

### III. Business Vitality Trends Documentation

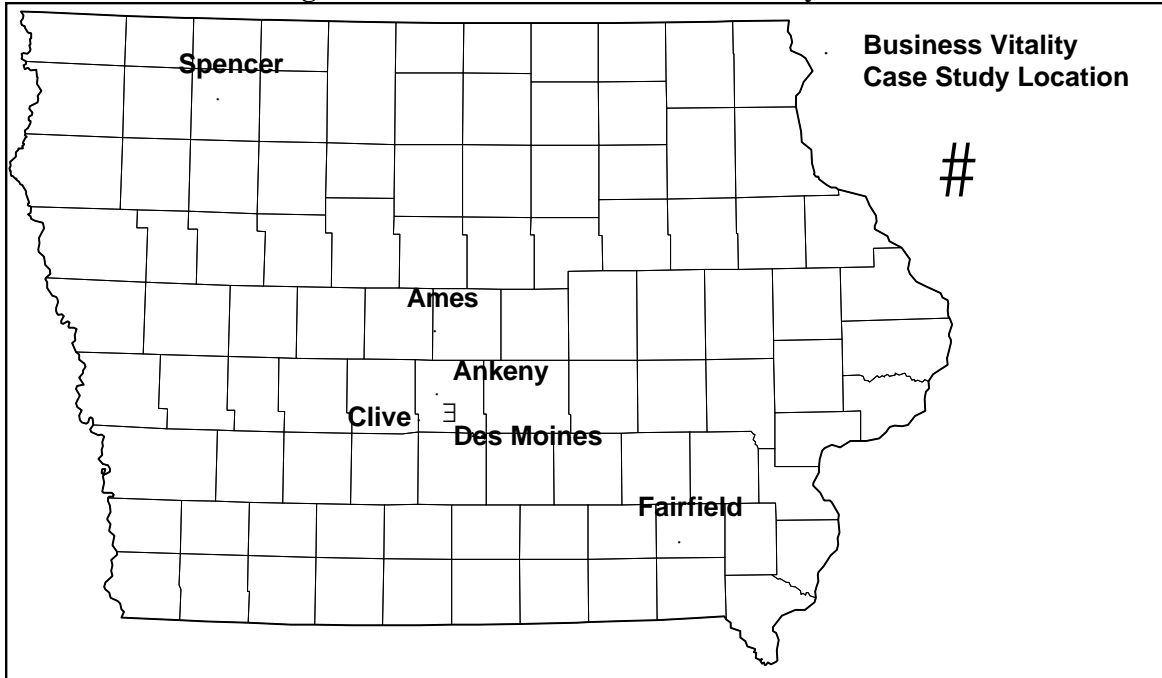
#### A. Introduction

The Access Management Task Force has been especially mindful of the impacts of access control activities within commercial corridors of Iowa communities. In order to determine whether there have been negative impacts on businesses within each of the five case study corridors, the research team has assembled information about community business patterns and trends in each of the case study corridor communities. This analysis assumes that consistent negative impacts from the implementation of access control measures should be reflected in the business activity decreases in each of the corridors.

In order to analyze corridor business activity, it is important that these patterns and trends can be compared to overall community business activities. This is in effort to provide evidence that impacts in the corridors are somehow different than the community-wide business environment. For example, if business activity within the corridors has not kept pace with community trends, this could indicate negative impacts of access changes. On the other hand, if business activity has increased in the case study corridors, this could indicate that there were no significant impacts of roadway changes, or, that positive impacts on businesses as a result of increased traffic flow and safety. The comparison of corridor and community business activity provides useful relative measures of business activity levels.

This analysis examines business trends in five case study communities; Ames, Ankeny, Clive, Fairfield, and Spencer (see Figure 69). Data on the change in total number of businesses, business composition, and retail sales activity levels are analyzed for each of the communities as well as the corridor in which access improvements were completed.

**Figure 69: Locations of Selected Case Study Areas**



Backgrounds of each of the case studies communities are as follows:

- Ames is a large, regional hub for trade serving an area covering several counties. It has a population of slightly under 50,000 persons. A large percentage of the residents are college students at Iowa State University. Ames has experienced slow but steady growth in retail trade activity since the mid-1980s.
- Ankeny is a rapidly growing suburban community of Des Moines with nearly 20,000 persons. Along with rapid increases in population, it has experienced strong growth in retail trade since the late 1980s. The number of retail firms in Ankeny has roughly doubled since the mid-1980s with well over 500 currently.
- Clive is also a suburban community of Des Moines with a population approaching 10,000. It has experienced very rapid growth in retail trade since the early 1990s and has been one of the fastest-growing communities in Iowa in terms of retail trade. Given current development trends, it is likely that the strong retail growth will continue over the next few years.
- Fairfield is a mid-sized, rural community with about 10,000 persons located in the southeast corner of Iowa. The city has experienced relatively stable levels of retail sales over the past two decades. The number of retail firms located in Fairfield has remained nearly constant at 400 to 450 for the past 10 years.
- Spencer is another mid-sized community with about 11,000 residents with a geographic trade area that is considerably larger than Fairfield. Spencer is located in a less densely populated region of Iowa with no other, similar regional centers in close proximity. Like Fairfield, it has experienced static inflation-adjusted retail sales since the mid-1980s.

### ***B. Community Business Trends***

The five business vitality case study communities represent a range of business activity levels - although all are generally prosperous and have maintained relatively stable business growth. In Iowa, only about 50 percent of businesses survive over a five-year period. For the five business vitality case study communities, this percentage varies from 41 percent (Fairfield) to 54 percent (Spencer). Clive, is a notable exception with a business survival rate of 64 percent (see Appendix 1, Stone and Baumler 1997).

All of the case study communities, with the exception of Fairfield, have expanded their retail sales markets. In 1996, each of the case study communities had retail sales pull factors over 1.00. A pull factor of more than 1.00 indicates that a community is serving the retail needs of persons beyond those living in the local community. The pull factors for these communities range from 1.06 (Ankeny) to 1.71 (Clive). Ames, Ankeny, and Clive all experienced significant increases in retail sales pull factors between 1990 and 1996 (see Table 21).

**Table 21: Summary of Case Study Community Retail Business Trends**

<b>Community</b>	<b>Five Year Business Survival Rate</b>	<b>Five Year Change in Retail Sales</b>	<b>Five Year Change in Number of Retail Firms</b>	<b>Retail Sales Pull Factor 1990</b>	<b>Retail Sales Pull Factor 1996</b>	<b>Pull Factor % Change 1990-1996</b>
Ames	44.6%	8.8%	2.1%	1.00	1.14	+14.0%
Ankeny	44.1%	57.2%	22.7%	0.86	1.06	+23.3%
Clive	63.7%	346.2%	171.0%	0.44	1.71	+388.6%
Fairfield	41.2%	7.0%	10.4%	1.20	1.16	-0.3%
Spencer	54.3%	5.5%	3.4%	1.56	1.57	+0.1%
State of Iowa	49.8%	-	-	1.00	1.00	-

In terms of total retail sales activity for this period, all five case study communities experienced increases in total retail sales activity ranging from 5.5 percent (Spencer) to 346.2 percent (Clive). Clive has experienced explosive growth in business activity as a result of rapid development in the West Des Moines area. The other four case study communities have had somewhat slower rates of growth, averaging approximately 1 to 10 percent annual growth (adjusted for inflation).

### ***C. Corridor Business Patterns***

The previous results indicate that the business vitality case study communities have been successful retail markets over the past seven years. These trends can then be compared to business activities within each of the case study corridors. Currently, there is very little published information about the relationship of access management and business vitality. Reports from the Transportation Research Center at the University of Florida have addressed the impacts of median alternatives. Included in their analyses are questionnaire data from merchants that characterize the impacts of median construction on business activity (Long and Helms 1991). However, their analyses do not look at specific changes in sales activities; rather, they only report the subjective opinions of business owners.

A common assumption is that when vehicular access to properties is regulated, the net effect will be a decrease in site accessibility and therefore, sales. What this does not take into account is that greater control of ingress and egress can result in fewer conflicts between vehicles or between pedestrians and vehicles. In addition to increased safety, access management can result in reduced congestion with fewer interruptions of vehicular movement to and from properties. Motorists may avoid congested roads and routes they perceive as unsafe or inconvenient. It is likely that these benefits are not as visible to business and property owners, instead they are a perceived inconvenience to potential customers. For this reason it is important to document how access management projects have impacted local businesses in Iowa. This information is a vital element for increasing the level of awareness about access management, especially if there are positive impacts on economic activities.

### ***D. Business Types and Changes***

In the cases of Ankeny, Clive, and Fairfield, the total number of businesses in the corridor increased from the period before access improvements were constructed to the period after. For Ames and Spencer, the number of total businesses within the case study corridor declined slightly (8.0 percent and 13.7 percent respectively). These numbers account only for businesses by address and not by square footage or number of employees. For example, a commercial corridor may lose 10 percent of its businesses, but at the same time gain a large Wal-Mart or Hy-Vee size grocery store. In this case the number of businesses has declined, while the overall level of business and sales activity may have increased.

As might be expected, the most frequent types of businesses in each of the corridors are services, eating and drinking, miscellaneous, automotive, and specialty retail. These categories range from 10 to 45 percent of the businesses in each corridor. By comparison, services, specialty retail, and miscellaneous businesses are the most prevalent in each of the respective communities. In general, the corridors differ from their community business composition primarily in the proportion of motor vehicle, eating and drinking, and to a degree, specialty retail and service establishments.

Corridors tend to have a greater share of auto related and restaurant establishments. Corridors also tend to have a smaller share of specialty retail and services compared to their communities. Such businesses might instead be located within shopping malls or downtown areas. Because there are not dramatic differences in overall composition of businesses, changes in business activity for each corridor should be comparable to changes in business activity for the community in which they are located (see Table 22).

**Table 22: Difference in Current (1996) Business Composition (City Compared to Corridor)**

Business Type	Ames	Ankeny	Clive	Fairfield	Spencer
Utilities/Transportation	1.3%	1.6%	0.0%	2.7%	2.3%
Building Materials	-2.6%	-1.4%	0.0%	-5.5%	0.3%
General Merchandise	2.1%	0.5%	0.0%	-0.4%	1.2%
Food Dealers	-0.1%	-4.9%	0.0%	-5.5%	-2.5%
Motor Vehicle	-19.9%	0.6%	-5.1%	-28.7%	-16.0%
Apparel	4.3%	-2.1%	-7.1%	2.8%	1.9%
Home Furnishings	2.2%	3.8%	5.7%	3.6%	4.6%
Eating and Drinking	-20.1%	-3.2%	-10.0%	1.8%	-5.1%
Specialty Retail	14.6%	4.2%	-4.1%	12.0%	12.2%
Services	10.8%	-13.5%	6.6%	12.3%	-5.7%
Miscellaneous	5.1%	5.5%	7.5%	-1.8%	1.1%
Mobile Home Sales	na	na	na	na	na
Residential	na	na	na	na	na

Source: R.L. Polk Directory and Iowa Retail Sales & Use Tax Report

### ***E. Change in Business Composition***

In addition to analyzing the changes in total business activities within the study corridors, the changes in specific categories of businesses are also of interest. Impacts of access modifications can have different effects on different types of businesses, as well as on overall business activity. A review of the five case study corridors does not indicate a consistent pattern of business composition changes. This means that there does not appear to be a proportionately larger impact on one type of business compared to another in these areas (see Table 23).

**Table 23: Change in Business Composition (By Corridor)**

Business Type	Ames	Ankeny	Clive	Fairfield	Spencer
Utilities/Transportation	na	-100.0%	na	na	na
Building Materials	0.0%	-25.0%	na	200.0%	0.0%
General Merchandise	na	100.0%	na	0.0%	-100.0%
Food Dealers	-50.0%	66.7%	na	0.0%	0.0%
Motor Vehicle	10.0%	50.0%	100.0%	85.7%	-25.0%
Apparel	-100.0%	0.0%	0.0%	na	100.0%
Home Furnishings	0.0%	-100.0%	na	na	-100.0%
Eating and Drinking	40.0%	33.3%	66.7%	0.0%	0.0%
Specialty Retail	100.0%	50.0%	266.7%	400.0%	100.0%
Services	-42.9%	24.1%	11.1%	250.0%	-5.6%
Miscellaneous	-50.0%	100.0%	100.0%	25.0%	-55.6%
Mobile Home Sales	0.0%	na	na	0.0%	na
Residential	na	na	na	na	0.0%
Total	-8.0%	21.3%	68.0%	85.7%	-13.7%

Source: R.L. Polk Directory

There were no particular business categories that consistently decreased in number of locations for the case study areas. Home furnishings, services, and miscellaneous were the only business types to decrease in number of establishments in more than one corridor for the periods analyzed. Each decreased in two corridors. The loss of the home furnishings, services, and miscellaneous businesses (a total of 18 for all case study corridors) did not have a significant impact on total business locations, with the total number of businesses increasing an average of approximately 20 percent for each of the five corridors. It should also be noted that some of the business categories listed have high thresholds for business success. For example, a large, new, home furnishings establishment in a nearby community could easily disrupt local home furnishing sales; resulting in a nearly 100 percent loss to the local business mix. This is especially the case for specialty business types such as home appliances or home furnishings.

The business changes previously discussed represents *net* changes in number of businesses. The composition of the current stock of businesses in each corridor is the result of businesses existing before and after access improvements, new businesses (or name changes), and loss of businesses (or name changes). Because the business information was collected from the R.L. Polk directories, the differences between name changes and new or lost businesses are not entirely clear. Ames and Spencer have the highest rates of remaining businesses (67 and 64 percent respectively). Ankeny, Clive, and Fairfield had the highest rates of new business locations (61, 67, and 54 percent respectively). The rates of business losses or turnovers ranged from 13 percent for Fairfield to 50 percent for Spencer over a five-year period. This equates to approximately a 3 percent to 10 percent annual turnover of businesses. A typical community may experience anywhere from a 5 to 15 percent annual change, so these rates can be viewed as indicating somewhat stable business environments (Appendix 1).

These results suggest that access management activities have not adversely affected overall business locations within the selected case study corridors. In general, business activity has continued to expand. Losses in numbers of total businesses within the Ames and Spencer corridors may simply be the result of changing trends in business - a trend toward larger, multiple service establishments in a single location (e.g., Wal-Mart, K-Mart, Target, Hy-Vee, and Sam's Club). In both of these cases, overall sales activity has increased (or remained stable) during the time periods analyzed. In addition, the only consistent changes in specific business categories were increases in numbers of eating and drinking and specialty retail.

### F. Corridor Sales Trends

This analysis used disaggregate retail sales data for each of the five case study corridors. The Iowa Department of Revenue and Finance was able to report sales tax summaries for the street addresses which fell within corridor boundaries. Breakdowns by business type were not possible because of data confidentiality rules. From 1990 to 1995 retail sales activity increased within each of the five business vitality case study communities. Inflation adjusted annual increases ranged from 0.9 percent in Spencer to 57.7 percent in Clive (see Table 24).

**Table 24: Sales Activity for Corridors and Communities**

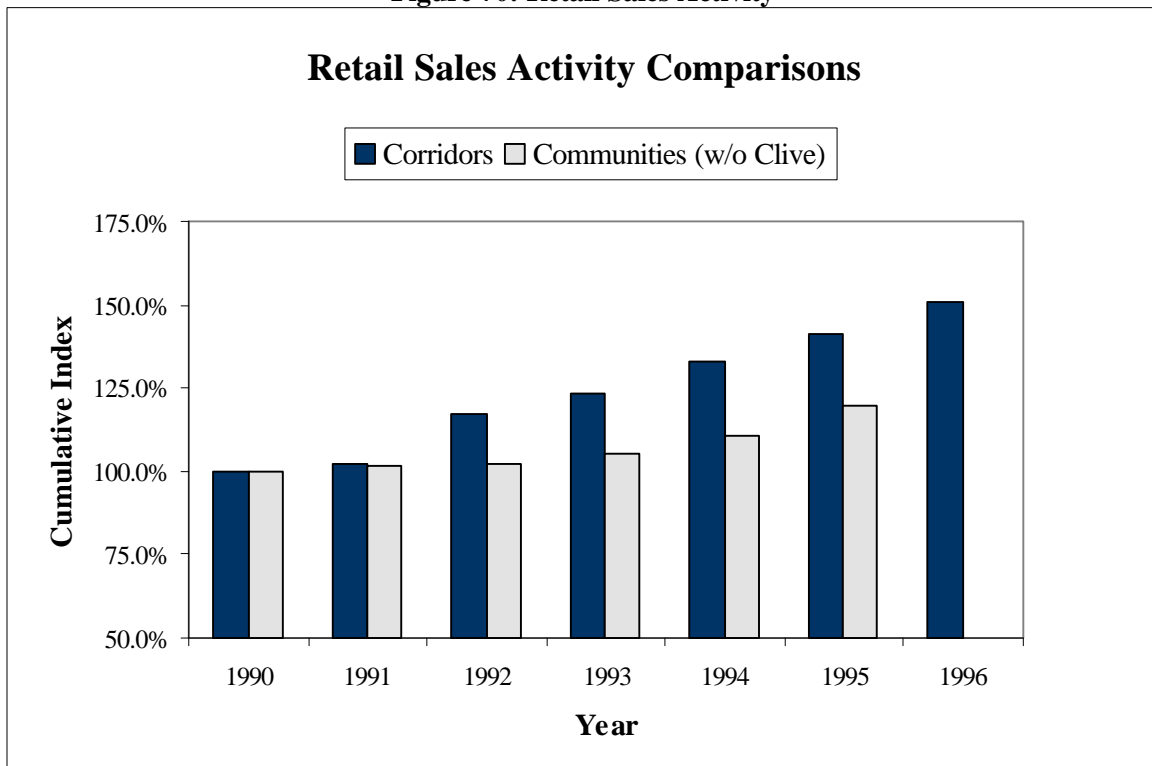
Year	Corridor Sales	Community Sales	Corridor Index	Community Index	Completion
<b>Ames</b>					
1990	15,068,900	384,328,804	100.0%	100.0%	
1991	13,445,019	388,862,320	89.2%	101.2%	
1992	14,215,046	388,774,727	94.3%	101.2%	
1993	14,393,570	399,426,817	95.5%	103.9%	
1994	13,846,263	402,207,192	91.9%	104.7%	Fall 1994
1995	14,693,133	418,148,170	97.5%	108.8%	
1996	15,798,306	na	104.8%	na	
<b>Ankeny</b>					
1990	8,211,100	116,564,938	100.0%	100.0%	
1991	10,132,321	128,618,282	123.4%	110.3%	
1992	13,989,674	136,846,533	170.4%	117.4%	
1993	13,456,890	137,075,948	163.9%	117.6%	Fall 1993
1994	16,492,770	154,852,588	200.9%	132.8%	
1995	17,067,945	183,212,866	207.9%	157.2%	
1996	18,595,836	na	226.5%	na	
<b>Clive</b>					
1990	6,478,100	24,020,089	100.0%	100.0%	
1991	6,745,108	49,518,974	104.1%	206.2%	Fall 1991
1992	8,800,195	66,399,337	135.8%	276.4%	
1993	9,564,852	74,415,863	147.6%	309.8%	
1994	10,773,843	103,397,595	166.3%	430.5%	
1995	10,890,861	107,170,336	168.1%	446.2%	
1996	11,588,433	na	178.9%	na	
<b>Fairfield</b>					
1990	18,261,350	86,837,886	100.0%	100.0%	
1991	17,354,959	83,458,500	95.0%	96.1%	
1992	17,549,619	83,106,800	96.1%	95.7%	Fall 1992
1993	17,840,378	87,605,920	97.7%	100.9%	
1994	17,776,399	88,784,797	97.3%	102.2%	
1995	19,211,631	92,891,667	105.2%	107.0%	
1996	20,720,973	na	113.5%	na	
<b>Spencer</b>					
1990	4,583,850	129,098,725	100.0%	100.0%	
1991	4,521,337	126,634,993	98.6%	98.1%	
1992	4,130,907	123,987,367	90.1%	96.0%	Summer 1992
1993	5,158,390	126,038,810	112.5%	97.6%	
1994	4,976,689	132,828,612	108.6%	102.9%	
1995	5,834,589	136,202,113	127.3%	105.5%	
1996	6,027,244	na	131.5%	na	

Source: Iowa Department of Revenue and Finance.

Note: State of Iowa Fiscal Years, 7/1-6/30. Figures adjusted to 1990 dollars. 1996 community sales not available.

At the same time, all of the case study corridors experienced retail sales growth between 1990 and 1996. The annual corridor increases ranged from 0.7 percent in Ames to 18.1 percent in Ankeny. Overall, the average annual sales growth rate for the five corridors was 7.3 percent compared to an average of 14.1 percent for the communities. However, excluding Clive, the average rate of growth for communities was 3.3 percent. Clive has experienced such phenomenal retail sales growth that its sales figures distort the average of the five communities. With this in mind, the results suggest that on average, the corridors have out-paced the communities in terms of retail sales activity over the past seven years (see Figure 70).

**Figure 70: Retail Sales Activity**



To examine the short term impacts of the access management projects, this analysis looked at changes in sales activity from the year before and the year after access improvements were completed. In each of the five case study corridors, sales activity increased the year after the projects were completed. Retail sales activity increases ranged from 1.6 percent (Fairfield) to 37.0 percent (Ankeny) with a 19.7 percent average rate of increase. The average for the corridors was slightly higher than the 'before and after' average changes for the communities (19.3 percent). The average corridor sales activity increases are even more dramatic if Clive is excluded from the community average, with the comparison then becoming 19.7 percent (corridors) to 6.5 percent (communities).

The results of the corridor sales trend analysis do not indicate that access changes have had a negative impact on business corridors for the five case study communities. In each case, corridors and communities have sustained stable or increasing rates of business growth. The results also suggest that there have been no short-term negative impacts (i.e., lower sales activity) from access management projects within these commercial corridors.

**G. Summary**

From the data for the case study areas, there are instances of decline in business activity. For example, the retail trade area for the City of Fairfield has contracted during the period from 1990 to 1996. In addition, Ames and Spencer experienced a decline in the total number of businesses within their case study corridors. However, in terms of economic vitality, business locations and turnover within case study corridors and communities; corridor business composition changes and overall retail sales activities for each corridor and community; there is no evidence that access management projects have disrupted retail business trade within the case study corridors of Ames, Ankeny, Clive, Fairfield, and Spencer. In fact, sales activity has generally increased in each of these cases after improvements were made. To provide a reliable assessment of business impacts, this analysis has compared relative business activity changes between corridors, cities, and state-wide trends. In this way, localized economic trends can be examined in light of regional economic changes.

**H. References**

Harpole, Kathy. 1997. Iowa Sales Revenue Data. Iowa Department of Revenue and Finance, Des Moines, Iowa.

Iowa Department of Revenue and Finance. 1990. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

\_\_\_\_\_. 1991. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

\_\_\_\_\_. 1992. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

\_\_\_\_\_. 1993. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

\_\_\_\_\_. 1994. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

\_\_\_\_\_. 1995. Iowa Retail Sales and Use Tax Report: Annual Report, Des Moines Iowa.

Long, Gary and Jeff Helms. 1991. Median Design for Six-Lane Urban Roadways. Transportation Research Center, University of Florida, Gainesville, Florida.

R.L. Polk & Co. 1990. Polk City Directory. Detroit, Michigan.

\_\_\_\_\_. 1991. Polk City Directory. Detroit, Michigan.

\_\_\_\_\_. 1992. Polk City Directory. Detroit, Michigan

\_\_\_\_\_. 1993. Polk City Directory. Detroit, Michigan

\_\_\_\_\_. 1994. Polk City Directory. Detroit, Michigan

\_\_\_\_\_. 1995. Polk City Directory. Detroit, Michigan

\_\_\_\_\_. 1996. Polk City Directory. Detroit, Michigan

### ***I. Appendix 1: Summary of Community Business Trends***

(Ken Stone and Scott Baumler, ISU Extension)

Starting and maintaining a small business is a difficult proposition. A high proportion of businesses do not survive in the long run for a variety of reasons. In Iowa, only about 50 percent of all businesses survive (continue to hold the same sales tax permit) over a five year period. For the five business vitality case study communities, this percentage generally varies from 41 percent (Fairfield) to 54 percent (Spencer). Clive, with a business survival rate of 64 percent, is a notable exception.

<b>Community</b>	<b>Five Year Business Survival Rate</b>
Ames	44.6%
Ankeny	44.1%
Clive	63.7%
Fairfield	41.2%
Spencer	54.3%
State of Iowa	49.8%

Clive also has a notably strong business environment in terms of retail sales captured from outside of the community. The retail sales pull factor indicates whether sales dollars are coming from outsiders. A pull factor of more than 1.00 indicates that a community is serving the retail needs of persons beyond its borders.

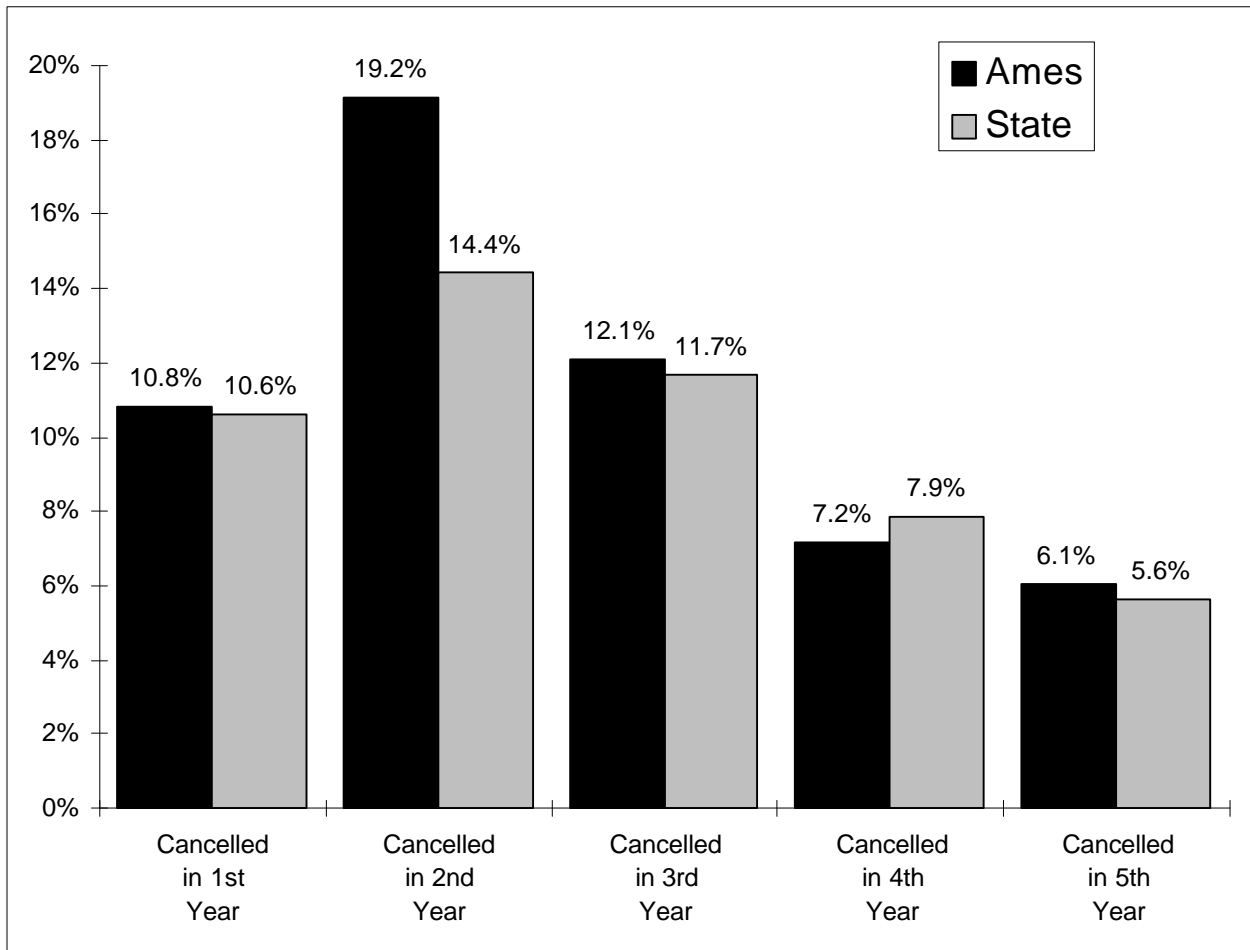
<b>Community</b>	<b>1990 Retail Sales Pull Factor</b>	<b>1996 Retail Sales Pull Factor</b>	<b>Percentage Change 1990-1996</b>
Ames	1.00	1.14	+14.0%
Ankeny	0.86	1.06	+23.3%
Clive	0.44	1.71	+388.6%
Fairfield	1.20	1.16	-0.3%
Spencer	1.56	1.57	+0.1%
State of Iowa	1.00	1.00	----

Clive and Spencer have the largest retail trade pull factors, indicating that they have been able to capture significant trade beyond their borders. However, Clive's pull factor has been growing much more rapidly. Fairfield has actually lost sales to other communities over the past six years. Ames and Ankeny have increased their pull factors moderately.

### **All Retail Firms**

Permits Issued From FY88 Through FY91

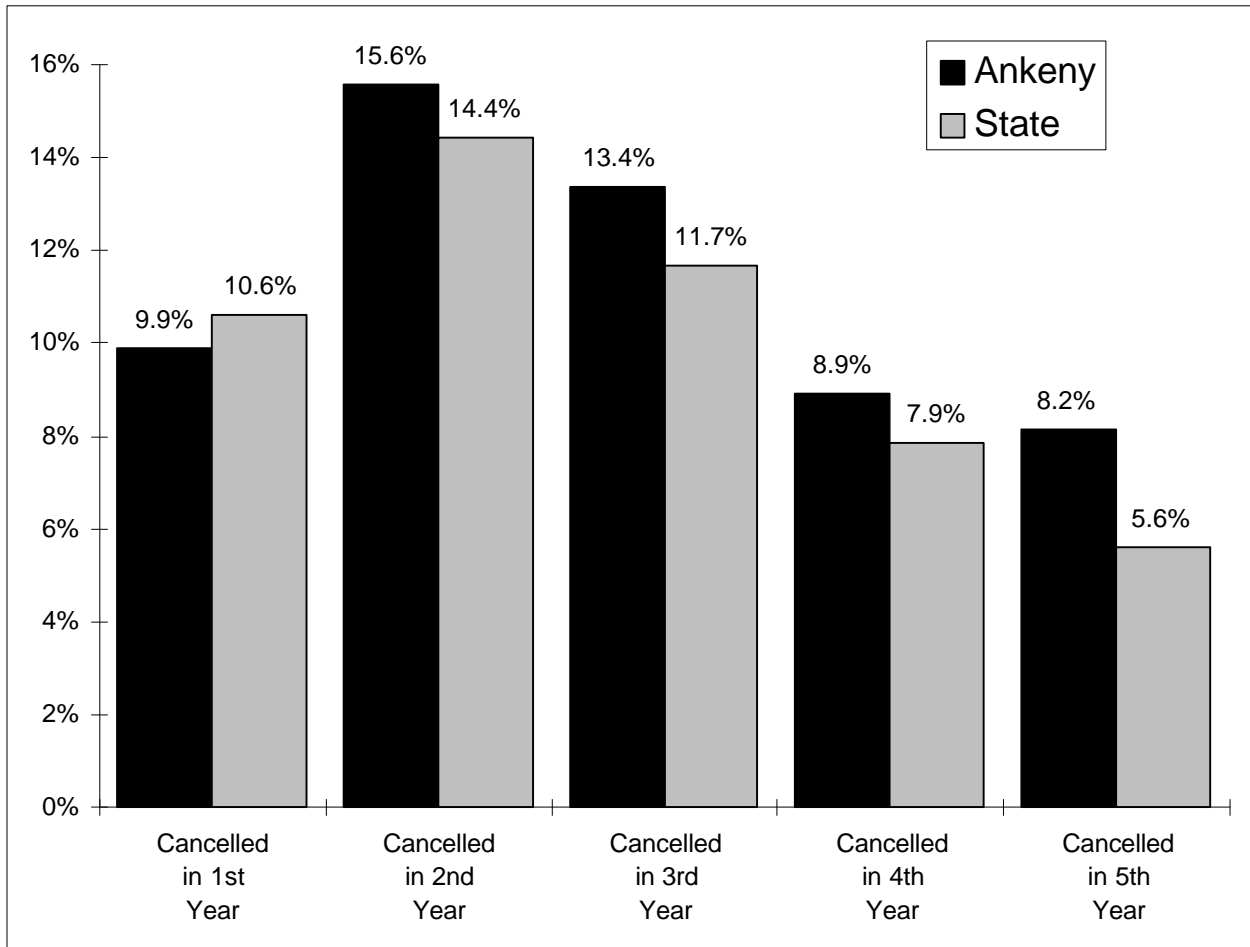
	Ames		State	
	Count	Percent	Count	Percent
Permits Issued	710	100.0%	51,489	100.0%
Canceled in 1 <sup>st</sup> Year	77	10.8%	5,466	10.6%
Canceled in 2 <sup>nd</sup> Year	136	19.2%	7,421	14.4%
Canceled in 3 <sup>rd</sup> Year	86	12.1%	6,009	11.7%
Canceled in 4 <sup>th</sup> Year	51	7.2%	4,050	7.9%
Canceled in 5 <sup>th</sup> Year	43	6.1%	2,888	5.6%
Total Remaining More Than 5 Years	317	44.6%	25,655	49.8%



All Retail Firms

*Permits Issued From FY88 Through FY91*

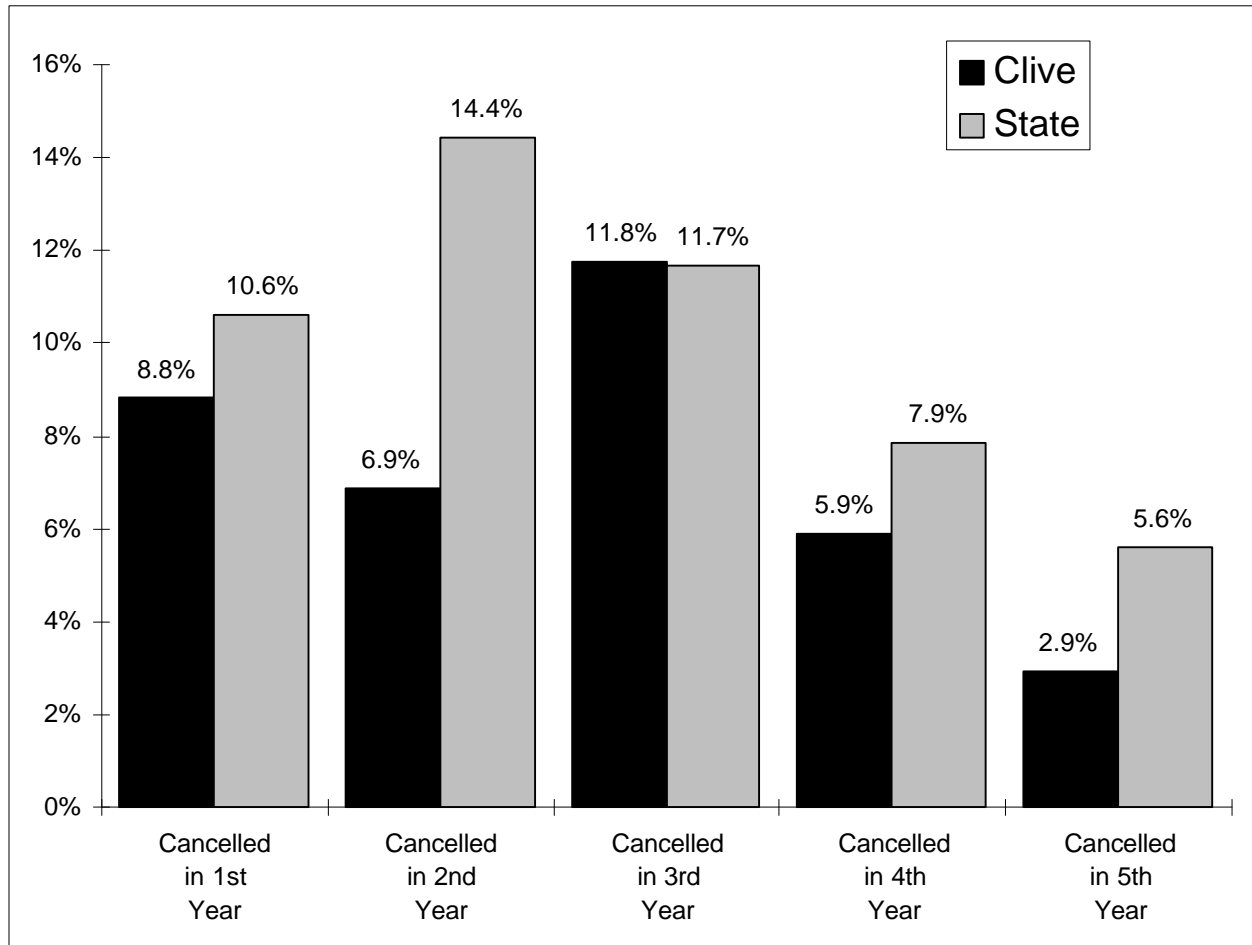
	<b>Ankeny</b>		<b>State</b>	
	Count	Percent	Count	Percent
Permits Issued	404	100.0%	51,489	100.0%
Canceled in 1 <sup>st</sup> Year	40	9.9%	5,466	10.6%
Canceled in 2 <sup>nd</sup> Year	63	15.6%	7,421	14.4%
Canceled in 3 <sup>rd</sup> Year	54	13.4%	6,009	11.7%
Canceled in 4 <sup>th</sup> Year	36	8.9%	4,050	7.9%
Canceled in 5 <sup>th</sup> Year	33	8.2%	2,888	5.6%
Total Remaining More Than 5 Years	178	44.1%	25,655	49.8%



**All Retail Firms**

Permits Issued From FY88 Through FY91

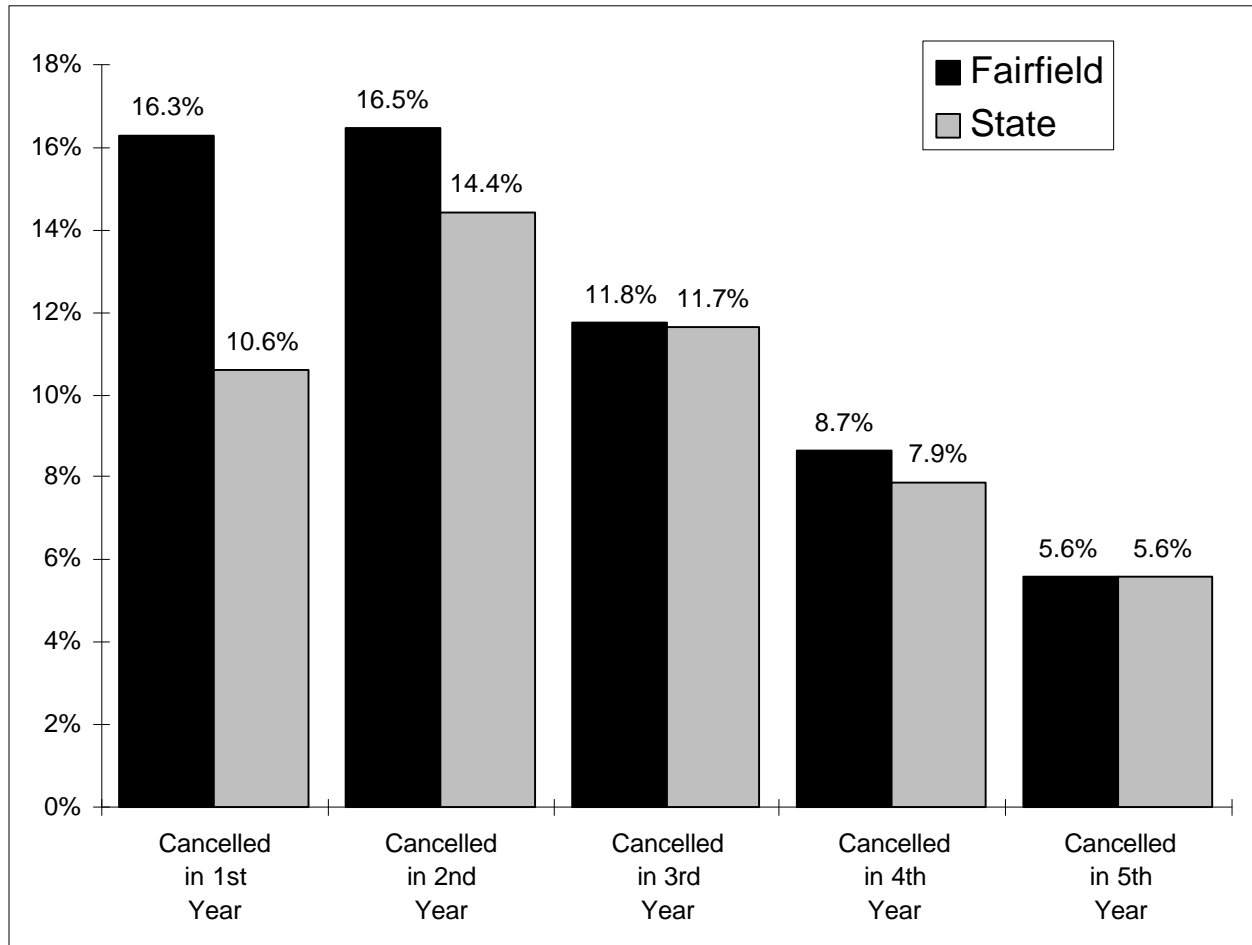
	<b>Clive</b>		<b>State</b>	
	Count	Percent	Count	Percent
Permits Issued	102	100.0%	51,489	100.0%
Canceled in 1 <sup>st</sup> Year	9	8.8%	5,466	10.6%
Canceled in 2 <sup>nd</sup> Year	7	6.9%	7,421	14.4%
Canceled in 3 <sup>rd</sup> Year	12	11.8%	6,009	11.7%
Canceled in 4 <sup>th</sup> Year	6	5.9%	4,050	7.9%
Canceled in 5 <sup>th</sup> Year	3	2.9%	2,888	5.6%
Total Remaining More Than 5 Years	65	63.7%	25,655	49.8%



**All Retail Firms**

Permits Issued From FY88 Through FY91

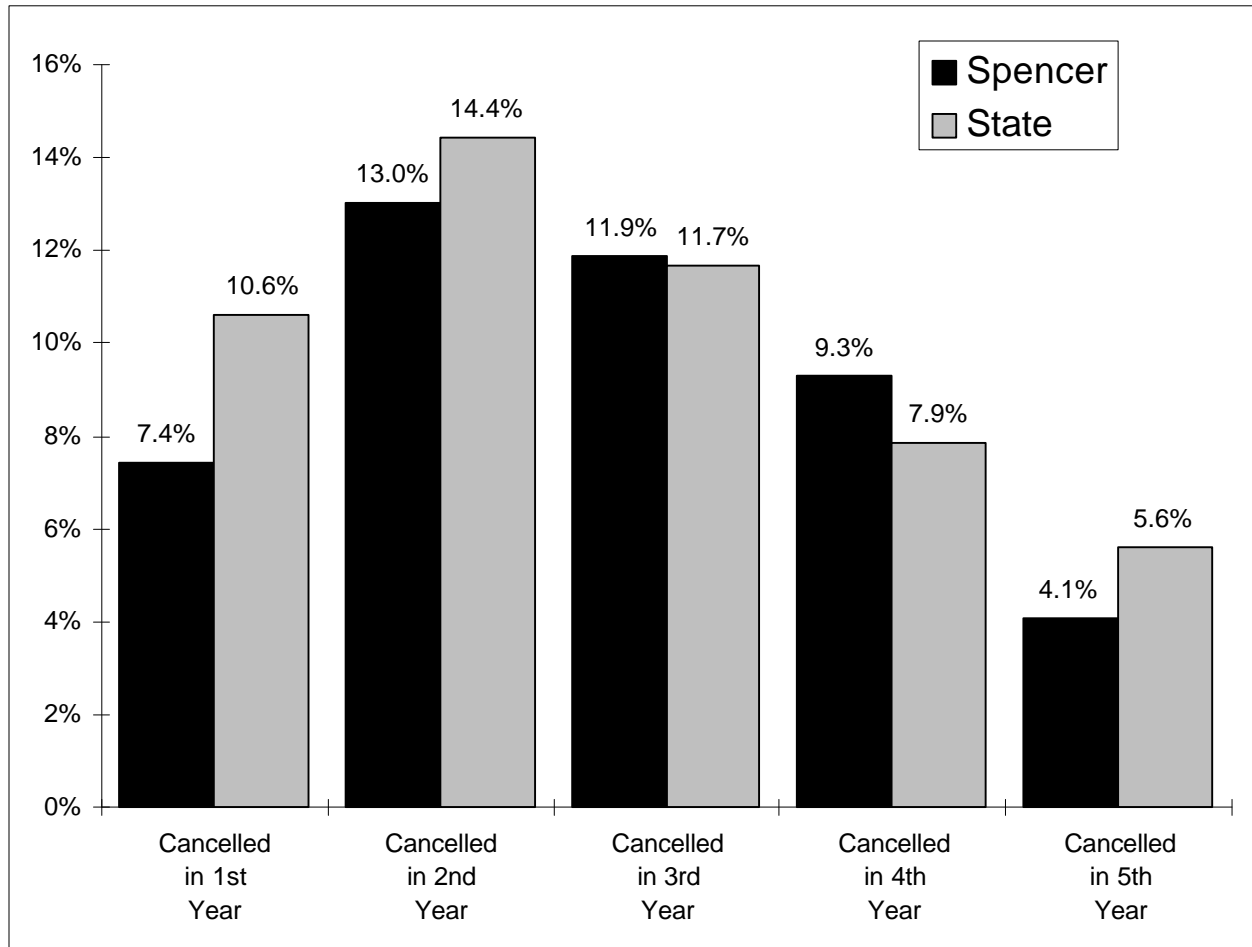
	Fairfield		State	
	Count	Percent	Count	Percent
Permits Issued	485	100.0%	51,489	100.0%
Canceled in 1 <sup>st</sup> Year	79	16.3%	5,466	10.6%
Canceled in 2 <sup>nd</sup> Year	80	16.5%	7,421	14.4%
Canceled in 3 <sup>rd</sup> Year	57	11.8%	6,009	11.7%
Canceled in 4 <sup>th</sup> Year	42	8.7%	4,050	7.9%
Canceled in 5 <sup>th</sup> Year	27	5.6%	2,888	5.6%
Total Remaining More Than 5 Years	200	41.2%	25,655	49.8%



All Retail Firms

Permits Issued From FY88 Through FY91

	<b>Spencer</b>		<b>State</b>	
	Count	Percent	Count	Percent
Permits Issued	269	100.0%	51,489	100.0%
Canceled in 1 <sup>st</sup> Year	20	7.4%	5,466	10.6%
Canceled in 2 <sup>nd</sup> Year	35	13.0%	7,421	14.4%
Canceled in 3 <sup>rd</sup> Year	32	11.9%	6,009	11.7%
Canceled in 4 <sup>th</sup> Year	25	9.3%	4,050	7.9%
Canceled in 5 <sup>th</sup> Year	11	4.1%	2,888	5.6%
Total Remaining More Than 5 Years	146	54.3%	25,655	49.8%



Town	Fiscal Year	Utilities	Building Mat.	General Mdse.	Food Stores	Motor Veh.	Apparel Stores	Home Furn.	Eating & Drinking	Specialty Stores	Service Whse.	Misc.	Total	
<b>Ames</b>														
	80	0.94	0.69	1.72	1.07	0.75	1.91	1.39	1.56	1.22	1.35	0.29	0.46	0.98
	81	0.93	0.68	1.69	1.06	0.74	1.85	1.35	1.60	1.23	1.53	0.29	0.48	1.02
	82	0.93	0.62	1.68	1.08	0.71	1.81	1.43	1.51	1.28	1.51	0.25	0.45	1.02
	83	0.92	0.61	1.69	1.07	0.71	1.75	1.48	1.54	1.33	1.50	0.28	0.50	1.05
	84	0.85	0.74	1.73	1.08	0.72	1.68	1.32	1.56	1.36	1.36	0.32	0.46	1.04
	85	0.82	0.76	1.72	1.11	0.74	1.72	1.38	1.58	1.38	1.37	0.34	0.54	1.06
	86	0.85	0.76	1.81	1.16	0.76	1.76	1.37	1.57	1.32	1.33	0.28	0.72	1.09
	87	0.84	0.64	1.83	1.11	0.73	1.67	1.31	1.52	1.25	1.27	0.28	0.60	1.06
	88	0.84	0.84	1.86	1.12	0.68	1.68	1.21	1.51	1.21	1.22	0.31	0.69	1.08
	89	0.85	0.91	1.83	1.11	0.72	1.65	1.23	1.44	1.21	1.20	0.37	0.64	1.09
	90	0.85	0.89	1.83	1.15	0.71	1.68	1.07	1.46	1.15	1.28	0.41	0.62	1.10
	91	0.88	0.88	1.73	1.26	0.72	1.70	1.15	1.42	1.13	1.33	0.48	0.61	1.11
	92	0.90	0.85	1.72	1.43	0.80	1.70	1.16	1.36	1.25	1.21	0.49	0.61	1.11
	93	0.89	0.96	1.69	1.31	0.82	1.83	1.12	1.51	1.33	1.28	0.44	0.66	1.13
	94	0.89	0.94	1.61	1.26	0.84	1.64	1.16	1.55	1.34	1.27	0.41	0.66	1.12
	95	0.90	0.93	1.62	1.25	0.88	1.63	1.18	1.62	1.31	1.36	0.42	0.85	1.15
	96	0.90	0.85	1.75	1.32	0.89	1.59	1.11	1.67	1.27	1.35	0.39	0.66	1.14

Town	Fiscal Year	Utilities	Building Mat.	General Mdse.	Food Stores	Motor Veh.	Apparel Stores	Home Furn.	Eating & Drinking	Specialty Stores	Service Whse.	Misc.	Total	
<b>Ankeny</b>														
	80		1.42		1.39	0.62	0.68	0.38	1.04	1.25	0.66	0.71	2.84	0.82
	81		1.19	0.36	1.40	0.81	0.80	0.40	0.98	1.25	0.68	0.48	2.53	0.78
	82		1.10	0.33	1.48	0.72	0.71	0.31	0.85	1.18	0.75	0.45	2.88	0.74
	83		1.15	0.30	1.45	0.77	0.63	0.29	0.89	1.09	0.82	0.41	3.33	0.76
	84	1.09	1.29	0.32	1.42	1.04	0.59	0.24	0.87	1.19	0.86	0.53	0.65	0.83
	85	1.08	1.64	0.32	1.58	1.21	0.44	0.22	1.10	1.21	0.82	0.55	0.46	0.86
	86	0.59	1.49	0.43	1.60	1.37	0.39	0.26	1.11	1.11	0.79	0.42	0.62	0.79
	87		1.31	0.92	1.53	1.60	0.39	0.32	1.13	0.96	0.72	0.52	1.37	0.80
	88		1.35	0.93	1.42	1.75	0.32	0.34	1.22	0.94	0.69	0.60	1.63	0.84
	89		1.28	1.02	1.09	2.09	0.30	0.39	1.19	0.95	0.65	1.11	1.56	0.90
	90		1.25	1.22	1.01	1.37	0.23	0.46	1.19	0.99	0.65	1.06	1.36	0.86
	91		1.51	1.52	1.05	1.28	0.22	0.49	1.19	1.14	1.18	1.06	1.27	0.94
	92		1.27	1.51	1.12	1.36	0.20	0.57	1.11	1.34	0.81	1.10	1.31	0.96
	93	0.27	1.07	1.12	1.15	1.22	0.37	0.39	1.18	1.14	0.87	1.56	0.69	0.92
	94	0.28	1.06	1.12	1.46	1.24	0.30	0.72	1.05	1.09	0.92	1.54	1.19	0.98
	95	0.29	2.41	1.14	1.57	1.20	0.34	0.72	1.19	1.06	0.94	1.35	1.56	1.10
	96	0.27	3.03	1.11	1.75	0.80	0.29	0.69	1.11	0.94	0.82	1.32	1.41	1.06

Town	Fiscal Year	Utilities	Building Mat.	General Mdse.	Food Stores	Motor Veh.	Apparel Stores	Home Furn.	Eating & Drinking	Specialty Stores	Service Whse.	Misc.	Total	
<b>Clive</b>	80												0.30	
	81												0.31	
	82												0.35	
	83												0.34	
	84												0.27	
	85												0.28	
	86												0.27	
	87								1.63	0.42	0.52	0.01	0.50	0.28
	88								1.60	0.57	0.64		0.84	0.33
	89								1.81	0.45	0.65		0.97	0.36
	90								1.74	1.19	0.96		0.82	0.44
	91					0.18			2.00	3.39	1.47	0.43	2.55	0.89
	92					0.19			3.31	3.67	1.55	0.54	4.24	1.17
	93					0.31			3.71	2.68	1.76	0.69	5.69	1.27
	94					0.51		2.16	4.56	3.23	1.97	0.66	8.31	1.71
	95					0.58		2.50	4.40	3.70	2.10	0.61	7.34	1.72
	96					1.35		2.30	4.49	2.52	2.32	0.65	7.71	1.71

Town	Fiscal Year	Utilities	Building Mat.	General Mdse.	Food Stores	Motor Veh.	Apparel Stores	Home Furn.	Eating & Drinking	Specialty Stores	Service	Whse.	Misc.	Total
<b>Fairfield</b>														
	80	1.60	1.36	1.33	1.82	1.30	1.71	1.32	1.03	1.30	0.88	0.89	1.96	1.27
	81		1.49	1.23	1.77	1.59	1.82	1.21	1.02	1.25	1.05	0.86	4.81	1.27
	82	1.58	1.69	1.17	1.77	1.34	1.88	1.05	1.07	1.25	0.91	0.86	1.53	1.24
	83	1.57	1.57	1.21	1.82	1.37	1.86	1.03	1.09	1.31	0.81	0.74	1.59	1.23
	84	1.63	1.71	1.16	1.83	1.36	1.81	0.98	1.16	1.29	0.92	0.63	1.60	1.26
	85	1.56	1.62	1.21	1.80	1.40	1.75	0.89	1.17	1.50	1.16	0.85	1.42	1.30
	86	1.55	1.62	1.12	1.79	1.36	1.69	0.86	1.23	1.71	1.27	0.96	1.34	1.34
	87	1.51	1.38	1.43	1.73	1.63	1.51	0.73	1.27	1.71	1.20	0.80	1.19	1.31
	88	1.60	1.33	1.78	1.72	1.56	1.43	0.74	1.22	1.66	1.18	0.74	0.94	1.34
	89	1.59	1.23	1.83	1.77	1.44	1.34	0.93	1.17	1.68	1.17	0.81	0.95	1.35
	90	1.23	0.99	1.61	1.77	1.41	1.17	0.80	1.08	1.68	1.08	0.62	0.88	1.20
	91	1.26	0.87	1.53	1.56	1.45	1.07	0.81	1.09	1.59	1.01	0.63	0.74	1.15
	92	1.23	0.88	1.47	1.51	1.56	1.06	0.84	1.12	1.45	0.99	0.53	1.02	1.14
	93	1.37	0.91	1.43	1.59	1.57	0.73	1.12	1.15	1.63	0.95	0.54	1.06	1.17
	94	1.40	0.92	1.36	1.52	1.56	0.65	0.91	1.19	1.48	0.95	0.52	1.07	1.14
	95	1.39	0.71	1.32	1.62	1.52	0.95	0.85	1.18	1.32	0.94	1.08	1.01	1.16
	96	1.42	0.79	1.17	1.92	1.46	0.64	1.81	1.04	1.41	0.95	0.68	1.19	1.16

Town	Fiscal Year	Utilities	Building Mat.	General Mdse.	Food Stores	Motor Veh.	Apparel Stores	Home Furn.	Eating & Drinking	Specialty Stores	Service Whse.	Misc.	Total	
<b>Spencer</b>														
	80	1.29	2.06	2.20	1.79	2.44	2.88	2.30	1.78	2.02	1.79	1.78	1.24	1.83
	81	1.24	1.99	2.61	1.81	2.40	3.40	2.36	1.69	2.10	1.88	1.64	1.36	1.87
	82	1.24	1.92	2.53	1.91	2.67	3.51	2.62	1.69	2.11	1.73	1.48	1.13	1.83
	83	1.22	1.77	2.49	1.94	2.75	3.43	2.32	1.65	2.19	1.66	1.47	0.95	1.79
	84	1.16	1.87	2.17	1.92	2.62	3.13	2.77	1.76	2.21	1.74	1.39	0.99	1.77
	85	1.10	1.64	2.73	1.72	2.39	2.92	2.87	1.64	2.10	1.59	0.98	0.68	1.67
	86	1.05	1.20	2.52	1.67	2.38	2.98	2.21	1.56	1.94	1.40	0.96	0.68	1.56
	87	1.06	1.07	2.26	1.86	2.75	2.99	2.15	1.48	1.71	1.34	1.01	0.71	1.53
	88	0.95	0.92	2.23	1.72	2.99	3.02	2.00	1.50	1.62	1.45	0.89	1.10	1.54
	89	1.03	0.77	2.27	1.90	3.20	3.14	2.57	1.48	1.60	1.41	0.78	1.15	1.59
	90	0.98	0.96	2.21	1.98	3.13	2.52	2.69	1.35	1.61	1.43	0.75	1.18	1.56
	91	0.96	1.07	1.98	2.05	3.10	2.32	2.64	1.38	1.63	1.45	0.77	1.23	1.54
	92	0.97	0.90	1.74	2.10	3.23	2.32	2.71	1.26	1.65	1.44	0.76	1.14	1.49
	93	1.03	1.08	1.68	2.17	3.15	2.43	2.97	1.32	1.60	1.39	0.73	1.04	1.49
	94	1.05	1.08	1.83	2.13	3.43	2.60	2.92	1.43	1.46	1.45	0.80	1.11	1.55
	95	1.05	0.99	1.98	2.10	3.51	2.66	2.60	1.49	1.45	1.44	0.94	1.04	1.56
	96	1.04	0.97	2.01	2.17	3.46	2.59	2.53	1.50	1.47	1.53	0.96	1.02	1.57



**J. Appendix 2: Community Business Patterns**  
(Dave Plazak, CTRE)

Ames is a large, regional hub for trade serving an area covering several counties. It has a population of slightly under 50,000 persons. A large percentage of the residents are college students at Iowa State University. Ames has experienced slow but steady growth in retail trade activity since the mid-1980s. The number of retail firms in Ames has remained very steady since the mid-1980s at about 1000; per firm sales have also remained stable. Current per capita sales are about \$10,000. Ames has several times the total trade activity of the other four business vitality case study locations, with inflation- adjusted sales of around \$126 million per year.

**Retail Trade Trends: Ames**

Year	Firms	Total Sales	Per Capita Sales	Per Firm Sales
1971	612	\$81,851,200	\$2,040	\$133,744
1975	720	\$130,279,679	\$3,055	\$181,070
1980	868	\$233,130,159	\$5,093	\$268,738
1985	985	\$294,087,710	\$6,326	\$298,718
1986	1003	\$305,843,836	\$6,559	\$305,005
1987	996	\$316,459,686	\$6,766	\$317,810
1988	1010	\$340,309,628	\$7,254	\$336,857
1989	1035	\$361,417,067	\$7,681	\$349,280
1990	1030	\$384,328,804	\$8,143	\$373,225
1991	1001	\$405,226,075	\$8,586	\$404,922
1992	996	\$417,330,483	\$8,842	\$419,112
1993	1033	\$441,600,421	\$9,356	\$427,493
1994	1052	\$456,060,489	\$9,772	\$433,415

Source: Iowa Public Resources On-Line

**Inflation-Adjusted Retail Sales: Ames**

Year	Firms	Total Sales	Per Firm Sales
1971	612	\$81,851,200	\$133,744
1975	720	\$101,148,819	\$140,582
1980	868	\$121,930,000	\$140,553
1985	985	\$111,565,899	\$113,322
1986	1003	\$112,236,270	\$111,928
1987	996	\$114,617,778	\$115,107
1988	1010	\$118,409,752	\$117,208
1989	1035	\$120,673,478	\$116,621
1990	1030	\$122,319,798	\$118,786
1991	1001	\$122,572,920	\$122,481
1992	996	\$122,026,457	\$122,547
1993	1033	\$125,347,834	\$121,343
1994	1052	\$126,122,923	\$119,860

Source: Iowa Public Resources On-Line

**Ankeny** is a suburban community of nearly 20,000 persons that has experienced strong growth in retail trade since the late 1980s. The number of retail firms in Ankeny has roughly doubled since the mid-1980s and now is well over 500. Inflation-adjusted retail sales have increased at a rate of about five percent per year over the past decade and are now almost \$50 million. Current per capita sales are about \$9,000 in Ankeny, and growing quickly.

**Retail Sales Trends: Ankeny**

<b>Year</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Capita Sales</b>	<b>Per Firm Sales</b>
1971	173	\$15,970,133	\$1,633	\$92,580
1975	224	\$30,992,631	\$2,522	\$138,206
1980	340	\$63,274,943	\$4,101	\$186,103
1985	396	\$85,382,698	\$5,036	\$215,885
1986	419	\$79,880,703	\$4,628	\$190,760
1987	426	\$88,379,979	\$5,031	\$207,465
1988	423	\$98,558,321	\$5,515	\$233,274
1989	443	\$113,133,064	\$6,224	\$255,524
1990	454	\$116,564,938	\$6,307	\$257,034
1991	460	\$134,030,681	\$7,252	\$291,688
1992	480	\$146,898,000	\$7,948	\$306,357
1993	527	\$151,549,154	\$8,200	\$287,706
1994	557	\$175,586,485	\$8,970	\$315,519

Source: Iowa Public Resources On-Line

**Inflation-Adjusted Retail Sales: Ankeny**

<b>Years</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Firm Sales</b>
1971	173	\$15,970,133	\$92,580
1975	224	\$24,062,602	\$107,303
1980	340	\$33,093,589	\$97,334
1985	396	\$32,391,008	\$81,899
1986	419	\$29,314,019	\$70,004
1987	426	\$32,010,134	\$75,141
1988	423	\$34,293,083	\$81,167
1989	443	\$37,773,978	\$85,317
1990	454	\$37,098,962	\$81,806
1991	460	\$40,541,646	\$88,230
1992	480	\$42,952,631	\$89,578
1993	527	\$43,017,075	\$81,665
1994	557	\$48,558,209	\$87,256

Source: Iowa Public Resources On-Line

**Clive** is another suburban community with a population approaching 10,000. It has experienced very rapid growth in retail trade since the early 1990s and has been one of the fastest-growing communities in Iowa in terms of retail trade. It might be described as a retailing “magnet”. Inflation-adjusted sales have increased by nearly 700 percent over the past decade. In 1985, Clive had only 32 retail businesses; it now has over 160 and the number continues to grow very quickly. Current sales per capita are almost \$14,000.

**Retail Trade Trends: Clive**

Year	Firms	Total Sales	Per Capita Sales	Per Firm Sales
1971	NA	NA	NA	NA
1975	15	\$3,289,610	\$725	\$223,024
1980	21	\$8,937,404	\$1,474	\$430,718
1985	32	\$10,940,407	\$1,618	\$347,315
1986	35	\$10,864,742	\$1,574	\$310,421
1987	44	\$12,341,372	\$1,752	\$280,486
1988	53	\$15,508,011	\$2,159	\$295,391
1989	55	\$18,022,671	\$2,461	\$330,691
1990	59	\$24,020,089	\$3,219	\$408,853
1991	100	\$51,602,787	\$6,915	\$514,741
1992	115	\$71,276,412	\$9,552	\$622,501
1993	133	\$82,273,085	\$11,026	\$617,434
1994	160	\$117,241,956	\$13,814	\$731,619

Source: Iowa Public Resources On-Line

**Inflation-Adjusted Retail Sales: Clive**

Year	Firms	Total Sales	Per Firm Sales
1971	N/A	N/A	N/A
1975	15	\$2,554,045	\$173,156
1980	21	\$4,674,374	\$225,271
1985	32	\$4,150,382	\$131,758
1986	35	\$3,987,061	\$113,916
1987	44	\$4,469,892	\$101,588
1988	53	\$5,395,968	\$102,780
1989	55	\$6,017,586	\$110,414
1990	59	\$7,644,841	\$130,125
1991	100	\$15,608,829	\$155,699
1992	115	\$20,841,056	\$182,018
1993	133	\$23,353,132	\$175,258
1994	160	\$32,423,107	\$202,328

Source: Iowa Public Resources On-Line

**Fairfield** is a mid-sized, rural community with about 10,000 persons that has experienced rather static retail sales over the past two decades once the effect of inflation is accounted for. The number of retail trade firms located in Fairfield has remained nearly constant at 400 to 450 for the past decade. Inflation adjusted sales have also remained stable at \$27 to \$30 million per year. Current per capita sales are about \$10,000.

**Retail Sales Trends: Fairfield**

<b>Year</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Capita Sales</b>	<b>Per Firm Sales</b>
1971	327	\$27,012,667	\$3,074	\$82,734
1975	304	\$38,055,994	\$4,195	\$125,081
1980	340	\$62,642,039	\$6,644	\$184,106
1985	401	\$74,241,690	\$7,735	\$185,257
1986	418	\$77,077,122	\$8,002	\$184,505
1987	427	\$81,295,569	\$8,410	\$190,388
1988	415	\$86,999,818	\$8,969	\$209,638
1989	408	\$92,454,884	\$9,498	\$226,883
1990	424	\$86,837,886	\$8,890	\$205,048
1991	411	\$86,970,526	\$8,904	\$211,607
1992	426	\$89,211,049	\$9,133	\$209,539
1993	450	\$96,855,818	\$9,916	\$215,116
1994	468	\$100,672,585	\$10,236	\$215,227

Source: Iowa Public Resources On-Line

**Inflation-Adjusted Retail Sales: Fairfield**

<b>Year</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Firm Sales</b>
1971	327	\$27,012,667	\$82,734
1975	304	\$29,546,579	\$97,113
1980	340	\$32,762,573	\$96,290
1985	401	\$28,164,526	\$70,280
1986	418	\$28,285,182	\$67,708
1987	427	\$29,444,248	\$68,956
1988	415	\$30,271,336	\$72,943
1989	408	\$30,869,744	\$75,754
1990	424	\$27,637,774	\$65,260
1991	411	\$26,306,874	\$64,007
1992	426	\$26,085,102	\$61,269
1993	450	\$27,492,426	\$61,060
1994	468	\$27,840,870	\$59,521

Source: Iowa Public Resources On-Line

**Spencer** is another a mid-sized community with about 11,000 residents that serves a considerably larger geographic trade area than Fairfield. Spencer is located in a less densely populated part of Iowa and there are no other, similar regional centers located nearby. Like Fairfield, it has experienced static inflation-adjusted retail sales since the mid-1980s. The number of retail firms in Spencer has remained constant at around 500 for years. Inflation-adjusted sales have stayed in a range near \$40 million per year. Current per capita sales are about \$13,500 per year.

#### **Retail Trade Trends: Spencer**

<b>Year</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Capita Sales</b>	<b>Per Firm Sales</b>
1971	416	\$41,431,133	\$3,975	\$99,714
1975	418	\$67,116,118	\$6,100	\$160,469
1980	487	\$111,517,487	\$9,510	\$229,106
1985	524	\$114,150,487	\$10,017	\$218,053
1986	507	\$106,824,154	\$9,428	\$210,802
1987	493	\$111,327,313	\$9,883	\$225,816
1988	494	\$116,603,212	\$10,413	\$236,039
1989	503	\$125,859,192	\$11,306	\$250,342
1990	498	\$129,098,725	\$11,666	\$259,234
1991	489	\$131,963,933	\$11,925	\$270,003
1992	486	\$133,094,320	\$12,027	\$273,998
1993	509	\$139,346,657	\$12,592	\$273,766
1994	515	\$150,613,621	\$13,536	\$292,738

Source: Iowa Public Resources On-Line

#### **Inflation-Adjusted Retail Sales: Spencer**

<b>Year</b>	<b>Firms</b>	<b>Total Sales</b>	<b>Per Firm Sales</b>
1971	416	\$41,431,133	\$99,714
1975	418	\$52,108,788	\$124,588
1980	487	\$58,325,045	\$119,825
1985	524	\$43,304,434	\$82,721
1986	507	\$39,201,525	\$77,359
1987	493	\$40,321,374	\$81,788
1988	494	\$40,571,751	\$82,129
1989	503	\$42,023,103	\$83,586
1990	498	\$41,088,073	\$82,506
1991	489	\$39,916,495	\$81,671
1992	486	\$38,916,468	\$80,116
1993	509	\$39,553,408	\$77,708
1994	515	\$41,651,997	\$80,956

Source: Iowa Public Resources On-Line

Comparing trends of inflation-adjusted retail sales for the five communities shows that all except Ames have similar-sized retail markets in the range of about \$30-\$50 million per year. Ames has a market three times that large. Patterns of growth diverge more. Ankeny and especially Clive are fast-growing markets. Ames has experienced steady growth. Fairfield and Spencer have experienced little or no growth in inflation-adjusted retail sales.

**Inflation-Adjusted Retail Sales: Five Case Study Communities**

Year	Ames	Ankeny	Clive	Fairfield	Spencer
1971	\$81,851,200	\$15,970,133	NA	\$27,012,667	\$41,431,133
1975	\$101,148,819	\$24,062,602	\$2,554,045	\$29,546,579	\$52,108,788
1980	\$121,930,000	\$33,093,589	\$4,674,374	\$32,762,573	\$58,325,045
1985	\$111,565,899	\$32,391,008	\$4,150,382	\$28,164,526	\$43,304,434
1986	\$112,236,270	\$29,314,019	\$3,987,061	\$28,285,182	\$39,201,525
1987	\$114,617,778	\$32,010,134	\$4,469,892	\$29,444,248	\$40,321,374
1988	\$118,409,752	\$34,293,083	\$5,395,968	\$30,271,336	\$40,571,751
1989	\$120,673,478	\$37,773,978	\$6,017,586	\$30,869,744	\$42,023,103
1990	\$122,572,920	\$37,098,962	\$7,644,841	\$27,637,774	\$41,088,073
1991	\$122,026,457	\$40,541,646	\$15,608,829	\$26,306,874	\$39,916,468
1992	\$122,347,834	\$42,952,631	\$20,841,056	\$26,085,102	\$38,916,468
1993	\$125,347,834	\$43,017,075	\$23,353,132	\$27,492,426	\$39,553,408
1994	\$126,122,923	\$48,558,209	\$32,423,107	\$27,840,870	\$41,651,997

Source: Iowa Public Resources On-Line

