)	$61.42	Warehouses (excl. manufacturer owned)	$64.41
Mean Cost Per Square Foot of New Construction: 2005-2013	**$146.84**	**Mean Cost Per Square Foot of New Construction: 2014-2016**	**$145.35**
Total Dollar Value of New Construction	$3,929,050,800	Total Dollar Value of New Construction	1,501,308,900
Total Square Feet of New Construction	26,758,100	Total Square Feet of New Construction	10,329,000

2005-2016	Cost/Sq Ft.
Amusement, Social and Recreational Bldgs	$283.98
Dormitories	$157.05
Government Service Buildings	$195.77
Hospitals and Other Health Treatment	$252.65
Hotels and Motels	$100.49
Manufacturing Plants, Warehouses, Labs	$95.94
Miscellaneous Nonresidential Buildings	$242.82
Office and Bank Buildings	$164.47
Parking Garages and Automotive Services	$74.94
Religious Buildings	$150.45
Schools, Libraries, and Labs (nonmfg)	$187.79
Stores and Restaurants	$98.16
Warehouses (excl. manufacturer owned)	$62.82
Mean Cost Per Square Foot of New Construction: 2005-2016	**$146.42**
Total Dollar Value of New Construction	$5,430,359,700
Total Square Feet of New Construction	37,087,100

School Construction in Sedgwick County, Kansas and Wyandotte County, Kansas

The primary data used to analyze school construction costs were obtained from the F.W. Dodge Company, a company that collects and disseminates data on construction projects for the industry. The Dodge data provides the bid costs of school construction projects. The Dodge data also provided the bid costs of construction costs disaggregated for (1) elementary schools (K-8), (2) secondary schools (9-12), (3) colleges/universities, and (4) rest of education.

Table 7 provides summary statistics on school construction costs by type of school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the

period 2005-2016. All data has been adjusted for inflation to inflation-adjusted 2016 dollars.

Table 7

Real Cost Per Square Foot of New School Construction by Type and Time Period

2005-2016

2005-2013	Real Value	Square Feet	Real Cost Per Square Foot
Elementary (K-8)	$493,992.5	3,106.0	$159.04
Secondary (9-12)	$251,856.2	1,154.6	$218.13
College / Universities	$88,800.0	480.2	$184.92
Rest of Education	$123,566.7	737.5	$167.55
TOTALS	**$958,215.4**	**5,478.3**	**$174.91**
2014-2016	**Real Value**	**Square Feet**	**Real Cost Per Square Foot**
Elementary (K-8)	$70,930.5	437.4	$162.16
Secondary (9-12)	$96,285.1	334.8	$287.59
College / Universities	$118,659.3	421.6	$281.45
Rest of Education	$46,368.9	196.8	$235.61
TOTALS	**$332,243.8**	**1,390.6**	**$238.92**
2005-2016	**Real Value**	**Square Feet**	**Real Cost Per Square Foot**
Elementary (K-8)	$564,923.0	3,543.4	$159.43
Secondary (9-12)	$348,141.3	1,489.4	$233.75
College / Universities	$207,459.3	901.8	$230.05
Rest of Education	$169,935.6	934.3	$181.89
TOTALS	**$1,290,459.2**	**6,868.9**	**$187.87**

The square foot cost of construction for elementary (K-8) was ***$3.12 per square foot cheaper*** for the period 2005-2013 than the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas

The square foot cost of construction for Secondary (9-12) was ***$69.46 per square foot cheaper*** for the period 2005-2013 than the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

The square foot cost of construction for College/University was ***$96.53 per square foot cheaper*** for the period 2005-2013 that the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

The square foot of construction for Rest of Education was ***$68.06 per square foot cheaper*** for the period 2005-2013 that the period 2014-2016 which was after repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

Conclusions

The results of this analysis of school construction costs in Sedgwick County, Kansas indicate that school construction costs in Sedgwick County, Kansas and Wyandotte County, Kansas are ***higher*** across all types of school construction ***after*** the repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas. Therefore, the repeal or modification of prevailing wage laws did not result in costs savings as alleged by proponents of House Bill No. 2069.

Chapter IV
Summary and Conclusions

In this study, I have examined the impact of House Bill No. 2069 in Kansas which voided the prevailing wage statues in Sedgwick County, Kansas and Wyandotte County, Kansas. Using data obtained from the F.W. Dodge Company on construction costs, I have empirically examined the argument of opponents of prevailing wage laws that large construction cost savings can be realized and more importantly, are being realized from repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

The results of this study are clear and indicate the following:

- For the period 2005-2013, the mean cost per square foot of non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas (***before*** repeal of Sedgwick County and Wyandotte County prevailing wage statutes) was $146.84.
- For the period 2014-2016, the mean cost per square foot of non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas (**after** repeal of Sedgwick County and Wyandotte County prevailing wage statutes) was $145.35
- For the period 2005-2016, the mean cost per square foot of non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas was $146.42.
- For the period 2005-2013, there is no statistically significant differences in mean square foot costs across all types of non-residential construction in Sedgwick County, Kansas and Wyandotte County, Kansas
- For the period 2005-2013, the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period 2005-2013 was $174.91.
- For the period 2014-2016, the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $238.92.

- For the period 2005-2016, the mean cost per square foot of new non-residential school construction in Sedgwick County, Kansas and Wyandotte County, Kansas for the period was $187.87.
- For the period 2005-2013, the mean square foot cost of construction for elementary (K-8) was $159.04 per square foot; for the period 2014-2016, the mean square foot cost of construction for elementary (K-8) was $162.16 per square foot; the square foot cost of construction for elementary (K-8) was ***$3.12 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for Secondary (9-12) was $218.13 per square foot; for the period 2014-2016, the mean square foot cost of construction for Secondary (9-12) was $287.59 per square foot; the square foot cost of construction for Secondary (9-12) was ***$69.46 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for College/University was $184.92 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $281.45 per square foot; the square foot cost of construction for College/University was ***$96.53 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.
- For the period 2005-2013, the mean square foot cost of construction for Rest of Education was $167.55 per square foot; for the period 2014-2016, the mean square foot cost of construction for College/University was $235.61 per square foot; the square foot cost of construction for College/University was ***$68.06 per square foot cheaper*** before repeal of the prevailing wage statutes in Sedgwick County, Kansas and Wyandotte County, Kansas.

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