The University of Kansas

Policy Research Institute

January 6, 2006

Mayor and City Council City Hall 6 East 6th Street Lawrence, Kansas 66044

Honorable Mayor and City Council Members:

This letter presents a summary of the benefit-cost analysis performed for: **PackerWare Corporation**.

Description of the Tax Abatement Model:

The model is an analysis of the economic impact that a new or expanding firm would have on the community when a property tax abatement is requested by a company. In particular, the model examines the economic impact on the city, county, public school districts, and the state of Kansas.

From the perspective of the units of local government the benefits that are studied are as follows:

- Increases in local sales tax collections through company and employee spending;
- Additional franchise fees on utilities (gas, electric, cable TV);
- Increases in property taxes from new houses and company buildings;
- Increased state funding for any new school children.

Similarly, costs to local government include:

- Operational and capital costs to provide streets, public utilities, police and fire protection, and other public services for the company and new residents;
- Specific costs related to the new firm and borne by the city, if any (new roads, bridges, sewer services, etc);
- Expenditures related to the local school districts for education of the school children of the new company employees.

In addition the model considers the impact on the state of Kansas:

- Benefits including state-level sales and income tax collections;
- State-level costs for services such as education.

To account for total economic impacts, secondary (multiplier) effects of a new development are estimated through the use of income and employment multipliers.

However, it should be stressed that the model <u>does not</u> measure non-fiscal impacts on the community such as:

- Intangible costs (air and water pollution, traffic congestion, etc.);
- Intangible benefits (increased quality of life, social benefits of economic growth, etc.);
- External impact on the surrounding communities; and,
- The likelihood that the firm would locate even without the abatement.

To truly capture the total impact of a new firm on the community, these other issues must be accurately recognized and carefully considered. The fiscal impact results presented here should only be *part* of the information used when deciding whether to grant a tax abatement.

The results are presented in terms of net benefits; that is, benefits minus costs. To provide a fuller understanding of the influence of the proposed tax abatement on different government units, the net benefit amount is calculated separately for the city of Lawrence, Douglas County, USD 497, and again as the total net-benefit of all three.

Summary of the Cost-Benefit Analysis for PackerWare Corporation

PackerWare Corporation ("PackerWare") is a manufacturer of injection molded rigid plastic packaging. The company's primary products include plastic containers and drink cups. The company was founded in Lawrence, Kansas in 1968. In 1997, the company was purchased by Berry Plastics Corporation ("Berry Plastics"). Berry Plastics currently operates 30 injection molding presses and 20 printing presses at the Lawrence, Kansas location. Berry Plastics is considering the expansion to increase the company's thermoform manufacturing capacity. The additional capacity will enable Berry Plastics to support the current market and future market demand for thermoformed plastic packaging.

The expansion will be conducted in three phases. Phases 1 and 2 will include modifications to existing warehouse space that will upgrade building and system improvements and convert space to manufacturing space. Phase 3 includes new building construction; the new building would be 40,000 square feet in area. The expansion and new construction would take place on existing acreage. The combined value of the building improvements is estimated to be \$24,500,000 (Phase 1=\$6.5 million, Phase 2=\$6.0 million, and Phase 3=\$12.0 million). Furthermore, \$93,500,000 worth of equipment would be purchased during the three phases (Phase 1=\$30.0 million, Phase 2=\$28.0 million, and Phase 3=\$60.0 million).

PackerWare Corporation plans to hire 154 new employees in conjunction with their expansion plans (43 new employees in Phase 1, 35 new employees during Phase 2, and 76 new employees with Phase 3). Salaries for these new employees range from \$21,840 to \$72,800, with the average being \$28,854 in Year 1 and \$27, 438 for all three phases.

The requested abatement is 90 percent for ten years on \$24,500,000 of real estate and 90 percent for ten years on \$93,500,000 of equipment. Phase 1 would start in 2006 (Year 1), Phase 2 in 2007 (Year 2), and Phase 3 in 2009 (Year 4).

Below are the fiscal impacts of the company's proposed project for the city of Lawrence, Douglas County, the Lawrence School District (497), and the Combined Total, assuming the abatement request is granted. The benefits are given as cumulative amounts for ten and fifteen years after the company expands. The benefit/cost ratios are also listed.

	Year	<u>10</u>	Ye	ar 15
	Net Benefits	B/C Ratio	Net Benefits	B/C Ratio
City of Lawrence	\$4,762,010	6.71 to 1	\$6,785,908	7.18 to 1
Douglas County	\$419,441	1.97 to 1	\$928,044	2.61 to 1
USD 497	\$9,739	1.03 to 1	\$372,033	1.83 to 1
Combined City, Co., USD497	\$5,191,191	4.18 to 1	\$8,085,985	4.80 to 1

The impact on the state of Kansas has also been approximated, using three sources of revenue (income, property, and sales taxes) and the one significant area of expense: education. The approximate net benefit after fifteen years to the state is \$25,973,877.

Another way to view benefits is to look at how many jobs are created and the amount of disposable income that accrues to the firm's workers (wages and salaries plus benefits less taxes). In addition to these 'primary' effects, economic theory predicts there will also be 'secondary' effects, or spillovers, in the local community. Increased money circulation in the local economy as a direct result of plant and employee spending has been shown to create additional jobs and income. Below is a summary of the direct effects and an estimate of the secondary effects resulting from the firm's activities, for all of Douglas County.

	Disposable Income	Employment
Primary Effects	\$2,723,534	119
Secondary Effects	\$712,842	59
Total	\$3,436,377	178

Hopefully this analysis will be helpful to you in your decision making. We encourage you to call us at (785) 864-4618 if you have any questions or suggestions of ways in which this report might be made more useful to you. A complete report on the benefit-cost analysis accompanies this letter.

Sincerely,

Kenna Mthurd

Genna Hurd Research Associate Policy Research Institute

POLICY RESEARCH INSTITUTE THE UNIVERSITY OF KANSAS

Cost-Benefit Analysis of the Fiscal and Economic Impact of New or Expanding Firms Requesting Tax Abatements

Name of Firm:PackerWare CorporationType of Project:ExpansionNature of Business:ManufacturingAbatement Request:90% for 10 years on new equipment90% for 10 years on new real estate

Date of Analysis: January 6, 2006

prepared by:

Genna Hurd Research Associate

Steven Maynard-Moody Director Policy Research Institute

Cost-Benefit Analysis for PackerWare Corporation

Introduction

This report summarizes the results of a benefit-cost analysis for PackerWare Corporation. The analysis is based on the Fiscal and Economic Impact Model of the Policy Research Institute at the University of Kansas, as customized for the city of Lawrence.

Main Results

1. Applicant's New Investment

The applicant proposes a total investment of 118,000,000 in real estate and equipment for the three phases (Phase 1=30.0 million, Phase 2=232.0 million, and Phase 3=60.0 million). The firm also anticipates the creation of "additional" annual operating expenditures totaling 889,151,975, of which 529,822 (0.6 percent) is estimated to be spent locally (Table 2).¹

2. Amount of Abatement Requested

PackerWare Corporation is requesting a 90 percent abatement for ten years on all new real estate purchased and 90 percent on all new equipment purchased.² The present value for the city, county and school district combined of the abated tax, adjusted for depreciation of equipment, and discounted over a 10-year period is \$8,038,609. An additional \$2,047,119 is abated over the 10-year period by the state (Table 1).

3. Net Benefits over a 15-Year Period

Over a 15-year time span, the present value of net benefits to the city of Lawrence amounts to \$6,785,908, given the abatements requested by PackerWare Corporation. The respective results are \$928,044 for Douglas County and \$372,033 for the Lawrence School District. The combined benefit for the city, county, and school district is \$8,085,985 if an abatement is granted. If *no* tax abatement is granted the present value of the net benefits would increase to \$9,438,499 for the City of Lawrence, \$3,770,779 for Douglas County, \$2,915,316 for USD 497, and \$16,124,594 for all three combined. These figures are shown in Table 4. For more detail, the Appendix shows cumulative net benefits for each year of 15 (pages 7-8).

4. New Employment and Jobs Provided

PackerWare Corporation plans to hire 154 new employees in conjunction with their expansion plans; 43 new employees will be hired in the first year, 35 new employees in the second year, 41

¹ This company projected expenditure increased with each of the phases – Year 1, Year 2, and Year 4. The model does not allow for the annual operation expenditures (includes utilities) to vary over time, but rather they stay the same for all years. Therefore, annualized averages were calculated for the annual operating expenditures.

 $^{^{2}}$ The 10-year abatement period will vary with the phases of the project. The model allows for investments in real estate, equipment, and workers to vary over time. It also calculates the benefits over a 15-year period, which will include all the abatement periods for this project's phases.

new employees in the fourth year, and 35 new employees in the fifth year (pages 11-13). The average pay of all employees in the first year is \$28,854 (Table 2). In addition, the firm provides an average of 22 percent fringe benefits for all employees. For the project as a whole, the average pay of all employees is \$27,438 (page 13).

5. Private Sector Income and Sales Associated with New Development

Table 5 shows that new total annual disposable income is estimated to be \$2,859,661 for Lawrence. Disposable income is salaries plus benefits minus income and other taxes. This figure includes disposable income to all employees of the firm as well as disposable income created through the multiplier effect. Local sales in Lawrence from the firm's purchases and from household expenditures amount to \$1,349,759. Of this amount, 25 percent, or \$334,715, is expected to be subject to local sales tax.

6. New Residents Associated with Development

After taking into account the employment multiplier effect, and estimating an average household size of 2.37 people for in-migrants, the project is expected to add 171 new residents to Douglas County (Table 3).

7. New Schoolchildren Associated with Development

The model estimates not only the number of new schoolchildren associated with the firm, but also the number of new school kids expected to come from in-migrating secondary workers. The total number of new school kids enrolled in Lawrence public schools is estimated to be 27 (Table 3).

8. Multipliers

An income multiplier of 1.25 and an employment multiplier of 1.60 were calculated for this project (Table 3). Every type of economic activity will have a different local multiplier effect depending on the characteristics of the incoming firm and employees.

9. Net Impact on the State of Kansas

In the first year, the state of Kansas will benefit from the proposed development through increased revenues in individual income taxes of \$39,359 a year. This includes income generated by secondary employment gains. The state will receive annual property taxes of \$19,858 when residential, plant and plant equipment taxes are added together. Sales tax collections on purchases and utility usage are estimated to total \$1,164,312 a year. Costs to the state are in the area of education, with basic state aid coming to \$36,577. The combination of these incomes and costs yields a net benefit of \$1,186,953 in the first year for the state of Kansas. Over a fifteen year period, the present value of net benefits to the state of Kansas becomes \$26,156,992 (page 8).

Reliability of Model Outcomes

The outcome of this cost-benefit analysis is intended to facilitate political decision making and does not represent precise values but reasonable approximations of the magnitude of the fiscal and economic impact of the project. The sensitive nature of the model to some variables such as the rate of in-migration associated with the new development suggests that one should view the results within a range rather than as a single outcome. Furthermore, the benefits and costs derived from this analysis do not include the intangible social costs or benefits, the benefits occurring during the construction phase of the project, or the costs associated with the chance that a firm might locate or expand in the community even without a tax abatement.

Conceptual limitations arise from the assumptions necessary for economic modeling. Empirical limitations of the input data may affect the reliability of the model's outcome. For example, this project will be conducted in phases with the third phase resulting in a significant increase in operating expenses. The model currently does not allow for operating expenses to vary over time.³ The cost-benefit is also based on the most recent fiscal budgets and tax structures; city and county budgets are subject to change from year to year as are the property, income, and sales tax rates. For these reasons, it is stressed once again that the results of this model should not be used as the sole criterion in deciding whether a tax abatement should be granted, but rather, as one factor out of many involved in making such a decision.

³ As previously mentioned, because different operating expenditures, including utilities, were associated with the different phases of the project, an annualize average was calculated for the expenditures.

Table 1

PackerWare Corporation

AMOUNT OF PROPERTY TAX ABATEMENT REQUESTED 90% For ten years on real estate 90% For ten years on property

	Local				State	
Current mill levy	City 27.86	County 29.86	School District USD 497 26.71	Total	School 20.00	State Levy 1.50
Abated Tax in First Year	\$167,005	\$178,976	\$160,123	\$506,104	\$119,893	\$8,992
Present Value of Abated Tax over 10 years in current dollars	\$2,652,591	\$2,842,735	\$2,543,284	\$8,038,609	\$1,904,297	\$142,822

Note: The present value of the 10-year tax abatement is calculated using a 7.5% discount rate.

Table 2

KEY FIRM-RELATED INPUT VARIABLES Year 1

1. Real Estate Investment	\$6,500,000		
2. Taxable Equipment	\$23,500,000		
3. Annual Operating Expenses Percent Spent Locally	\$89,151,975 0.6%		
New and Retained Employment	Number	Average Salary	Average Fringe Benefits
Total	43	\$28,854	
- Upper Salary Range	5	\$52,832	14%
- Mid Salary Range	38	\$25,699	23%
- Lower Salary Range includes part time	0	\$0	0%

Table 3

PackerWare Corporation

1. Estimated Location of New or Retained Employees	61.9% will live in Lawrence15.6% will live in rest of Douglas county22.5% will commute into county
2. Estimated Characteristics of Firm's In-Migrants	100.0% of Managers will migrate in50.4% of Professional/Technical will migrate in14.5% of Production/Clerical will migrate in
3. Estimated Number of Residents	141 in Lawrence171 in Douglas County total
4. Estimated Number of New Housing Units (from indirect residents)	56 in Lawrence71 in Douglas County total
5. Estimated Number of New School Children (from indirect residents)	27 in Lawrence (USD 497)1 in Baldwin (USD 348)1 in Eudora (USD 491)
6. Percent of Disposable Income Spent by Firm Employees in Lawrence	58%
7. Estimated Employment Multiplier Estimated Income Multiplier	1.60 1.25
8. Annual Government Operating Expenditures Incurred by New Firm <i>and</i> New Residents	Amount:Spent by:\$31,433Lawrence\$17,089Douglas\$9,922LawrenceSchoolDistrict
9. Capital Costs Incurred by Community from New Firm only	\$10,682 Lawrence \$8,074 Douglas County
10. Capital Costs Incurred by Community from New Residents only	\$135,313 Lawrence\$50,061 Douglas County\$164,634 Lawrence School District

COMMUNITY VARIABLES

Table 4

PackerWare Corporation

NET FISCAL BENEFITS FOR CITY, COUNTY, AND SCHOOL DISTRICT

Results are shown as present value of net benefits (benefits minus costs) in current-year dollars, discounted over a 15 year period

Estimate of Net Benefits	90% Abatement	No Abatement	
City of Lawrence	\$6,785,908	\$9,438,499	
Douglas County	\$928,044	\$3,770,779	
USD 497 (Lawrence)	\$372,033	\$2,915,316	
Total	\$8,085,985	\$16,124,594	
Total Benefit/Cost Ratio	4.80 to 1	8.58 to 1	

Table 5

NET CHANGE IN PRIVATE SECTOR INCOME AND SALES IN LAWRENCE AND DOUGLAS COUNTY

	Lawrence	Entire County
1. Total Increase in Disposable Income to Area Residents	\$2,859,661	\$3,436,377
- Primary Disposable Income to Firm Employees	\$2,175,279	\$2,723,534
- Secondary Income Created Through Multiplier Effect	\$684,382	\$712,842
2. Total Increase in Private Sector		
Sales for Local Businesses	\$1,349,759	\$1,388,029
(First year of operation) - Taxable Sales	\$334,715	\$350,955
- Non-taxable Sales	\$1,015,044	\$1,037,074

APPENDIX: Detailed Tables

PRESENT VALUE OF COSTS AND BENEFITS TO THE CITY GOVERNMENT

					DISCOUNT RATI	E: 7.5%						
									NET	CUMULATIVE		
	CAPITAL	OPERATING	TOTAL	TOTAL	Discount Factors		DISCOUNTED	DISCOUNTED	BENEFITS	NET		
YEAR	COST	COST	COST	BENEFIT	1/(1+disc)^(t-1)		COSTS	BENEFITS	B-C	BENEFITS		Real estate
1	39,175	36,828	76,003	413,888	1.0000		76,003	413,888	337,885	337,885	1	40,744
2	29,262	64,106	93,368	589,206	0.9302		86,854	548,099	461,245	799,130	2	78,353
3	0	64,106	64,106	584,679	0.8653		55,473	505,942	450,469	1,249,599	3	78,353
4	48,312	98,467	146,779	787,174	0.8050		118,152	633,644	515,492	1,765,091	4	153,573
5	29,246	125,733	154,979	938,128	0.7488		116,048	702,471	586,423	2,351,514	5	153,573
6	0	125,733	125,733	929,760	0.6966		87,580	647,633	560,052	2,911,567	6	153,573
7	0	125,733	125,733	923,671	0.6480		81,470	598,503	517,033	3,428,600	7	153,573
8	0	125,733	125,733	918,895	0.6028		75,786	553,869	478,083	3,906,683	8	153,573
9	0	125,733	125,733	916,030	0.5607		70,499	513,620	443,121	4,349,804	9	153,573
10	0	125,733	125,733	916,030	0.5216		65,580	477,786	412,206	4,762,010	10	153,573
11		125,733	125,733	986,235	0.4852		61,005	478,515	417,510	5,179,521		1,272,460
12		125,733	125,733	1,051,425	0.4513		56,749	474,553	417,805	5,597,325		
13		125,733	125,733	1,051,425	0.4199		52,789	441,445	388,656	5,985,981		
14		125,733	125,733	1,186,819	0.3906		49,106	463,527	414,420	6,400,401		
15		125,733	125,733	1,186,819	0.3633		45,680	431,188	385,507	6,785,908	_	
		Total	\$1,792,562	\$13,380,185		TOTAL	\$1,098,774	\$7,884,682	\$6,785,908		-	

Cost Benefit Ratio: 7.18

PRESENT VALUE OF COSTS AND BENEFITS TO THE COUNTY GOVERNMENT

					DISCOUNT RATE:	7.5%						
									NET	CUMULATIVE		
	CAPITAL	OPERATING	TOTAL	TOTAL	Discount Factors		DISCOUNTED	DISCOUNTED	BENEFITS	NET		
YEAR	COST	COST	COST	BENEFIT	1/(1+disc)^(t-1)		COSTS	BENEFITS	B-C	BENEFITS		Real estate
1	14,493	19,660	34,153	57,060	1.0000		34,153	57,060	22,907	22,907	1	43,664
2	10,826	34,586	45,412	90,775	0.9302		42,244	84,442	42,198	65,105	2	83,970
3	0	34,586	34,586	85,923	0.8653		29,928	74,352	44,424	109,528	3	83,970
4	21,996	53,434	75,430	144,552	0.8050		60,718	116,359	55,641	165,169	4	164,581
5	10,820	68,355	79,175	152,178	0.7488		59,286	113,951	54,665	219,834	5	164,581
6	0	68,355	68,355	143,211	0.6966		47,613	99,755	52,141	271,975	6	164,581
7	0	68,355	68,355	136,685	0.6480		44,292	88,567	44,275	316,251	7	164,581
8	0	68,355	68,355	131,567	0.6028		41,201	79,303	38,101	354,352	8	164,581
9	0	68,355	68,355	128,496	0.5607		38,327	72,048	33,721	388,073	9	164,581
10	0	68,355	68,355	128,496	0.5216		35,653	67,021	31,368	419,441	10	164,581
11		68,355	68,355	203,733	0.4852		33,166	98,850	65,685	485,126		1,363,673
12		68,355	68,355	273,596	0.4513		30,852	123,486	92,634	577,760		
13		68,355	68,355	273,596	0.4199		28,699	114,870	86,171	663,931		
14		68,355	68,355	418,696	0.3906		26,697	163,527	136,830	800,761		
15		68,355	68,355	418,696	0.3633		24,834	152,118	127,284	928,044		
		Total	\$952.307	\$2.787.260		TOTAL	\$577.663	\$1,505,707	\$928.044		-	

Cost Benefit Ratio: 2.61

PRESENT VALUE OF COSTS AND BENEFITS TO SCHOOL DISTRICTS

					DISCOUNT RATE:	7.5%						
									NET	CUMULATIVE		
	CAPITAL	OPERATING	TOTAL	TOTAL	Discount Factors		DISCOUNTED	DISCOUNTED	BENEFITS	NET		
YEAR	COST	COST	COST	BENEFIT	1/(1+disc)^(t-1)		COSTS	BENEFITS	B-C	BENEFITS		Real estate
1	47,664	11,490	59,154	24,221	1.0000		59,154	24,221	-34,933	-34,933	1	39,065
2	35,603	20,073	55,676	42,624	0.9302		51,791	39,651	-12,141	-47,073	2	75,125
3	0	20,073	20,073	38,284	0.8653		17,370	33,128	15,759	-31,315	3	75,125
4	45,785	31,110	76,895	75,654	0.8050		61,897	60,899	-999	-32,313	4	147,244
5	35,583	39,688	75,271	70,737	0.7488		56,363	52,968	-3,396	-35,709	5	147,244
6	0	39,688	39,688	62,714	0.6966		27,645	43,684	16,039	-19,670	6	147,244
7	0	39,688	39,688	56,876	0.6480		25,716	36,853	11,137	-8,533	7	147,244
8	0	39,688	39,688	52,297	0.6028		23,922	31,522	7,600	-933	8	147,244
9	0	39,688	39,688	49,549	0.5607		22,253	27,782	5,529	4,596	9	147,244
10	0	39,688	39,688	49,549	0.5216		20,701	25,844	5,143	9,739	10	147,244
11		39,688	39,688	116,861	0.4852		19,256	56,700	37,444	47,183		1,220,025
12		39,688	39,688	179,365	0.4513		17,913	80,955	63,042	110,225		
13		39,688	39,688	179,365	0.4199		16,663	75,307	58,644	168,869		
14		39,688	39,688	309,180	0.3906		15,501	120,754	105,253	274,122		
15		39,688	39,688	309,180	0.3633		14,419	112,329	97,910	372,033	_	
		Total	\$683,948	\$1,616,454		TOTAL	\$450,564	\$822,597	\$372,033		-	

Cost Benefit Ratio: 1.83

PRESENT VALUE OF COSTS AND BENEFITS TO STATE OF KANSAS

				DISCOUNT RATE:	7.5%						
								NET	CUMULATIVE		
		TOTAL	TOTAL	Discount Factors		DISCOUNTED	DISCOUNTED	BENEFITS	NET		
YE	AR	COSTS	BENEFIT	1/(1+disc)^(t-1)		COSTS	BENEFITS	B-C	BENEFITS		Real estate
	1	36,577	2,671,237	1.0000		36,577	2,671,237	2,634,660	2,634,660	1	31,444
	2	63,801	2,741,798	0.9302		59,349	2,550,510	2,491,160	5,125,820	2	60,469
	3	63,801	2,738,304	0.8653		55,209	2,369,544	2,314,335	7,440,155	3	60,469
	4	98,922	2,844,273	0.8050		79,628	2,289,528	2,209,900	9,650,055	4	118,519
	5	126,132	2,895,401	0.7488		94,448	2,168,078	2,073,630	11,723,685	5	118,519
	6	126,132	2,888,943	0.6966		87,858	2,012,318	1,924,460	13,648,144	6	118,519
	7	126,132	2,884,244	0.6480		81,729	1,868,879	1,787,150	15,435,295	7	118,519
	8	126,132	2,880,558	0.6028		76,027	1,736,271	1,660,244	17,095,538	8	118,519
	9	126,132	2,878,347	0.5607		70,723	1,613,895	1,543,173	18,638,711	9	118,519
1	10	126,132	2,878,347	0.5216		65,788	1,501,298	1,435,510	20,074,221	10	118,519
1	11	126,132	2,932,527	0.4852		61,199	1,422,844	1,361,646	21,435,866		982,013
1	12	126,132	2,982,837	0.4513		56,929	1,346,283	1,289,354	22,725,221		
1	13	126,132	2,982,837	0.4199		52,957	1,252,356	1,199,399	23,924,620		
1	14	126,132	3,087,327	0.3906		49,262	1,205,792	1,156,530	25,081,150		
1	15	126,132	3,087,327	0.3633		45,826	1,121,667	1,075,842	26,156,992	_	
	Total	\$1.650.554	\$43.374.305		TOTAL	\$973.509	\$27.130.500	\$26.156.992		-	

Cost Benefit Ratio: 27.87





Firm Inputs^{*} (Data obtained from new firm/project)

 A. Firm's Investment Real Estate (not currently on the tax roll) Taxable Equipment and Machinery B. Percent of assessed valuation abated Real Estate: Equipment: C. Area of Facility and Land in acres E. Annual Utility Bills Water / Sewer bill Gas 	\$6,500,0 \$23,500, 90.0% 90.0% 0.0 165,738 7.883	00 000	Total: sq ft =	\$30,000,000	Name of Firm or P PackerWare Corp Nature of Busines: Manufacturing Date of Analysis: January 6, 2006 Year 1	Project: poration s	Type of Project Expansion
3. Electric	3.390.50	7					
4 Telephone	3 146	-					
5. Cable TV	0			Franchise Fee Rates:		Oct-05	I
6. TOTAL plant bill for municipal utilities	3,567,27	4		Gas Electricity		1.65% 3.77%	
F. Annual franchise fees on utilities	128,105			Cable TV		2.95%	
	Annualized	d Average	Percent Spent	Amount Spent			
G. Annual Firm Operating Expenses		Expense:	Locally	Locally			
1. Professional Services		\$24,871	0.0%	0			
2. Business Services	\$1	,949,456	18.0%	350,902			
Leased Warehouse/equipment	\$5	,095,056	0.0%	0			
4. Transportation	\$10	,081,839	0.0%	0			
5. Office Supplies		\$0	5.0%	0			
6. Material and Goods	\$68	,308,045	0.0%	0			
7. Insurance		\$132,624	0.0%	0			
8. Supplies	\$2	2,213,607	2.0%	44,272			
9. Unspecified / Other	\$1	,346,477	10.0%	134,648	-		
H. Proportion of Operating Expenses Subject to Sales Taxes	φοε 0.00%	,151,975		\$J29,022			
I Percent of Total Operating Expenses Subject to Sales Taxes	0.00%						
Enter in others if applicable: Fude	0.0%						
Baldy	vin 0.0%						
Rest of Cou	nty 0.0%						
			Average	Total	Median		
Schedule of New Employees	Nur	nber	Salary	Avg Salaries	Fringes		
J. Managerial/Professional							
1. Management		1	72,800	72,800	8%		
2. Professional		1	66,560	66,560	11%		
3. Other		3	41600	124,800	17%		
Тс	otal	5	52,832	264,160	14%		average
K. Lechnical/Production		•	04.000	000.000	170/		
1. Protessional	,	9 14	34,320	308,880	1/%		
2. recinical 3. Production/Assembly		18	24,900 21.840	214,000	∠5% 25%		
3. FIODUCION/ASSEMBLY	tol (0	21,040	076 560	2370		0.4070.00
L Clerical/Assembly	nai C	00	20,099	970,000	23%		avelaye
		0	0	0	00/		
2 Production/Assembly		0	0	0	0%		
3 Part-time		0	0	0	0%		
Tc	otal	0	Ő	0	0%		average
							Ū
M. Employee Summary				Base Salary	Fringe Benefits		
1. Total Managers		5		\$52,832	14%		
2. Total Prof./Tech.		38		\$25,699	23%		
3. Total Prod/Clerical		0		\$0	0%		-
4. Total New Employment		43		\$1,240,720 \$1,503,339 \$28,854	Total Salaries Total w/ benefits Avg Salary		

^{*} The firm inputs in this table are those in Phase 1 (Year 1) of the project. This project also included real estate, equipment, and employment inputs in Phase 2 (Year 2) and Phase 3 (Years 4 and 5), which are not presented in this table.

Other Employment Inputs

Phase 2 - Year 2 Schedule of New Employees		Number	Average Salary	Total Avg Salaries	Median Fringes	
J. Managerial/Professional 1. Management 2. Professional 3. Other	Total	0 0 0 0	72,800 66,560 41600 0	0 0 0 0 0	8% 11% 17% 0%	average
K. Technical/Production 1. Professional 2. Technical 3. Production/Assembly	Total	9 8 18 35	34,320 24,960 21,840 25,762	308,880 199,680 393,120 901,680	17% 25% 25% 23%	average
M. Employee Summary 1. Total Managers 2. Total Prof./Tech. 3. Total Prod/Clerical 4. Total New Employment	_	3	0 5 0	Base Salary \$0 \$25,762 \$0	Fringe Benefits 0% 23% 0%	
4. Total New Employment		3	5	\$901,680 T \$1,108,551 T \$25,762 A	otal Salaries otal w/ benefits wg Salary	
Phase 3 - Year 4			Average	Total	Median	
Schedule of New Employees		Number	Salary	Avg Salaries	Fringes	
J. Managerial/Protessional 1. Management 2. Professional 3. Other	Tatal	1 1 3	72,800 66,560 41600	72,800 66,560 124,800	8% 11% 17%	
K. Technical/Production 1. Professional 2. Technical 3. Production/Assembly	lotai	9 9 18	52,832 34,320 24,960 21,840	264,160 308,880 224,640 393,120	14% 17% 25% 25%	average
	Total	36	25,740	926,640	23%	average
M. Employee Summary 1. Total Managers 2. Total Prof./Tech. 3. Total Prod/Clerical		3	5 6 0	Base Salary \$52,832 \$25,740 \$0	Fringe Benefits 14% 23% 0%	
4. Total New Employment		4	1	\$1,190,800 T \$1,440,910 T	otal Salaries otal w/ benefits	

\$29,044 Avg Salary

Other Employment Inputs

Phase 3 - Year 5			Average	Total	Median	
Schedule of New Employees		Number	Salary	Avg Salaries	Fringes	
J. Managerial/Professional						
1. Management		0	72,800	0	8%	
2. Professional		0	66,560	0	11%	
3. Other		0	41600	0	17%	
	Total	0	0	0	0%	average
K. Technical/Production						
1. Professional		8	34,320	274,560	17%	
2. Technical		9	24,960	224,640	25%	
3. Production/Assembly		18	21,840	393,120	25%	
	Total	35	25,495	892,320	23%	average
					Fringe	
M. Employee Summary				Base Salary	Benefits	
1. Total Managers			0	\$0	0%	
2. Total Prof./Tech.		3	5	\$25,495	23%	
3. Total Prod/Clerical			0	\$0	0%	
4. Total New Employment	_	3	5			
				\$892.320	Total Salaries	
				\$1,099,083	Total w/ benefits	
				\$25,495	Avg Salary	
Total: Phase 1, Phase 2, and Phase 3			Average	Total	Median	
Schedule of New Employees		Number	Salary	Avg Salaries	Fringes	
J. Managerial/Professional						
1. Management		2	72,800	145,600	8%	
2. Professional		2	66,560	133,120	11%	
3. Other		6	41600	249,600	17%	
	Total	10	52,832	528,320	14%	average
K. Technical/Production						
1. Professional		35	34,320	1,201,200	17%	
2. Technical		37	24,960	923,520	25%	
3. Production/Assembly	_	72	21,840	1,572,480	25%	
	Total	144	25,675	3,697,200	23%	average
					Fringe	
M. Employee Summary				Base Salary	Benefits	
1. Total Managers	_	1	0	\$52,832	14%	
2. Total Prof./Tech.		14	4	\$25,675	23%	
3. Total Prod/Clerical			0	\$0	0%	
4. Total New Employment		15	4			
				\$4,225,520	Total Salaries	
				\$5,151,895	Total w/ benefits	
				\$27,438	Avg Salary	

Disposable Income Calculations

					Remainder o	
Salaries, Benefits, Taxes, Unearned Income (in dollars)		RENCE	DALDWIN	EUDORA	COUNTR	COUNTY
A. New firm's Managers / Upper Salary workers						
1. Base Salary		\$52,832	\$52,832	2 \$52,832	\$52,832	\$52,832
2. Fringe benefits (added) 3. Federal Income Tax (subtracted)		7,396	7,396	5 7,396 5 4,425	7,390	7,396 4 4 2 5
4. State Income Tax (subtracted)		1,670	1,670	1,670	1,670	1,670
5. Social Security and Medicare (subtracted)		4,042	4,042	4,042	4,042	4,042
6. Property Tax (subtracted)		2,694	3,074	4 2,931	2,066	2,900
7. Plus unearned income (rent interest dividends etc.)		66	66	66	66	66
B. New firm's Prof/Tech. Staff / Mid salary workers						
1. Base Salary		\$25,699	\$25,699	\$25,699	\$25,699	\$25,699
2. Plus Fringe benefits		5,938	5,938	5,938	5,938	5,938
3. Federal Income Tax (subtracted)		965 517	965	965	965	965 517
5. Social Security and Medicare (subtracted)		1.966	1.966	1.966	1.966	1.966
6. Property Tax (subtracted)		1,311	1,495	1,425	1,005	1,410
7. Plus unearned income		32	32	32	32	32
(rent, interest, dividends, etc.)						
C. New firm's Production/Cierical Workers / Lower salary 1 Base Salary	workers	\$0	\$0	\$0	\$0	\$0
2. Plus Fringe benefits		φU 0	φ0 (, ⁴⁰	φ0 (φ0 0
3. Federal Income Tax (subtracted)		0	C	0	C	0
4. State Income Tax (subtracted)		0	0	0 0	0	0
5. Social Security and Medicare (subtracted)		0	(0	(0
6. Property Lax (subtracted) 7. Plus unearned income		0	() 0	l (0
(rent, interest, dividends, etc.)		Ŭ	· · · ·	,	· · · · ·	
D. Displaced workers						
1. Base Salary		\$0	\$0	\$0	\$0	\$0
2. Plus Fringe benefits, (12%) 3. Federal Income Tax (subtracted)		0) 0	ĺ	0
4. State Income Tax (subtracted)		0	() 0	(0
5. Social Security and Medicare (subtracted)		0	C	0 0	C	0
6. Property Tax (subtracted)		0	C) 0	(0
7. Plus unearned income		0	C) 0	(0
F Long-term vacated jobs and/or long-term unemployed	getting a new job in i	new comp	anv			
1. Base Salary	getting a new jee in	\$0	\$C	\$0	\$0	\$0
2. Plus Fringe benefits, (12%)		0	C	0 0	(0
3. Federal Income Tax (subtracted)		0	0	0	(0
4. State income Tax (subtracted) 5. Social Security and Medicare (subtracted)		0	() 0	l (0
6. Property Tax (subtracted)		0	0	0 0	(0
7. Plus unearned income		0	C) 0	C	0
(rent, interest, dividends, etc.)						
E Social Security Pates						
1. Social Security Tax:		6.20%				
2. Social Security Income Cap:		90,000				
3. Medicare		1.45%				
G Estimated average Federal tax rates on taxable income						
\$60,000-80,000	•	18.3%	Appendix 1	Federal Deduction:	9,700	
\$40,000-60,000		16.2%		Federal Exemptions:	7,347	_
\$20,000-40,000		13.9%		Total:	17,047	
below \$20,000		11.1%				
H. Estimated average State tax rates on taxable income:						
\$60,000-80,000		5.5%	Appendix 1	State Deduction:	6,000	
\$40,000-60,000		5.1%		State Exemptions:	5,333	_
\$20,000-40,000 below \$20,000		4.4% 3.6%		i otal:	11,333	
		3.0%				
					Remainder of	Outside
I. Estimated Annual Property Tax as Percentage of Annual	Income I	Lawrence	Baldwir	Eudora	County	County
	wanagers: Prof/Tech:	5.10% 5.10%	5.82%	5.55%	3.91%	5.49% 5.40%
	Production:	0.00%	0.00%	0.00%	0.00%	0.00%

Demographic Impact (Data generated through employee surveys)

	LAWRENCE	BALDWIN	EUDORA	Remainder of COUNTY	OUTSIDE COUNTY	
A. Living Patterns of new Employees	(average distributio	n according to Si	urvey, Table 1)			
New workers distributed so that 22.5% commute, 61.9% live i	n Lawrence, 15.6% live outs	ide Lawrence cit	y limits.			
Distribution breakdown	61.9%	5.2%	5.2%	5.2%	22.5%	
1. New firm's Manager	3.1	0.3	0.3	0.3	1.1	
New firm's Professional / Technical staff	23.5	2.0	2.0	2.0	8.6	
New firm's Prod/Clerical Workers	0.0	0.0	0.0	0.0	0.0	
Lawrence	Total: 26.6		In County Total: 33.3		Grand Total: 4	3
B. Percentage of New workers migrating in						
1. Manager(s) migrating in	100.0%	100.0%	100.0%	100.0%	0.0%	100
Professional / Technical migrating in	50.4%	50.4%	50.4%	50.4%	0.0%	50.4
Prod/Clerical Workers migrating in	14.5%	14.5%	14.5%	14.5%	0.0%	14.5
Secondary worker/resident migration ratio	14.5%	14.5%	14.5%	14.5%	14.5%	14.5
C. Percentage of job changers within Douglas Co.						
1. Managers	0.0%					
Professional / Technical employees	53.9%					
3. Production / Clerical	62.2%					
D. Living Patterns of former Workforce						
1. Number of displaced workers	0	0	0	0	0	
Actual jobs vacated (enter if known)	0	0	0	0	0	
Maximum number of vacated jobs	12.7	1.1	1.1	1.1	4.6	

Consumer and Plant Spending Inputs

Place of Spending	PI LAWRENCE	ace of Residence	EUDORA	DOUGLAS COUNTY OTHER	OUTSIDE DOUGLAS COUNTY
A. Spending Patterns of Employees					
1. Lawrence	58%	50%	50%	50%	5%
2. Baldwin	1%	10%	0%	0%	0%
3. Eudora	1%	0%	10%	0%	0%
4. In rest of county	0%	0%	0%	0%	0%
B. Proportion of employees' disposable income spent in county which eventually becomes				COUNTY	
C Dreparties of employees' dispensible income				35%	
subject to LOCAL sales tax (City & County Tax)				47%	
D. Proportion of plant operating budget spent in county which eventually					
becomes personal income locally (PSY)				35%	
		Implied	income multiplier:	1.255	

Lawrence Government Inputs

	LAWRENCE	BALDWIN	EUDORA	DOUGLAS COUNTY	
A. Property tax mill levy	27.859	30.117	18.387	29.856	
B. City and County option sales tax rate	1.0%	1.0%	0.5%	1.0%	
C. Residential assessment ratio D. Industrial assessment ratio, real estate E. Industrial assessment ratio, equipment	11.5% 25% 25%	11.5% 25% 25%	11.5% 25% 25%	11.5% 25% 25%	
F. City Share of County Sales Tax Revenues	59.9%	2.50%	2.99%	34.29%	
G1. Percent of Gross Income allocated to housing: G2. Current Home Mortgage Rate G3. Value of Purchased Homes	29.00% 5.65%				
A. Manager B. Professional/Technical C. Production/Clerical Workers D. Secondary Workers	\$221,187 \$107,592 \$0 \$107,592	\$221,187 \$107,592 \$0 \$107,592	\$221,187 \$107,592 \$0 \$107,592	\$221,187 \$107,592 \$0 \$107,592	
CITY INPUTS H. City population I. Existing city housing units J. Acres of Commercial Property in Lawrence	81,873 38,146 2,414				
	Lawrence	Baldwin	Eudora	Rest of County	County Total
NEW HOUSING UNITS 1. Adjustment Factors for Housing 2. New housing units (Mgr) 3. New housing units (Prof/Tech) 4. New housing units (Prod/Clerical)	95% 2.94 11.26 0.00	0.25 0.95 0.00	0.25 0.95 0.00	0.25 0.95 0.00	
5. New housing units: Secondary workers Lawrence Total	2.15 16.35 2.37	0.18	0.18	0.18	20.47
7. New residents expected from FIRM 8. Employment Multiplier	2.37 35.43 1.59	2.98 1.08	2.98 1.08	2.98 1.00	44.4
9. New Residents Expected with Multiplier 10. Total New Employment with Multiplier	40.79 42.21	2.98 2.42	2.98 2.42	2.98 2.24	49.72 49.3

Lawrence Revenues and Expenditures

REVENUES AND EXPENDITURES FROM NEW RESIDENTS A. Per Capita Revenue B. Capital Cost (per housing unit) C. Per Capita Operating Expenditures	\$354 794 448			
RESIDENTIAL UTILITY REVENUES: D. Annual Utility Bill (per housing unit) 1. Average Water and Sewer Utility Bill (per housing unit)	\$600			
2. Franchise fees (per housing unit)	51	From:	Average Annual Utility Bill per Household A. Gas: B. Electricity: C. Cable:	\$959 \$567 \$479
RESIDENTIAL UTILITY EXPENDITURES E. Capital Costs Per housing unit	1,602			
F. Operating Expenditures Per housing unit	23,004,434 603			
PLANT RELATED EXPENDITURES				
A. Capital Costs (including roads, fire, police and other) B. Operating Expenditures	0			
(based on the average of costs per employee and costs per 100,000 square feet of facility and land area)	6,013		Cost per Er Costs per 100,000 sq.ft. total la	nployee: 280 nd area: 13017
PLANT RELATED UTILITY EXPENDITURES C. Capital Costs D. Operating Expenditures (35,000 wage earners assumed) ?	5,000 1,000			
PLANT RELATED REVENUES E. General Plant Revenues (based on the average of revenues per employee and revenues per 100.000 square feet of facility and land area)	6,375		Revenues per Er Revenues per 100,000 sq.ft. total la	nployee: 297 nd area: 13801
F. Payment in lieu of taxes (if applicable) / other revenues	0			

Douglas County Government, Revenues, and Expenditures

GENERAL INFORMATION A. Residential Property tax mill levy B. County option sales tax rate C. County population D. Number of existing housing units E. Acres of Commercial Property	29.856 1.0% 102,786 6,892 413	
REVENUES AND EXPENDITURES FROM NEW RESIDENTS: F. Per Capita Revenue (exclude property & sales tax) G. Capital Costs (per housing unit) H. Per Capita Operating Expenditures	\$214 \$708 \$309	
PLANT RELATED EXPENDITURES I. Capital Costs J. Operating Expenditures (based on the average of costs per employee and costs per 100,000 square feet of facility and land area)	\$0 \$3,604	Cost per Employee: 168 Costs per 100,000 sq.ft. total land area: 56736
PLANT RELATED REVENUES K. General Plant Revenues (based on the average of revenues per employee and revenues per 100,000 square feet of facility and land area) L. Payment in lieu of taxes (if applicable) / other revenues	\$3,896 0	Revenues per Employee: 181 Revenues per 100,000 sq.ft. total land area: 61322
M. New housing units expected within county	2	20.5
N. Total value of new housing units (sum of all in-county communities)	\$2,620,	640
O. New Residents (in-migrants) expected	4	19.7

School District Inputs

		USD 497	USD 348	USD 491	
ESTIMATE UNDER SCHOOL FINANCE PLAN	_	Lawrence	Baldwin	Eudora	
A Total Mill Levies for each district		46.711	59.383	65.466	
1 Minus Statewide Mill Levies (20 mills school finance)		20.00	20.00	20.00	
2 Equals District Mill Levies		26.00	39.38	45 47	
B NEW HOUSING UNITS IN EACH SCHOOL DISTRICT		20.71	00.00	40.47	
1 Number of new bousing units (manager)		2 94	0.25	0.25	
2 Number of new housing units (nro/tech)		11 26	0.25	0.25	
2. Number of new housing units (pro/tecr)		0.00	0.95	0.95	
4. Number of new housing units (prod/ciencar)		0.00	0.00	0.00	
4. Number of new housing units. Secondary workers	0.122	2.15	0.10	0.10	
C. DATIO OF NEW SCHOOL CHILDREN FROM IN MICRANTS (per working bauach	Suill.	10.55	1.57	1.57	
A TO OF NEW SCHOOL-OF ILD KENT KOW IN-INIGKANTS (per working househol Defin per per version bevecheld member in 1000	nu member)	0.353	0.252	0.252	
Ralio per new working household member file vere leter		0.353	0.353	0.555	
2. Ratio per new working household member rive years later		0.559	0.559	0.559	
3. Ratio per new working nousehold member (AVG 1990,1995)		0.456	0.456	0.456	
		7.05	0.50	0.50.0	ounty tota
D. NUMBER OF NEW SCHOOL CHILDREN DUE TO IN-MIGRANTS		7.85	0.58	0.58 9.	0
1. Number of School Children (manager)		1.41	0.12	0.12	
2. Number of School Children (pro/tech)		5.41	0.45	0.45	
Number of School Children (prod/clerical)		0.00	0.00	0.00	
Number of School Kids: Secondary workers		1.03	0.01	0.01	
Employment multiplier		1.59	1.08	1.08	
CPERATING EXPENDITURES AND CAPITAL COSTS	\$2 000 E	rom K S A 72 6410			
E. Annual basic State Alu Per Pupil	φ3,090 <u>F</u> I	10111 K.S.A. 72-0410	4 504	4 500	
F. Annual operating cost per pupil in excess or state funding		1,464	1,501	1,526	
G. Annualized capital cost per pupil (replacement value)		5,000	5,000	5,000 N	o source
H. Annualized capital outlay cost per pupil		1,073	502	700	
(average Capital Outlay divided by average FTE)					
		10.050.000	000.000	000 040	
1. Capital Outlay		10,950,000	692,200	899,613	
2. Full Time Enrollment		10,202	1,379	1,285	
Payment in lieu of taxes (if applicable) / other revenues	0				
	ů.				
		USD 497	USD 348	USD 491	
This section is part of the school calculation:	State	Lawrence	Baldwin	Fudora	
		Editorioo	Baldmin	Eddord	
1 75th Percentile of Statewide A\/PP	\$69,208				
K Local Ontion Budget (LOB)	millione	1/ 937	2 070	1 961	
L Assessed Valuation of Districts	millions	929.2	50.9	1.501	
	minoris	020.5	59.0	45.0	
M Assessed Valuation per Pupil (AV/PP)		\$91 100	\$42.247	\$35,600	
N. Assessed Valuation per Fupir (AVFF)		\$01,190	\$+3,3+7 0 774	\$35,009	
N. Supplemental State Ald	millions	0.000	0.774	0.952	
O New Assessed Malvating and Bugil due to new shildren		¢04 400	642.220	¢25 500	
O. New Assessed valuation per Pupil due to new children		\$81,130	\$43,329	\$35,592	
P. New Supplemental State Aid due to new children	millions	0.000	0.774	0.953	
Q. Additional Supplemental State Aid due to new children		\$0	\$550	\$459	
				.=	
R. State Median AVPP (School year 2001-02)		47,943	47,943	47,943	
S. Bond & Interest Payment		8,937,793	1,155,940	1,706,539	
Basic Percentage Fact	or: 25%				
T. State Aid Percentage Factor*		0.00%	29.60%	37.33%	
U. State Capital Improvement Aid Amount		0	342,107	637,125	
V. New State Aid Percentage Factor due to new children		0.00%	29.61%	37.35%	
W. New State Capital Improvement Aid Amount		0	342,319	637,401	
X. Additional Aid Amount Due to New Children		\$0	\$212	\$276	

State Government Inputs

INCOME TAX A. Income Tax from Primary Workers		Management	Professional/ Technical	Assembly/ Clerical
1. Number of employees - Year 1		\$52,832	38 \$25,600	0
3. Income Tax per Worker (from 1SectionII.A, B, C)		\$1,670	\$517	\$0 \$0
4. Total Income Taxes from Primary Workers	\$27,990			
B. Income Tax from Secondary Income from Employee Spending				
1. State Income Multiplier:		1.25		
Total Secondary Income from Primary Employees Total State Income Tax from Secondary Income	\$11,369	\$316,018		
	¢11,000			
C. Total income tax from Primary and Secondary worker spending	\$39,359			
D. Secondary Income from Plant Spending		05.0%		
2. Total Annual Firm Spending (operating expenditures)		\$89.151.975		
3. Firm Spending that Becomes In-State Income		\$31,203,191		
4. Plus Secondary Income	¢1 409 450	\$39,150,805		
5. Total income tax from income created by plant spending.	\$1,406,450			
				Combined Total
PROPERTY TAXES				21.5 mills
1. State Universal Mill Levy: 'School Finance Fund'		20.00	mills	21.5 11113
2. State Capital Improvement Levy: 'Education Building Fund'		1.5	mills	
F. State Assessment Ratios Industrial Assessment Ratio Real Estate		25.0%		
2. Industrial Assessment Ratio, Equipment		25.0%		
3. Residential Assessment Ratio		11.5%		
G. Property Taxes on New Homes				
 Total value of new homes purchased by workers: Amount of home value exempt from State property tax: 	\$2,620,640 \$20,000			
 Property tax exemption for residential home-owners 	\$46			
ALES TAXES State sales tax rate		5.30%		
2. Disposable Primary Income from plant employees		1,259,932		
3. Proportion of disposable income subject to sales tax		47.0%		
4. Total personal income including secondary income		1,575,949		
5. Amount of disposable personal income subject to sales tax		740,696		
6. Sales Tax Revenues from workers/residents		39,257		
7. Taxable business purchases		0		
8. Plant purchases of taxable utilities		3,567,274		
9. Taxable Secondary income created from plant spending		18,400,878		
TO. Sales Las revenues nom Flant Spending		1,104,312		
EDUCATION COSTS Total cost for basic state aid		35 070	# new school children v	basic state aid
2. Supplemental state aid		1,498		
3. Total cost for Schools		36,577		