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# The Economic Impact of Fort Hays State University on the Local Economy: Fiscal Year 2007

Dr. Carl Parker and Dr. Tom Johansen



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A university education alters the path of people's lives. It helps them fulfill their aspirations to become artists, business and organizational leaders, teachers, health care professionals, and more. A university education is widely recognized as an investment that pays a lifetime of dividends in the form of better jobs and higher incomes.

The economic impact reported in this study used a conservative approach in calculating the various estimates presented; therefore, the actual economic impact of Fort Hays State University is much larger than the value of \$194 million estimated in this study.

The total economic impact of the university upon the local economy is determined by combining a direct impact with an indirect impact and an induced impact.

- The direct impact is the sum of all local expenditures associated with the university, which was estimated to be \$107,835,862.
- The indirect impact of additional business spending to support the initial expenditure was estimated to be \$21,567,172
- The induced impact of additional expenditures resulting from the incomes created by the direct impact was \$64,701,517.

The total economic impact for FY 2007 (the fiscal year starting July 1, 2006, and ending June 30, 2007) was **\$194,104,551**.

The university impact can also be viewed from the perspective of its impact on the local community through generation of various tax revenues.

- Total real estate taxes (property tax) paid by FHSU faculty and staff was \$847,448.
- Personal property taxes collected from faculty and staff in Ellis County was \$134,360.
- The total motor vehicle taxes collected for FHSU employees in Ellis County was \$268,793.
- The sales taxes collected by Hays related to the university impact was \$2,123,173.

In FY 2007, gross salary paid to university employees, excluding student labor, generated an additional \$12,461,865 in gross earnings in the local economy. The 785 total full-time, benefits-eligible jobs at FHSU would generate an additional 204 full-time equivalent jobs in the local economy.

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# The Economic Impact of Fort Hays State University on the Local Economy: Fiscal Year 2007

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## INTRODUCTION

### **Fort Hays State University Strengthens the Economy of Today and Tomorrow**

The state of Kansas investment in the development of human capital through Fort Hays State University has multiple long-term economic benefits. These benefits include a better educated state work force that results in both productivity and earnings gains. There is a consistent positive correlation between the education level within a state and the per capita income for that state. Analogous to the development of human capital is the transfer of technology and know-how to businesses, non-profit and civic organizations, as well as government agencies. University employees provide regional leadership as they serve on committees and boards in various organizations, providing technical expertise and resources, and they engage in other service activities. Also, local businesses benefit from easy access to a large supply of part-time and full-time workers. This benefit is especially important when labor markets are tight due to low unemployment rates. Sporting events, cultural activities and educational programs are available to the general public and provide intangible benefits to the region by improving local residents' quality of life. Quantifying these long-term multifaceted benefits is beyond the scope of this study.

The purpose of this study is to determine the approximate magnitude of the economic impact of Fort Hays State University upon the Hays and Ellis County local economy in FY 2007. The models used in this study are linear cash-flow concepts upon which data can be readily obtained. The models omit qualitative issues. These models include only university-related expenditures. The spending units are identified as the university, faculty and staff, students, visitors, food

service, the bookstore, the FHSU Foundation, and the Athletic Corporation. Discussion of spending estimates, data sources and assumptions are presented below for each of these units. The total of these expenditures is called the "direct impact," which is a primary source of the economic impact of the university upon its local economy.

### **Economic Impact Methodology Used in this Study**

How a regional economy responds to changes in economic activity is largely determined by the buy-sell relationships among companies located within that region. Input-Output (I-O) models estimate inter-industry relationships in a region by measuring the distribution of inputs purchased and output sold by each industry. Using I-O models, it is possible to calculate how the impact of one dollar "ripples" throughout the regional economy, creating additional expenditures and jobs. An economic multiplier is a measure of the ripple effect that an initial expenditure has on the regional economy.

Universities purchase goods and services from local businesses that, in turn, purchase inputs and services from other local businesses. These increased sales result in increased employment of local citizens. The expenditures represent the multiplier effect of the university's expenditures. This same multiplier effect is also associated with the university's expenditures on construction and capital improvement projects as well as the expenditures of faculty, staff and students on local goods and services.

There are other measures that also provide a perspective of the economic impact of the university. One model concerns college-related tax revenues received by local governments, and another model

concerns the creation of jobs and income in the local community resulting from university expenditures. The tax revenues considered in this study include real estate taxes, personal property taxes, sales taxes and motor vehicle taxes. These taxes fund governmental activity at the city and county levels as well as provide funding for the school district. The jobs model considers the additional jobs and income created in the community associated with expenditures of the university.

## Expenditure Models

FHSU expenditures are associated with the following categories: the university, faculty and staff, students, visitors, food service, the bookstore, the FHSU Foundation, and the Athletic Corporation. Expenditures for FY 2007 are associated with spending to local businesses in Ellis County and the city of Hays. The broader impact of FHSU spending on the region or state is not considered in this study. Assumptions, data sources and other issues are specifically identified in this presentation to assist in making the needed corrections for future economic impact studies.

## University Expenditures (Other than Employment)

University operations expenditures minus wages and salaries and minus internal account transfers and payments were \$28,431,665 for FY 2007. Next, the proportion of these expenditures spent locally is applied. Some university expenditures are required to use state contracted vendors, so these expenditures are not likely to be local. Currently, computer access to data that track expenditures by vendor address or zip code

is unavailable. Hopefully, this issue can be addressed in the future. For this report, 55 percent of expenditures are assumed to be local expenditures. This percentage is consistent with that used in other studies. This gives a figure of **\$15,637,416** in local expenditures.

## Faculty and Staff Expenditures

This estimate includes total spending on local purchases of goods and services by university faculty and staff. Payroll records were used to calculate employee net pay. Net pay to faculty and staff is defined as the gross pay minus all deductions that result in the paycheck received by the employee. Payroll deductions include required withholdings such as federal and state income taxes, social security, and Medicare taxes. Also withheld was the required state retirement employee contribution, which was 5.5 percent for unclassified and 4 percent for classified employees. Health and supplementary life insurance is deducted, and employees can elect to have voluntary tax-sheltered supplementary retirement annuity payments withheld. Other voluntary deductions may include:

- Deferred Compensation
- Flexible Spending Accounts:
  - Medical and Dependent Care
- Long-term Care Insurance
- Parking Dues
- Organizational Dues
- United Way Donations
- Endowment Donations
- Learning Quest
- Savings Bonds

**Table 1: FHSU Employee Net Pay**

Employee Type	Number of Employees	Net Pay
Nine-Month Unclassified (Faculty)	254	\$8,514,659
12-Month Unclassified	227	\$7,766,734
Regular Classified (With Benefits)	304	\$5,487,435
<b>Total Faculty/Staff Net Pay</b>	<b>785</b>	<b>\$21,768,828</b>

Source: University Payroll

The total net pay for each classification of employee was determined and is presented in Table 1.

Other categories of employees that also have to be considered are Temporary Classified and Temporary Unclassified. The Temporary Classified employee is a part-time employee who may work in a variety of capacities for the university, including secretarial, clerical, maintenance, custodial, etc. Temporary Unclassified employees are usually associated with teaching responsibilities, either in a part-time capacity teaching on campus or teaching classes offered through the Virtual College. The total net pay for these two employee classifications, with a Hays mailing address (317 employees), was **\$1,086,830**.

The Senior Companion and Foster Grandparent Program employees working in Ellis County had a total net pay of **\$156,989**. Added to the net pay for FHSU employees identified in Table 1, the total net pay for all employees at FHSU is \$23,012,647.

It was assumed for this study that all of net pay was spent and no additional savings were withheld. Faculty and staff have available the opportunity to participate in voluntary tax-sheltered savings programs at FHSU that would be payroll deducted and thus not included in net pay. A future study of faculty and staff expenditure patterns will provide more insight into the validity of this assumption and any needed adjustments.

It is not known what proportion of faculty and staff disposable income is spent locally. This is an empirical question that would properly be based on a faculty/staff survey. The percentage of income spent locally associated with comparable universities may not be useful as guidelines because of the uniqueness of the Hays market area. Hays is the center of a trade area with little competition for goods and services in close

proximity. Salina, which is 90 miles away, is the closest larger trade center. The gravity model concerning expenditure patterns predicts that a higher percentage of disposable income is spent locally when competitive businesses are farther away.

Additionally, higher fuel prices reduce any competitive advantage of businesses that require extensive travel. The previous university impact study used a 90-percent local expenditure figure. This percentage will be used in this study due to lack of any basis for a different figure.

The total of the university employees' net income discussed above equals \$23,012,647. Ninety percent for total local expenditures equals **\$20,711,382**.

Full-time employees who were covered by health insurance were also responsible for purchase of local health services and medications covered by insurance. Health insurance premiums are deducted from gross pay for the employee and are not included in the net pay figures. Insurance payments to local providers of health care goods and services are associated with the employee and must be included as a part of employee expenditures. The Kansas Health Policy Authority provided estimates of these figures, as shown in Table 2.

The Kansas Health Policy Authority now has the ability to identify organizations such as FHSU in their claims database. They were able to identify the dollars spent for FHSU members to providers in Hays for the 2007 fiscal year. These are much more accurate figures than the estimates used for this spending component in previous impact studies.

Adding the total from Table 2 to FHSU employee local expenditures gives a Grand Total spending of **\$23,612,642**.

**Table 2: Workers Compensation Data for FHSU – FY07**

Health Benefits Paid to Faculty/Staff FY07 (Benefits Paid to Hays Place of Service)	<b>\$2,433,543</b>
Worker's Comp. – Medical Paid to Faculty/Staff	\$322,337
Worker's Comp. – Disability	\$145,380
Total	<b>\$467,717</b>
Total Medical Reimburse & Worker's Comp.	<b>\$2,901,260</b>

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## Student Expenditures

Spending by university students is another major source of the economic impact of the university. The on-campus headcount is the enrollment figure relevant for direct student spending. For the academic year 2006-07, the average on-campus headcount was 4,346 students. Since the fiscal year starts half way through a summer session, the average number of students for the 2006 and 2007 summer sessions was used to estimate the number of on-campus students. This average was 1,235.5 students.

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**Table 3: Student Enrollment for Academic Year 2006-07  
(Final Supplemental Data)**

Students	On-Campus Headcount	On-Campus FTE
Fall 2006	4509	3734
Spring 2007	4183	3348
Average	4346	3541
Summer 2006	1166	372
Summer 2007	1305	383
Average	1235.5	377.5

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Virtual College enrollment also significantly impacts the economy by increasing university revenues and thus university expenditures. This spending component is included in both the university spending and in faculty/staff spending.

There are students who reside in university-owned facilities such as dormitories, students who live off-campus in the community and students who live outside the local community.

### Residence Hall Students

These students do not purchase local housing services, and most of their food expenditures are related to a university meal plan. It would not be appropriate to count either of these student expenditures, since they are considered revenue to this university activity. From this revenue, university housing services make expenditures that are included in the university operations expenditures model. Nevertheless, they purchase a variety of goods and services in the local community, including such items as entertainment, food, beverages, clothing, school supplies, hygienic needs, insurance, medical and dental care, dry cleaning, and many other items.

### Local Off-Campus Students

Some students will reside in group housing such as fraternities or sororities; some students will rent private quarters, living alone or with a roommate(s); and some students will live at home with parents. The expenditure patterns for these students will vary greatly depending upon the circumstances.

### Students Living in Other Communities

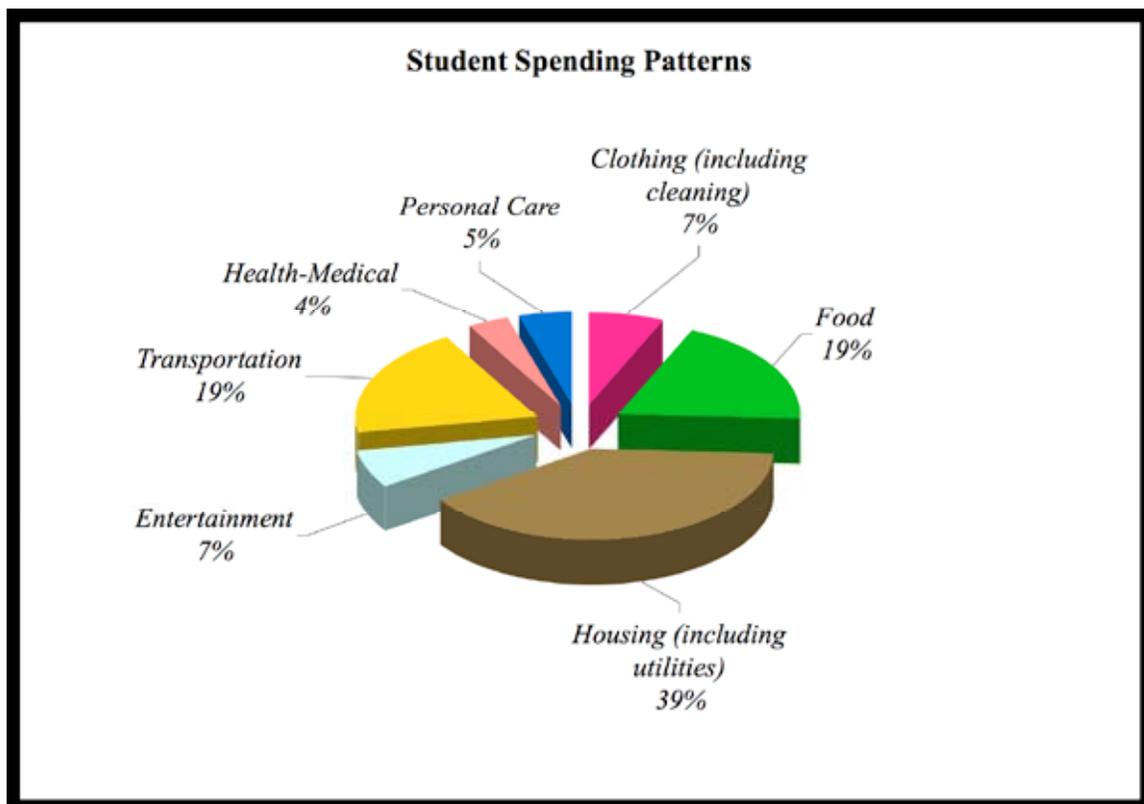
Students who commute to campus from surrounding areas will likely make some local expenditures on gasoline, food and other items. Students associated with internet courses and programs may not come to the campus and thus may not make any local purchases. Tuition and fees are not included in measuring the local economic impact of students because they are included in the instruction cost component of the university's operation budget.

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Student spending data were collected for on-campus students as part of a study by the Department of Economics and Finance concerning student finances. A survey was administered in the spring semester of 2005 from a random sample of 1,500 undergraduate and graduate students at FHSU. This sample included only students who took six credit hours or more of coursework on campus. Detailed data were collected on such things as student income, expenditures, debt and employment. Figure 1 shows the pattern of student monthly spending for six spending categories: clothing (including laundry/cleaning), food, housing (including utilities), entertainment, transportation (including car payments), and health/medical. Tuition and fees are not included in measuring the local economic impact of students because they are a revenue component that funds spending that is accounted for in the university's operation budget.

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**Figure 1**



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Student spending patterns change very little from year to year in terms of the percentage of their budgets spent on various categories, even though the dollar amounts may change to reflect the change in market prices.

Estimating local expenditures by students requires adjustments to be made for students who live in university-owned facilities such as dormitories. Students who live in such facilities do not purchase local housing services, and most of their food expenditures are related to a university meal plan. About 18.3 percent of the average nine-month student

on-campus headcount resided in university housing during the 2004-05 school year. For 2006-07 the percentage was 18.5 percent. The student survey allows for the identification of students who live in dorms and provides a basis for making adjustments to the housing and meal expenditures for those students.

FHSU students who did not live in dorms spent an average of \$1,092 per month in 2005. Adjusting for inflation, the student spending for FY07 is \$1,149. This figure is somewhat lower than that found in some recent studies for other universities. For example, Mesa State College in Grand Junction, Colo., reported

that average student spending was \$1,186 a month during the 2003-04 academic year. Middle Tennessee State University in Murfreesboro, Tenn., reported an average student expenditure of \$1,259 for the 2002-03 school year. Average monthly expenditures for students attending universities in metropolitan areas will undoubtedly be higher.

Total FHSU student spending for the 2006-07 school year (including the summer session) was adjusted for students living in dorms. See Table 4. Total student spending was **\$42,902,488**.

**Table 4: Student Expenditures Less Tuition,  
Average for Fall 2006-Spring 2007\***

Students Living in Dorms	803
Average Monthly Student Expenditures	\$573.34
Average 9-Month Student Expenditures	\$5,160.06
Total 9-Month Student Expenditures	\$4,143,528
Students Not Living in Dorms	3,543
Average Monthly Student Expenditures	\$1,148.78
Average 9-Month Student Expenditures	\$10,339.06
Total 9-Month Exp. For On-Campus Headcount	\$36,631,275
Summer Session	1,236
Average 2-Month Summer Student Expenditures	\$1,722.12
Total 2-Month Summer Student Expenditures	\$2,128,545
<b>Total FY 2007 Student Expenditures</b>	<b>\$42,903,349</b>

\*All figures are rounded to nearest dollar.

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## Visitor Expenditures

Many people visited Fort Hays State University's campus in FY 2007 as prospective students and their parents, as conference and commencement attendees, and as audiences for cultural and sporting events. Unfortunately there is not a good estimate of the number of people attending these events from outside the community nor the length of stay of the visit. Without this information, it is not possible to estimate the total spending impact. However, data are available on two groups of visitors, and spending estimates are calculated for each.

### Special Athletic Events

The economic impact of high school state sporting events hosted at FHSU has been studied for the year 2007 by the Hays Convention and Visitors Bureau. The following events were hosted by FHSU with the estimated dollars spent in the community. The amounts below include both the spending of the teams and the fans that supported each team. Only overnight visitors are included in the estimates; therefore, the estimates are conservative in that day visitors also spend money in the community. Day visitor information cannot be reliably estimated.

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**Table 5: Special Athletic Events**

State Volleyball	\$315,360
State Football	140,960
State Basketball	630,500
State Wrestling	493,920
Special Olympics	651,690
Southern Plains Wrestling Tournament	231,000
Kansas Shrine Bowl	1,500,000
<b>Total</b>	<b>\$3,963,430</b>

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### Special Memorial Union Events

The Hays Convention and Visitors Bureau also conducted a study on the events that were hosted in the Memorial Union on the FHSU campus. The events included in this study were the Kansas Remote Sensing Symposium; Multi-Media INT Competition; Seas, Trees, and Economics; Playdough Economics; Financial Fitness Institute; Economics of Sports; Cyber Crimes Training Conference; Kansas Academic Advising; Fall English Workshop; Kansas Scholastic Press Association; American Association of State Colleges of Agriculture and Renewable Resources; Kansas International Educator; Association of College Unions; and the FHSU Math Relays. The total local expenditures for these events were estimated to be **\$259,250**.

## Student Visitors

Not only does student spending impact the economy, student visitors spend a substantial amount that also impacts the economy. Students have visits from friends and family throughout the year. While the primary purpose is to visit the student, some visitors combine the visit with attending some university activity or event. Previous FHSU economic impact studies have not been able to estimate student visitor economic impact due to the absence of data. Based on the student survey previously referenced, 74.9 percent of students reported that they had visits during the semester. Students having visits reported an average of approximately five visits in the fall semester from family and friends, which would give a total of 10 visits for the school year (summer term is not included). For purposes of calculating spending in the local economy, visitors who stayed overnight in a motel were separated from other visits. Table 6 summarizes the data for the spending calculations.

**Table 6: Student Visitors**

<b>Description</b>	<b>Visitors (Motel)</b>	<b>Visitors (Non-Motel)</b>
Total Number of Visits*	5,514	27,037
Ave. No. of Persons/Visit	3	2.5
Total Visitors	16,542	67,593
Average Stay per Visit (Days)	1.9	1.9
Total Visitor Days	31,430	128,426
Per Diem Spending on Retail, Food, Gas, etc.**	\$103.10	\$103.10
<b>Total Visitor Spending</b>	<b>\$3,240,300</b>	<b>\$13,240,238</b>
<b>Lodging Expenditures</b>		
Number of Overnight Stays	5,514	
Ave. Stay per Visit (Nights)	1.5	
Total Lodging Nights	8,271	
Lodging Plus Tax/Night	\$76.80	
Total Lodging Spending	\$635,182	
<b>Total</b>	<b>\$3,875,483</b>	<b>\$13,240,238</b>
<b>Total All Visitor Spending</b>		<b>\$17,115,721</b>

\*Number of visits was based on the 2005 student survey and adjusted to reflect changes in on-campus student enrollments between the 2004-05 and 2006-07 school years.

\*\*All prices were adjusted to reflect the 5.2 percent increase in the CPI between the 2004-05 and 2006-07 school years.

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Students had 5,514 visits in the 2006-07 school year and spent an average of 1.5 nights in a motel. Because only 18 percent of visits included more than 3 persons, and since motel charges are the same for one or two persons and charges are minimal for an additional person, the number of visits times an average stay of 1.5 nights was used as a measure of overnight visits in a motel. There were a total of 8,271 lodging nights. The average motel rate, including tax, was estimated to be \$76.80. The total motel spending was **\$635,182**. Other spending on retail, food, gas, entertainment, etc. was \$3,240,300. This study did not have information on the actual amount spent on retail, food, gas, entertainment and other items, so an average per diem (\$103.10), as used in other impact studies such as Mesa State College in Grand Junction, Colo., (2003) was adopted. This per diem is consistent with the International Association of Conference and Visitors Bureau's formula (40 percent spent on lodging and 60 percent spent on retail, food, gas and misc.) to estimate total dollars spent by visitors over and above the motel receipts. This would give a per diem of \$115. Using the more conservative figure of \$76.80 and adding lodging spending to other spending gives a total of \$3,875,483 for student visitor spending of those who stayed in a motel.

Other overnight visitors, 27,037, stayed with the student or other family or friends in the area. Each visit averaged 2.5 persons who stayed an average of 1.9 days. The \$103.10 per diem per person was also used for this category of visitors. Visitors not staying in a motel spent \$13,240,238 in the local economy.

The total spending for both categories of student visitors was \$17,115,721. When combined with special athletic events and special Memorial Union events, **total visitor spending is \$21,338,401**. Again, it should be emphasized that this is a conservative estimate because only part of the total FHSU visitor spending is considered due to lack of data.

## University Book Store and Food Services

The University Bookstore reported a total payroll of \$196,262 and other local expenditures of \$467,000 in 2005. Data for 2007 was not available; therefore, the 2005 data was adjusted reflecting the 5.2 percent increase in the CPI. Making the necessary adjustment and assuming 90 percent of payroll was spent locally, the total local expenditure is **\$677,105**.

Professional Food Management reported a total net payroll of \$577,606 and additional local purchases of \$30,943. As in the case of university employees, it is assumed that these employees spend 90 percent of their net pay locally, which equals \$519,846. Adding other local expenditures gives a total of **\$550,789**.

## FHSU Athletic Association

Total spending by the FHSU Athletic Association was \$3,408,469. Of this total, local expenditures were calculated to be 80 percent or **\$2,726,775**.

## FHSU Foundation

The FHSU Foundation is a private foundation that supports the university through its fundraising efforts for student scholarships and departmental support money. Foundation spending consists of three areas: employee salaries, operating expenses and expenditures made by the association on behalf of university departments. Fiscal year 2007 salaries were \$222,142, of which it is assumed that 90 percent is spent locally, amounting to \$199,923. Local operating expenses, those expenditures necessary to operate the Foundation spent locally were \$97,196. Expenditures made locally on behalf of university departments were \$92,262. These expenditures do not include money paid out as scholarships. The total direct expenditure for the FHSU Foundation for FY 2007 was **\$389,385**.

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## Total FHSU Direct Economic Impact

The total direct impact of spending related to Fort Hays State University upon the local economy is the sum of the spending components previously discussed. A summary is presented in Table 7.

## Indirect and Induced Spending Impacts

For FY 2007, the direct impact of FHSU on the local economy was \$107,835,862. This direct impact produces an indirect impact as local business establishments purchase materials and supplies from other local enterprises to support their sales. The indirect impact is estimated to be 20 percent of the direct impact, or \$21,567,172. The income received by local residents from the initial dollars spent is partially spent within the local economy, thus creating additional sales. This induced impact is estimated to be 60 percent of the direct impact, or \$64,701,517. **This gives a total impact on the local community of \$194,104,552.** These impacts are summarized in the Table 8.

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**Table 7: Direct Impact Expenditures\***

University Operations Expenditures (Excluding Wages and Salaries)	\$15,637,416
Faculty and Staff Expenditures	\$23,612,642
Student Expenditures	\$42,903,349
Visitor Expenditures	\$21,338,401
Food Services	\$550,788
University Bookstore	\$677,105
FHSU Athletic Association	\$2,726,775
FHSU Foundation	\$389,385
<b>Total</b>	<b>\$107,835,862</b>

\*All figures are rounded to nearest dollar.

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**Table 8: Direct, Indirect, and Induced Impacts\***

Direct Impact	\$107,835,862
Indirect Impact	\$21,567,172
Induced Impact	\$64,701,517
<b>Total Impact</b>	<b>\$194,104,552</b>

\*All figures are rounded to nearest dollar.

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## Government Models

This set of models is designed to estimate the effect of the presence of the university upon local government revenues and, thus, their expenditures. The models presented in this report are limited to real estate property taxes, personal property taxes and sales taxes paid to local government.

### University-Related Real Estate Property Taxes

There are two components to this model: real estate taxes paid by faculty and staff and real estate taxes paid by fraternities and sororities. The amount of real estate taxes paid by fraternities and sororities was obtained directly from Ellis County, and the amount for the most recent available year, 2007, was a total of **\$5,936**.

From university payroll data, it was determined that there were 469 unique Hays addresses for full-time faculty and staff. This excluded apartment and PO Box addresses. Property tax information, as well as the appraised value for each residential address, was obtained from the Ellis County and the Ellis County Treasurer Web sites ([www.elliscounty.net](http://www.elliscounty.net) and [www.e-treasury.us](http://www.e-treasury.us)). The actual property taxes paid by FHSU faculty and staff totaled **\$847,448**. A number of faculty and staff, 94, do not pay property taxes directly. These households pay rent to owners who then pay the property taxes. The amount of property taxes indirectly paid by these employees is not available; therefore, the total amount of property taxes is a conservative amount. The average value of an FHSU employee's residential property was \$140,680 for 2007.

## Personal Property Taxes

In Ellis County, \$2,867,794 in personal property taxes was collected during the 2007 calendar year. Since there was no basis for direct estimation for university faculty and staff, it was assumed that the proportionate share of taxes was related to the proportion of Ellis County single-family dwellings accounted for by faculty and staff (9.4 percent).

The Ellis County Appraiser's Office provided data indicating there were 5,798 single-family dwellings in Hays and 7,191 in Ellis County. The number of unique FHSU full-time employee residential addresses in Ellis County in 2007 was 674, which is 9.4 percent of the total for the county.

Total personal property taxes collected from FHSU employees is estimated as the total personal property tax collected in the county multiplied by the percent of dwellings owned by FHSU employees. This amount was \$134,360 in 2007. It is possible that FHSU faculty and staff have above-average values for personal property that would result in a higher tax estimate. Also, this is likely to be an underestimate because faculty who rent were not included.

### Property Taxes Associated with Motor Vehicles

The Ellis County Treasurer's Office provided the estimate of the motor vehicle taxes collected. The total was \$2,867,794. As in the case of personal property taxes, FHSU's share of motor vehicle property taxes is related to the proportion of Ellis County dwellings accounted for by faculty and staff. If it can be shown that FHSU employees have either more vehicles or

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**Table 9: 2007 Real Estate Taxes Paid by FHSU Employees with Unique Hays Addresses**

	<b>Appraised Value</b>	<b>Property Taxes</b>
Total	\$65,979,060	\$847,448
Average	\$140,680	\$1,807

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vehicles with higher values than the average for the community, then the estimates for FHSU employees would be higher. The assumption implicit in these figures is that FHSU employees own about the same number of vehicles as do other households in the community and that the vehicles owned are of the same average market value as those owned by the average household. The total motor vehicle taxes collected for FHSU employees in Ellis County is \$268,793

## **Sales Taxes**

The Kansas Department of Revenue reports that total sales taxes distributed back to the city of Hays for Calendar Year 2006 was \$7,737,928, based on the city 1.75 percent sales tax that was initiated January 2005. Total sales taxes distributed back to Hays in 2007 were \$8,139,982. Total Hays sales subject to sales taxes are thus calculated to be \$465,141,829 in 2007. Many of the direct impact expenditures related to the university are not subject to sales taxes. Expenditures from faculty and staff salaries and expenditures of students and visitors are subject to sales taxes as well as the expenditures associated with the indirect and induced impacts. The total of these expenditures is estimated to be \$121,324,144, and the sales tax collected by Hays attributable to FHSU provided sales tax revenue of \$2,123,173.

## **Earnings Model**

The Regional Industrial Multiplier System (RIMS II) model developed by the U.S. Department of Commerce, Bureau of Economic Analysis, provides multipliers for earnings created in a given region. Gross earnings are used for this estimate since fringe benefits and deductions will vary by employer. The \$33,020,311 in gross salary paid to university employees, excluding student labor, generates an additional \$12,461,865 in gross earnings in the local economy (Ellis County).

## **Jobs Model**

The number of jobs created in the local economy due to the presence of the university is associated with employment opportunities at the university and jobs created by business enterprises resulting from university-related expenditures. The RIMS II system provides employment (jobs) multipliers that give the total number of jobs created in all industries for each job created in the industry being considered. Applying the multiplier appropriate to FHSU, the total full-time, benefits-eligible jobs at FHSU (785) would generate an additional 204 full-time equivalent jobs in the local economy. There are over 285 temporary unclassified and temporary classified jobs that may be either full-time or part-time. Unfortunately, a full-time equivalent number of jobs could not be calculated, but these jobs also result in an increase in the number of jobs created in the local economy.

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## Total Economic Impact

The significant contributions to Hays and the surrounding area are documented throughout this report. This study has used a conservative approach in calculating the various estimates presented; therefore, the actual economic impact of Fort Hays State University is much larger than the value of \$194 million estimated in this study.

As in conventional economic impact assessments, the direct spending by FHSU — spending that is funded by both state and non-state sources — and the multiplier effect of this direct spending are major parts of the university's overall economic impact. However, the value of FHSU to the region is much more than the total impact of its direct, indirect and induced spending because of what FHSU actually *provides*. Specifically, the primary product of FHSU is the large number of job-ready graduates produced each year that make life-long contributions to Kansas and its economy.

Education is a good investment for the state and the local region because of the lifetime earnings increase associated with education. The correlation between earnings and educational achievement is well established. Not only do the students benefit from careers with higher income, the area in which the students live benefits from the increased spending resulting from that higher income.

A university education alters the path of people's lives. It helps them fulfill their aspirations to become artists, business and organizational leaders, teachers, health care professionals, and more. A university education is widely recognized as an investment that pays a lifetime of dividends in the form of better jobs and higher incomes.



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