



Appendix A

Economic Data Analysis

The following Appendix analyzes a series of data relating to Brunswick's local economy. The goal of this analysis is to identify general areas of strength and weakness and to determine potential economic opportunities for Brunswick's future redevelopment.

The following analysis is based on the U.S. Census' *County Business Patterns* for 1998 to 2001. More recent data is not available at this time from this source or any other compatible source. The *County Business Patterns* series is among the most comprehensive and most reliable sources of economic information, and is one of few that allows direct comparisons between local and national data.⁵ The *County Business Patterns* is also published annually, making it possible to examine individual trends from one year to the next.

The *County Business Patterns* provide data at the national, State, Metropolitan Statistical Area (MSA), County and ZIP code area levels. For the purposes of this analysis, Brunswick's Pearl and Center roads corridors are assumed to be identical to the 44212 ZIP code. Although it is understood that there are a small number of businesses in this ZIP code that are not on Pearl or Center roads, the overwhelming majority of businesses in this ZIP code are located on or near these two roads.

Like most economic data sources, the *County Business Patterns* suppresses data for most categories in which there are a small number of establishments in order to protect the confidentiality of those businesses. The *County Business Patterns* also releases less specific data for smaller jurisdictions, including ZIP codes, for the same reason. As a result, some indicators of economic health, such as the profitability of an industrial sector, must be approximated by less direct measures, such as the number of establishments in an industry. This data limitation is unfortunate, but approaching the available data from a variety of angles allows us to develop a reasonably clear picture of the City's economic structure.

⁵ The 2002 Economic Census, which will also provide similar data, will not be published until 2004 and will not be available for this project.



Section 1: General Characteristics

Tables 1, 2, and 3 below summarize four basic economic indicators for the Brunswick ZIP code, Medina County and the Cleveland MSA. The four indicators that are commonly used are the number of establishments, the number of employees, the annual payroll and the first quarter payroll, which allows additional insights into the annual payroll trends.

The first column after the line indicates the amount that one might have estimated for the 2001 total if one assumed that growth since 1998 had not exceeded the rate of inflation. The rate of inflation used here is approximate; the national rate of inflation has which has remained around 3% during this period. The final column indicates the degree to which growth between 1998 and 2001 exceeded (or failed to exceed) the rate of inflation.

Table 1: Summary, ZIP Code 44212, 1998 – 2001

	1998	1999	2000	2001	net change 1998-2001	% change 1998-2001	2001 estimate at rate of annual inflation (3%)	Difference 2001 inflation assumption and actual	Percent Difference 2001 inflation and actual
Number of establishments	659	692	692	701	42	6.37%	n/a	-	-
First quarter payroll (\$1000s)	\$33,532	\$37,349	\$48,571	\$44,913	\$11,381	33.94%	\$37,741	\$7,172	19.00%
Number of employees	7,126	7,881	8,763	7,931	805	11.30%	n/a	-	-
Annual payroll (\$1000s)	\$152,998	\$167,828	\$196,710	\$196,399	\$43,401	28.37%	\$172,201	\$24,198	14.05%

Source: County Business Patterns, U.S. Census

Table 2: Summary, Medina County, 1998 - 2001

	1998	1999	2000	2001	net change 1998-2001	% change 1998-2001	2001 estimate at rate of inflation (3%)	Difference 2001 inflation assumption and actual	Percent Difference 2001 inflation and actual
Number of establishments	3,762	3,881	3,927	3,971	209	5.56%	n/a	-	-
First quarter payroll (\$1000s)	\$291,167	\$315,283	\$335,173	\$344,359	\$53,192	18.27%	\$327,711	\$16,648	5.08%
Number of employees	49,811	51,014	53,253	52,320	2,509	5.04%	n/a	-	-
Annual payroll (\$1000s)	\$1,296,375	\$1,392,027	\$1,418,069	\$1,445,404	\$149,029	11.50%	\$1,459,081	-\$13,677	-0.94%

Source: County Business Patterns, U.S. Census

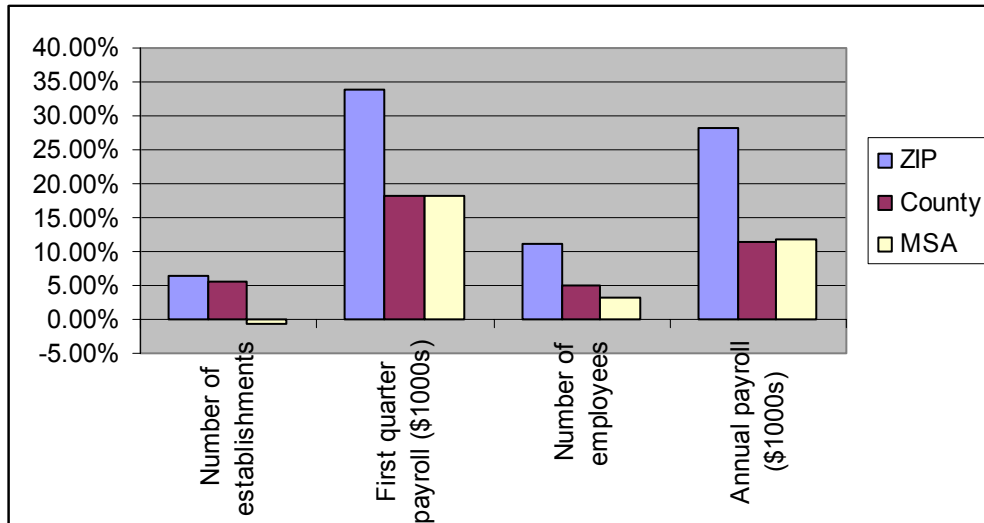
Table 3: Summary, Cleveland MSA, 1998 - 2001

	1998	1999	2000	2001	net change 1998-2001	% change 1998-2001	2001 estimate at rate of inflation (3%)	Difference 2001 inflation assumption and actual	Percent Difference 2001 inflation and actual
Number of establishments	59,334	59,388	59,206	59,037	-297	-0.50%	n/a	-	-
First quarter payroll (\$1000s)	\$7,783,117	\$8,207,985	\$8,965,944	\$9,208,184	\$1,425,067	18.31%	\$8,759,967	\$448,217	5.12%
Number of employees	1,043,092	1,058,929	1,087,932	1,077,676	34,584	3.32%	n/a	-	-
Annual payroll (\$1000s)	\$32,423,373	\$34,288,040	\$35,852,790	\$36,233,265	\$3,809,892	11.75%	\$36,492,792	-\$259,527	-0.71%

Source: County Business Patterns, U.S. Census

Chart 1 summarizes the key differences between the three areas

Chart 1: Percent Change 1998 – 2001, All Areas



This data leads us to the following conclusions:

- The Brunswick ZIP code has grown significantly faster than Medina County and the Cleveland MSA over the period 1998 – 2001. This is the case for each of the four key indicators given.
- Brunswick’s payroll growth has also significantly outstripped the rate of inflation and county and MSA over this period, at a time when total annual payrolls at the county and MSA levels were lagging slightly behind the approximate rate of inflation.
- At all levels, the percentage change in the number of establishments and number of employees was less than the percentage change in payroll, but Brunswick added proportionately more establishments and employees than did Medina County or the MSA.
- One in five net new businesses in Medina County between 1998 and 2001 were in Brunswick.
- As a result, it appears that Brunswick has enjoyed a highly robust economy in recent years compared to both Medina County and the MSA as a whole. Although 2002 and 2003 numbers may be unlikely to post such strong gains as in previous years due to national economic trends, it should be noted that the data used here does include the first two years of the recent recession. More significantly, this long-term strength indicates that Brunswick may be better positioned to weather economic downturns than the County or MSA as a whole.



Section 2: Brunswick Average Annual Payroll

As noted in the previous section, numbers of establishments in an industry is not the most reliable indicator of economic activity, but it is the only such measure that is directly available for a local area. Payroll totals are, however, provided for the ZIP Code as a whole, and this data can be compared to the County and Cleveland MSA data to indicate how Brunswick’s establishments compare in terms of payroll to the surrounding areas. A high payroll does not automatically indicate strong businesses or high profitability, but it does indicate that businesses in a given sector are infusing more money into the regional economy.

Table 4 calculates average payrolls at the employee and establishment levels for 1998, and Table 5 provides the same analysis for 2001. Chart 2 and 3 illustrate the relationships given in each table.

Table 4: Average Payroll, 1998

	Number of Establishments	Total Employees	Total Annual Payroll (\$1000)	Average Payroll per Employee (\$1000)	Average Payroll per Establishment (\$1000)
Brunswick	659	7,126	152,998	\$21.47	\$232.17
Medina County	3,762	49,811	1,296,375	\$26.03	\$344.60
Cleveland MSA	59,334	1,043,092	32,423,373	\$31.08	\$546.46
<i>Difference Brunswick/Medina County</i>				(\$4.56)	(\$112.43)
<i>Difference Brunswick/Cleveland MSA</i>				(\$9.61)	(\$314.29)

Source: County Business Patterns, U.S. Census

Chart 2: Average Payroll, 1998



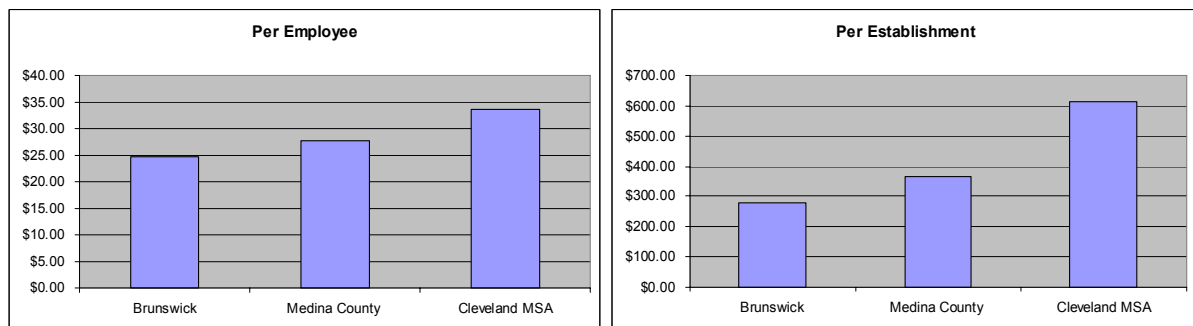
Source: County Business Patterns, U.S. Census

Table 5: Average Total Payroll, Brunswick and Medina County, 2001

	Number of Establishments	Total Employees	Total Annual Payroll (\$1000)	Average Payroll per Employee (\$1000)	Average Payroll per Establishment (\$1000)
Brunswick	701	7,931	196,399	\$24.76	\$280.17
Medina County	3,971	52,320	1,455,404	\$27.82	\$366.51
Cleveland MSA	59,037	1,077,676	36,233,265	\$33.62	\$613.74
<i>Difference Brunswick/Medina County</i>				(\$3.05)	(\$86.34)
<i>Difference Brunswick/Cleveland MSA</i>				(\$8.86)	(\$333.57)

Source: County Business Patterns, U.S. Census

Chart 3: Average Payroll, 2001



Source: County Business Patterns, U.S. Census

According to this data, Brunswick’s average payroll for both employees and establishments is significantly less than the averages for both Medina County and the Cleveland MSA. The difference in average payroll per establishment is especially pronounced between Brunswick and the Cleveland MSA, a factor that is in part due to the

fact that businesses in the MSA tend to be larger and are more dominated by higher-paying industries. However, the average payroll per employee is also significantly higher for Medina County and the Cleveland MSA, indicating that Brunswick employees, on average, earn less than the county or MSA average.

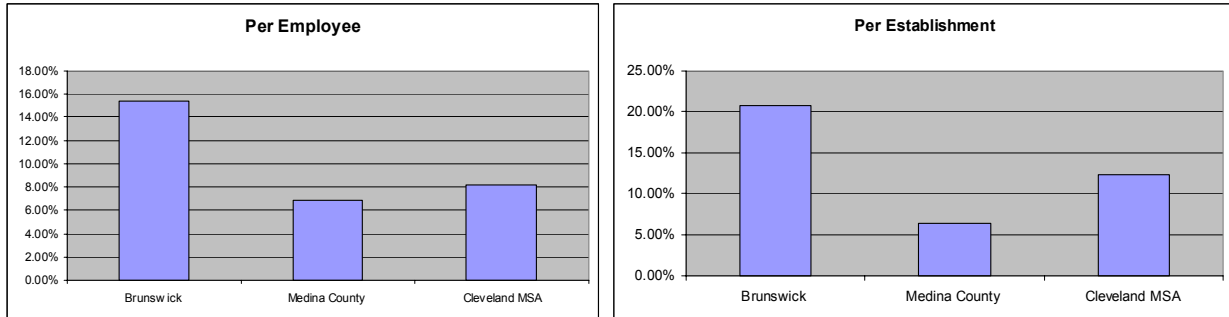
However, Brunswick’s payroll per employee and per establishment has been growing faster than that of the county and MSA, and the gap between Brunswick and the other entities has been closing steadily. This general trend was noted in Section 1; Table 12 and Chart 4 below demonstrate this relative growth in more detail.

Table 6: Change in Average Payroll, 1998 - 2001

	Average Payroll Per Employee 1998 (\$1000)	Average Payroll Per Employee 2001 (\$1000)	Net Difference (\$1000)	Percentage Difference	Average Payroll Per Establishment 1998 (\$1000)	Average Payroll Per Establishment 2001 (\$1000)	Net Difference (\$1000)	Percentage Difference
Brunswick	\$21.47	\$24.76	\$3.29	15.34%	\$232.17	\$280.17	\$48.00	20.68%
Medina County	\$26.03	\$27.82	\$1.79	6.88%	\$344.60	\$366.51	\$21.91	6.36%
Cleveland MSA	\$31.08	\$33.62	\$2.54	8.16%	\$546.46	\$613.74	\$67.28	12.31%

Source: County Business Patterns, U.S. Census

Chart 4: Change in Average Payroll, 1998 – 2001



This data demonstrates that Brunswick experienced much more growth in average employee and average establishment payrolls than did Medina County or Brunswick over the same period. Although this growth has been exceptional, average payrolls still appear to lag behind the County and MSA for the study period.

Section 3: Brunswick's Industry Mix

Although Section 1 indicates that Brunswick's overall economy is robust, even a casual review of the existing conditions in the Pearl and Center roads corridors indicates that this is not the case for every business and every location. This section examines the growth rates in each industrial sector,⁶ as well as the share of the area's total economic activity represented by each sector. Using these two pieces of information, each industrial sector can be identified in terms of its growth rate and its share of the local market. Tables 5, 7 and 9 are derived from these features.

As noted previously, the U.S. Census Bureau suppresses several types of data for industrial sectors at the ZIP code level. As a result, the only type of data that one can use to analyze different industrial sectors within the ZIP code is the number of establishments. This is hardly a perfect indicator, since a higher number of businesses does not guarantee economic health: a community could have a large number of poorly performing businesses or a small number of high performing businesses. However, by comparing change in the number of businesses in an industry over time and the proportion of the community's businesses falling within that industry, one may begin to understand the mix of industries that make up the local economy.

Table 6 analyzes each industrial sector's percent change and percentage share (the sector's proportion of the City's total establishments) between 1998 and 2001. Table 7 groups the industrial sectors by the potential combinations of high, moderate and low growth and high, moderate and low share. For the sake of this analysis, high growth and high share rates are identified as those above 10%, while low growth rates and low shares are less than 3%. Growth rates or industry shares between 3% and 10% have been identified as moderate. For ease of reference, amounts over 10% have been marked in bold type.

⁶ In economic analysis, "Industry" or "Industrial sector" refers to any broad grouping of similar businesses. As a result, Manufacturing is considered an industrial sector, as is Professional Services, Retail Trade, and the other names used in the tables in this section. Each of these sector names has a detailed formal definition; for the sake of simplicity these definitions (and their number codes) are not included.



Table 6: Change in Establishments, ZIP Code 44212, 1998 – 2001

	1998	1999	2000	2001	Net change 1998-2001	Percent Change 1998-2001	2001 Percent of total
Total	659	692	692	701	42	6.37%	100.00%
Construction	85	97	103	99	14	16.47%	14.12%
Manufacturing	34	35	37	41	7	20.59%	5.85%
Wholesale trade	46	46	47	50	4	8.70%	7.13%
Retail trade	112	112	105	114	2	1.79%	16.26%
Transportation & warehousing	23	22	24	19	-4	-17.39%	2.71%
Information	8	8	8	7	-1	-12.50%	1.00%
Finance & insurance	33	40	38	40	7	21.21%	5.71%
Real estate & rental & leasing	16	15	13	15	-1	-6.25%	2.14%
Professional, scientific & technical services	55	57	59	60	5	9.09%	8.56%
Management of companies & enterprises	3	4	4	4	1	33.33%	0.57%
Admin, support, waste mgt, remediation services	41	45	44	45	4	9.76%	6.42%
Educational services	11	10	6	6	-5	-45.45%	0.86%
Health care and social assistance	49	51	52	53	4	8.16%	7.56%
Arts, entertainment & recreation	7	7	7	8	1	14.29%	1.14%
Accommodation & food services	52	57	64	56	4	7.69%	7.99%
Other services (except public administration)	79	79	74	78	-1	-1.27%	11.13%
Auxiliaries (exc corporate, subsidiary & related)	1	1	1	1	0	0.00%	0.14%
Unclassified establishments	4	6	6	5	1	25.00%	0.71%

Source: County Business Patterns, U.S. Census

Table 7: Classification of Establishments by Change, ZIP Code 44212, 1998 – 2001

High Growth/High Share	Low Growth/High Share
Construction	Retail trade Other services (except public administration)
High Growth/Low Share	Low Growth/Low Share
Manufacturing Finance & insurance Management of companies & enterprises Arts, entertainment & recreation	Transportation & warehousing Information Real estate & rental & leasing Educational services
Moderate Growth/Share	
Professional, scientific & technical services Wholesale trade Admin, support, waste mgt, remediation ser Health care and social assistance Accommodation & food services	

Source: County Business Patterns, U.S. Census

As Table 7 indicates, Construction is the only industrial sector in Brunswick that has experienced high growth in numbers of establishments and a high share of the local economy. Manufacturing, Finance & Insurance, Management and Arts & Recreation have all experienced high growth, but their share of the local economy is still small (Management and Arts & Recreation have so few establishments that their numbers can be generally discounted). The impact of the Manufacturing sector is almost certainly understated by this data, since a relatively small number of manufacturing establishments may be likely to create more jobs and more payroll than many other types of businesses (See Section 3 below).

The Low Growth/High Share category is dominated by the Retail sector, which saw extremely small growth during the study period but includes approximately one sixth of the City's establishments. "Other Services" is a catchall category for a variety of establishments, most notably personal services, and is discussed in Section 5.

The sectors indicated in the Low Growth/Low Share category represent a very small amount of Brunswick's existing or potential economic activity. Finally, the Moderate Growth/Share category indicates several sectors that, while not dominating the local economy, have posted reasonably strong growth and together represent over one third of Brunswick's existing businesses.

Comparing Brunswick's distribution of establishments to larger areas will indicate areas where Brunswick may have particular strengths or advantages. Tables 7 and 8 provide the same information for Medina County.



Table 8: Change in Establishments, Medina County, 1998 - 2001

	1998	1999	2000	2001	Net change 1998-2001	Percent Change 1998-2001	2001 Percent of total
Total	3,762	3,881	3,927	3,971	209	5.56%	100.00%
Forestry, fishing, hunting, and agriculture support	11	11	10	10	-1	-9.09%	0.25%
Mining	4	4	3	3	-1	-25.00%	0.08%
Utilities	2	9	7	6	4	200.00%	0.15%
Construction	595	607	619	605	10	1.68%	15.24%
Manufacturing	309	308	304	306	-3	-0.97%	7.71%
Wholesale trade	301	299	296	299	-2	-0.66%	7.53%
Retail trade	539	542	538	576	37	6.86%	14.51%
Transportation & warehousing	117	128	132	119	2	1.71%	3.00%
Information	34	41	41	41	7	20.59%	1.03%
Finance & insurance	170	186	188	182	12	7.06%	4.58%
Real estate & rental & leasing	105	109	105	108	3	2.86%	2.72%
Professional, scientific & technical services	314	339	355	373	59	18.79%	9.39%
Management of companies & enterprises	19	19	20	18	-1	-5.26%	0.45%
Admin, support, waste mgt, remediation services	211	226	225	232	21	9.95%	5.84%
Educational services	29	34	28	29	0	0.00%	0.73%
Health care and social assistance	311	315	322	328	17	5.47%	8.26%
Arts, entertainment & recreation	54	57	59	62	8	14.81%	1.56%
Accommodation & food services	232	237	257	243	11	4.74%	6.12%
Other services (except public administration)	374	375	378	395	21	5.61%	9.95%
Auxiliaries (exc corporate, subsidiary & regional mgt)	5	4	4	4	-1	-20.00%	0.10%
Unclassified establishments	26	31	36	32	6	23.08%	0.81%

Source: County Business Patterns, U.S. Census

Table 9: Classification of Establishments by Change, Medina County, 1998 - 2001

High Growth/High Share	Low Growth/High Share
	Construction
	Retail trade
High Growth/Low Share	Low Growth/Low Share
Utilities	Forestry, fishing, hunting, and agriculture support
Information	Mining
Arts, entertainment & recreation	Manufacturing
	Wholesale trade
	Transportation & warehousing
	Real estate & rental & leasing
	Management of companies & enterprises
	Educational services
Moderate Growth/Share	
Finance & insurance	
Admin, support, waste mgt, remediation services	
Health care and social assistance	
Accommodation & food services	
Other services (except public administration)	

Source: County Business Patterns, U.S. Census

As noted previously, Medina County’s economy has not been as robust as Brunswick’s, and none of the sectors met the high growth/high share threshold. Comparing Tables 5 and 7 indicates some surprises:

- Brunswick’s strength in the Construction sector has not been typical of the County as a whole. In fact, it appears that virtually all of Medina County’s growth in this sector has occurred in the 44212 ZIP code.
- Both Brunswick and Medina County have a high share of retail establishments, but this sector has seen very little growth.
- Manufacturing has shown significantly stronger growth in Brunswick than in the County as a whole.
- Information businesses are experiencing a higher proportion of growth in the County than in Brunswick.

Finally, it may be useful to compare Brunswick’s distribution to that of the United States in order to determine the degree to which Brunswick’s local economy is following national trends. Tables 10 and 11 provide the same data for the United States.



Table 10: Change in Establishments, USA, 1998 - 2001

	1998	1999	2000	2001	Net change 1998-2001	Percent Change 1998-2001	2001 Percent of total
Total	6,941,822	7,008,444	7,070,048	7,095,302	153,480	2.21%	100.00%
Forestry, fishing, hunting, and agriculture support	27,263	26,926	26,076	26,447	-816	-2.99%	0.37%
Mining	24,653	23,699	23,738	24,319	-334	-1.35%	0.34%
Utilities	15,890	16,578	17,301	17,702	1,812	11.40%	0.25%
Construction	692,296	698,541	709,590	698,898	6,602	0.95%	9.85%
Manufacturing	366,249	360,244	354,498	352,619	-13,630	-3.72%	4.97%
Wholesale trade	453,714	450,030	446,237	438,924	-14,790	-3.26%	6.19%
Retail trade	1,113,137	1,111,260	1,113,573	1,119,950	6,813	0.61%	15.78%
Transportation & warehousing	186,162	187,339	190,044	190,683	4,521	2.43%	2.69%
Information	120,552	126,510	133,590	137,293	16,741	13.89%	1.93%
Finance & insurance	412,251	418,337	423,727	425,028	12,777	3.10%	5.99%
Real estate & rental & leasing	292,288	298,080	300,177	307,003	14,715	5.03%	4.33%
Professional, scientific & technical services	687,230	704,779	722,698	736,454	49,224	7.16%	10.38%
Management of companies & enterprises	43,678	46,528	47,387	47,559	3,881	8.89%	0.67%
Admin, support, waste mgt, remediation services	350,880	350,401	351,528	362,665	11,785	3.36%	5.11%
Educational services	64,844	66,492	68,014	70,878	6,034	9.31%	1.00%
Health care and social assistance	649,408	649,846	658,559	671,370	21,962	3.38%	9.46%
Arts, entertainment & recreation	102,794	102,786	103,816	105,961	3,167	3.08%	1.49%
Accommodation & food services	544,250	539,576	542,411	548,569	4,319	0.79%	7.73%
Other services (except public administration)	718,721	717,892	723,323	719,402	681	0.09%	10.14%
Auxiliaries (exc corporate, subsidiary & regional mgt)	13,816	14,589	14,793	14,934	1,118	8.09%	0.21%
Unclassified establishments	61,746	98,011	98,968	78,644	16,898	27.37%	1.11%

Source: County Business Patterns, U.S. Census

Table 11: Classification of Establishments by Change, USA, 1998 - 2001

High Growth/High Share	Low Growth/High Share
	Construction Retail trade Health care and social assistance Other services (except public administration)
High Growth/Low Share	Low Growth/Low Share
Utilities Information Management of companies & enterprises Educational services Auxiliaries (exc corporate, subsidiary & regional mgt)	Forestry, fishing, hunting, and agriculture support Mining Manufacturing Wholesale trade Transportation & warehousing Arts, entertainment & recreation Accommodation & food services
Moderate Growth/Share	
Finance & insurance Real estate & rental & leasing Admin, support, waste mgt, remediation services Professional, scientific & technical services	

Source: County Business Patterns, U.S. Census

Again, the conclusions are surprising:

- Construction is a Low Growth industry nationwide.
- The Retail Trade sector shows the same basic characteristics at the national, Medina County and Brunswick levels.
- The Health Care sector is growing more strongly in Brunswick and Medina County than in the United States.
- Manufacturing is a Low Growth/Low Share sector nationwide, reinforcing Brunswick’s unusual strength in this sector.
- Brunswick and Medina County are experiencing unusually high growth in Arts & Recreation-related businesses, and stronger growth and shares than average in Accommodations & Food Services, Wholesale Trade and several other small categories.
- Brunswick is experiencing unusually low growth and low share in Information sector businesses compared to the County and the nation.



Section 4: Brunswick Establishment Size Distribution

As Section 3 indicated, businesses with small numbers of employees appear to dominate the Brunswick market. Small businesses represent the majority of economic activity at all levels; the overwhelming majority of Americans work for establishments with less than 1,000 employees.

As with other types of data, the *County Business Patterns* do not provide the specific number of employees in each sector at the local level. Instead, establishments are grouped in size categories according to the number of employees. Tables 12 and 13 provide this information for Brunswick for 1998 and 2001. The distribution of establishments in these years is shown in Chart 5.

Table 12: Establishment size distribution, 1998

Industry Code Description	Number of employees										Percent Less than 10 Employees
	Total Establishments	'1-4'	'5-9'	'10-19'	'20-49'	'50-99'	'100-249'	'250-499'	'500-999'	'1000 or more'	
Total	659	345	122	109	59	18	5	0	1	0	70.86%
Construction	85	56	12	11	6	0	0	0	0	0	80.00%
Manufacturing	34	7	6	6	13	2	0	0	0	0	38.24%
Wholesale trade	46	25	7	6	7	1	0	0	0	0	69.57%
Retail trade	112	47	27	23	6	7	2	0	0	0	66.07%
Transportation & warehousing	23	17	2	3	0	1	0	0	0	0	82.61%
Information	8	3	2	2	1	0	0	0	0	0	62.50%
Finance & insurance	33	20	6	7	0	0	0	0	0	0	78.79%
Real estate & rental & leasing	16	9	3	2	2	0	0	0	0	0	75.00%
Professional, scientific & technical services	55	42	2	10	1	0	0	0	0	0	80.00%
Management of companies & enterprises	3	0	0	1	1	1	0	0	0	0	0.00%
Admin, support, waste mgt, remediation services	41	24	8	4	1	1	2	0	1	0	78.05%
Educational services	11	9	1	0	1	0	0	0	0	0	90.91%
Health care and social assistance	49	20	12	13	3	0	1	0	0	0	65.31%
Arts, entertainment & recreation	7	3	2	1	0	1	0	0	0	0	71.43%
Accommodation & food services	52	18	5	11	14	4	0	0	0	0	44.23%
Other services (except public administration)	79	41	27	8	3	0	0	0	0	0	86.08%
Auxiliaries (exc corporate, subsidiary & r)	1	1	0	0	0	0	0	0	0	0	100.00%
Unclassified establishments	4	3	0	1	0	0	0	0	0	0	75.00%

Source: County Business Patterns, U.S. Census

Table 13: Establishment size distribution, 2001

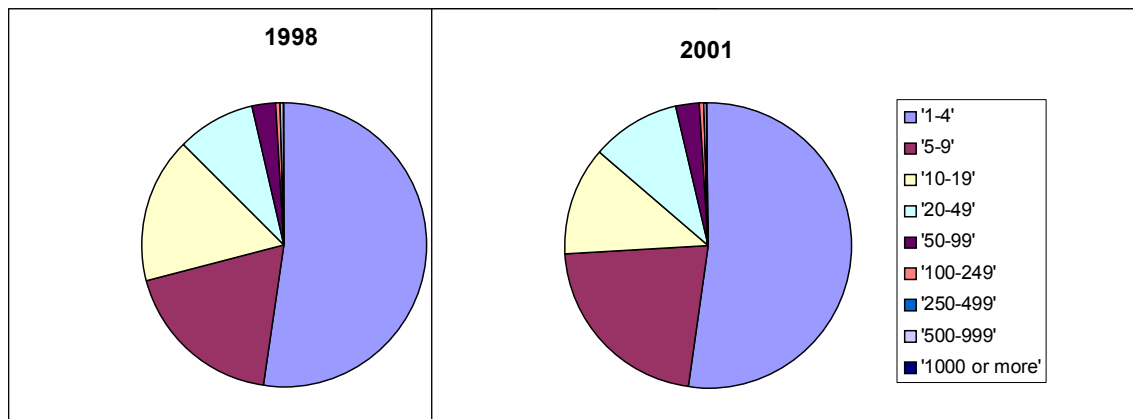


Number of employees

Industry Code Description	Total Establishments										Percent Less than 10 Employees
	'1-4'	'5-9'	'10-19'	'20-49'	'50-99'	'100-249'	'250-499'	'500-999'	'1000 or more'		
Total	701	365	152	89	69	21	3	1	1	0	73.75%
Construction	99	69	23	5	2	0	0	0	0	0	92.93%
Manufacturing	41	11	6	5	17	1	0	1	0	0	41.46%
Wholesale trade	50	23	13	7	7	0	0	0	0	0	72.00%
Retail trade	114	40	32	24	9	8	1	0	0	0	63.16%
Transportation & warehousing	19	12	6	0	1	0	0	0	0	0	94.74%
Information	7	3	1	1	2	0	0	0	0	0	57.14%
Finance & insurance	40	27	7	6	0	0	0	0	0	0	85.00%
Real estate & rental & leasing	15	9	4	1	1	0	0	0	0	0	86.67%
Professional, scientific & technical servi	60	41	6	9	3	1	0	0	0	0	78.33%
Management of companies & enterprises	4	1	0	0	1	2	0	0	0	0	25.00%
Admin, support, waste mgt, remediation ser	45	30	8	2	3	1	0	0	1	0	84.44%
Educational services	6	5	0	0	0	1	0	0	0	0	83.33%
Health care and social assistance	53	19	13	7	11	1	2	0	0	0	60.38%
Arts, entertainment & recreation	8	5	0	2	0	1	0	0	0	0	62.50%
Accommodation & food services	56	22	8	12	9	5	0	0	0	0	53.57%
Other services (except public administration	78	43	24	8	3	0	0	0	0	0	85.90%
Auxiliaries (exc corporate, subsidiary & r	1	0	1	0	0	0	0	0	0	0	100.00%
Unclassified establishments	5	5	0	0	0	0	0	0	0	0	100.00%

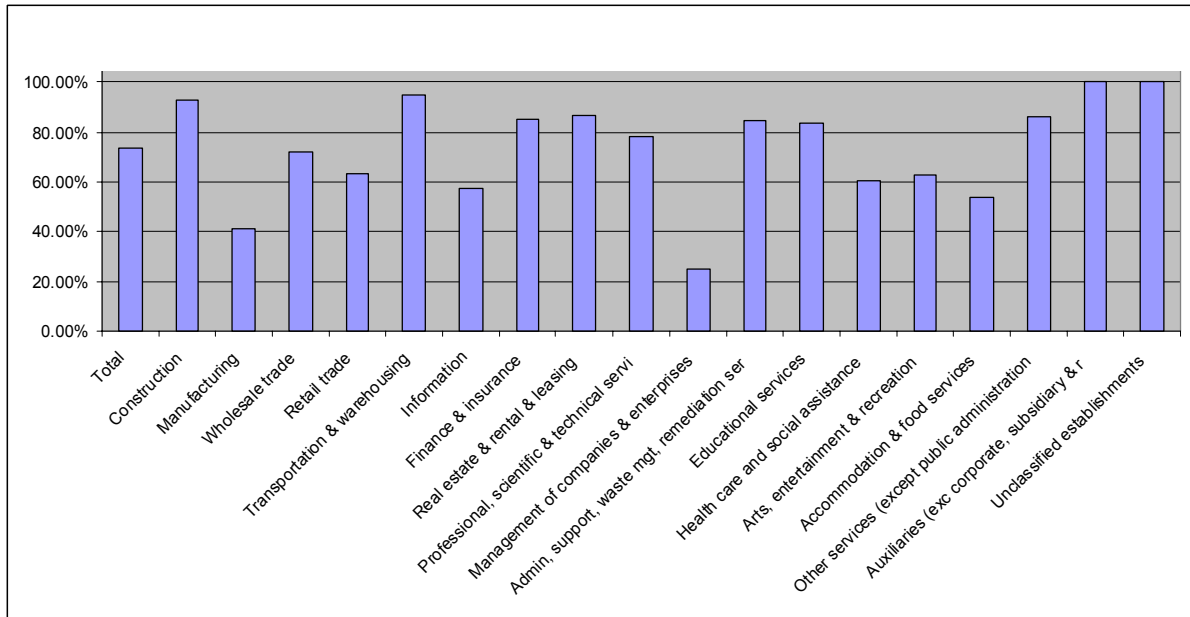
Source: County Business Patterns, U.S. Census

Chart 5: Establishment Size Distribution, 1998 and 2001



Brunswick’s industrial sectors are dominated to varying degrees by extremely small businesses. Chart 6 illustrates the degrees to which Brunswick’s industrial sectors have this characteristic. This data is provided only for the 2001, since the overall distribution did not change significantly between 1998 and 2001.

Chart 6: Percent of Brunswick Establishments, Less than 10 Employees, 2001



- Of the largest sectors, only the Manufacturing sector has a minority of establishments with less than 10 employees. The only sector with a smaller proportion of establishments with less than ten employees has only four total establishments.
- With the exception of two very small sectors, Auxilliaries and Unclassified, the highest proportion of very small establishments is in the Transportation & Warehousing sector, followed by Construction and Other Services.

Section 5: Subcategories, Selected Brunswick Industries

Finally, the *County Business Patterns* breaks down each of the industrial sectors to a high level of detail in terms of the sub-categories, or establishment types, in which individual businesses fall within a sector. However, the only data that is available at this level is the number of businesses in that establishment type and the size categories into which those businesses fall. For sectors with a large number of establishments, this data can provide additional insight into the distribution or clustering of business types that may be found in the City.

In Section 3, Brunswick’s industrial sectors were categorized based on the characteristics of their growth (as measured in terms of the number of establishments) and their share of the local establishment base. Many of these sectors represented such a small number of businesses that they do not provide enough data for a meaningful analysis. With one exception, the sectors analyzed below represent the largest sectors in that classification.

Table 14 is a duplicate of Table 7 in Section 3. The copy below identifies in bold type the sectors that are analyzed in this section.

Table 14: Sectors for Establishment Type Analysis

High Growth/High Share	Low Growth/High Share
Construction	Retail trade Other services (except public administration)
High Growth/Low Share	Low Growth/Low Share
Manufacturing Finance & insurance Management of companies & enterprises Arts, entertainment & recreation	Transportation & warehousing Information Real estate & rental & leasing Educational services
Moderate Growth/Share	
Professional, scientific & technical services Wholesale trade Admin, support, waste mgt, remediation ser Health care and social assistance Accommodation & food services Professional, scientific & technical services	

Establishment Type Concentration

The data for these industrial sectors can be analyzed in two ways. First, we can examine the number of businesses within each industrial sector. This analysis will indicate the

degree to which the city's establishments are concentrated in a few specific business types or spread across a wide spectrum. If the businesses within an industrial sector are concentrated in a small number of establishment types, this concentration may indicate an economic or locational strength -- or it could represent saturation. If the businesses within an industrial sector are dispersed across a wide range of establishment types, this lack of concentration may indicate that the city's economic and location characteristics do not provide any particular benefit, or that they provide benefits that can be used by a wide variety of businesses. Examination of the individual establishment types is usually necessary to determine whether the city's establishment concentrations result from advantages or disadvantages.

For the purposes of this type of analysis, establishment types that have a small number of businesses in them are generally removed, since it is assumed that they may occur for reasons other than the city itself and give no indication of the city's strengths or advantages. For this study, establishment types that have only one business in them have been removed from the analysis. Although this threshold is exceptionally low, Brunswick's industries generally demonstrate a very high degree of dispersal across establishment types (that is, there are few categories that have more than three businesses in them). Including establishment types with only two businesses may increase the overall appearance of concentration and may include some categories that simply represent two random occurrences, but not including these categories results in a very small data pool for Brunswick. For the purpose of this analysis, establishment types that include two businesses are assumed to represent something other than random occurrence, although this assumption is not as strong as when there are a larger number of businesses within an establishment type.

Because Brunswick's establishment types are highly dispersed, it makes sense to provide tables listing all of the establishment types in each sector that have two or more establishments. A review of the names of the establishment types listed will begin to give the reader some sense of the characteristics of Brunswick's business distribution.

Table 15: Establishment Types by Number of Establishments, 2001



Construction

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Plumbing, heating & AC contractor	21	21.21%	21	100%
Single-family housing construction	10	10.10%	10	100%
Painting & wall covering contractors	10	10.10%	10	100%
Carpentry contractors	10	10.10%	10	100%
Electrical contractors	8	8.08%	8	100%
Masonry & stone contractors	8	8.08%	8	100%
Excavation contractors	6	6.06%	6	100%
Roofing, siding, & sheet metal contracto	5	5.05%	5	100%
Floor laying & other floor contractors	4	4.04%	4	100%
Concrete contractors	4	4.04%	4	100%
Multifamily housing construction	2	2.02%	2	100%
<i>Total</i>	88	88.89%	88	100%

Administration, Support, Waste Management and Remediation Services

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Landscaping services	14	31.11%	13	93%
Janitorial services	7	15.56%	7	100%
Office administrative services	3	6.67%	3	100%
Temporary help services	3	6.67%	0	0%
Document preparation services	3	6.67%	3	100%
Carpet & upholstery cleaning services	3	6.67%	3	100%
Private mail centers	2	4.44%	2	100%
Travel agencies	2	4.44%	2	100%
All other support services	2	4.44%	1	50%
<i>Total</i>	39	86.67%	34	87%

Accommodation and Food Services

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Full-service restaurants	22	39.29%	11	50%
Limited-service restaurants	18	32.14%	9	50%
Drinking places (alcoholic beverages)	8	14.29%	7	88%
Snack & nonalcoholic beverage bars	5	8.93%	2	40%
Hotels (exc casino hotels) & motels	2	3.57%	1	50%
<i>Total</i>	55	98.21%	30	55%



Finance and Insurance

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Insurance agencies & brokerages	14	35.00%	13	93%
Commercial banking	8	20.00%	4	50%
Savings institutions	3	7.50%	2	67%
Real estate credit	2	5.00%	2	100%
Other credit intermediation activities	2	5.00%	2	100%
Securities brokerage	2	5.00%	2	100%
Investment advice	2	5.00%	2	100%
Direct property & casualty insurance carri	2	5.00%	2	100%
<i>Total</i>	35	87.50%	29	83%

Other Services

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Beauty salons	18	23.08%	14	78%
Religious organizations	15	19.23%	14	93%
Commercial equipment (exc auto & elec)	6	7.69%	6	100%
Automotive body, paint & interior R&M	4	5.13%	2	50%
Drycleaning & laundry services (exc coin-	4	5.13%	4	100%
Labor unions & similar labor organization:	4	5.13%	3	75%
General automotive repair	3	3.85%	3	100%
Oth similar organizations (exc business,	3	3.85%	3	100%
Automotive exhaust system repair	2	2.56%	1	50%
Funeral homes	2	2.56%	1	50%
Pet care (except veterinary) services	2	2.56%	2	100%
<i>Total</i>	63	80.77%	53	84%



Retail trade

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Automotive parts, accessories & tire sto	10	8.77%	5	50%
Gasoline stations with convenience store:	10	8.77%	8	80%
Convenience stores	7	6.14%	4	57%
New car dealers	5	4.39%	0	0%
Other building material dealers	5	4.39%	3	60%
Grocery (except convenience) stores	5	4.39%	2	40%
Furniture stores	4	3.51%	4	100%
Beer, wine & liquor stores	4	3.51%	4	100%
Pharmacies & drug stores	4	3.51%	0	0%
Optical goods stores	4	3.51%	4	100%
Used car dealers	3	2.63%	3	100%
Tire dealers	3	2.63%	2	67%
Floor covering stores	3	2.63%	3	100%
Jewelry stores	3	2.63%	3	100%
All other general merchandise stores	3	2.63%	2	67%
All other misc store retailers (exc tobacco)	3	2.63%	2	67%
Computer & software stores	2	1.75%	2	100%
Paint & wallpaper stores	2	1.75%	2	100%
Hardware stores	2	1.75%	1	50%
Nursery & garden centers	2	1.75%	1	50%
Other gasoline stations	2	1.75%	1	50%
Hobby, toy & game stores	2	1.75%	2	100%
Prerecorded tape, CD & record stores	2	1.75%	2	100%
Florists	2	1.75%	1	50%
Gift, novelty & souvenir stores	2	1.75%	0	0%
<i>Total</i>	94	82.46%	61	65%

Manufacturing

Establishment Type	Total Establishments	Percent of Sector Total	Total Under 10 Employees	Percent of Establishment Type Total
Special die, tool, die set, jig & fixture	3	7.32%	0	0%
Sporting & athletic goods mfg	3	7.32%	1	33%
Machine shops	2	4.88%	2	100%
<i>Total</i>	8	19.51%	3	38%

Professional, Scientific and Technical Services

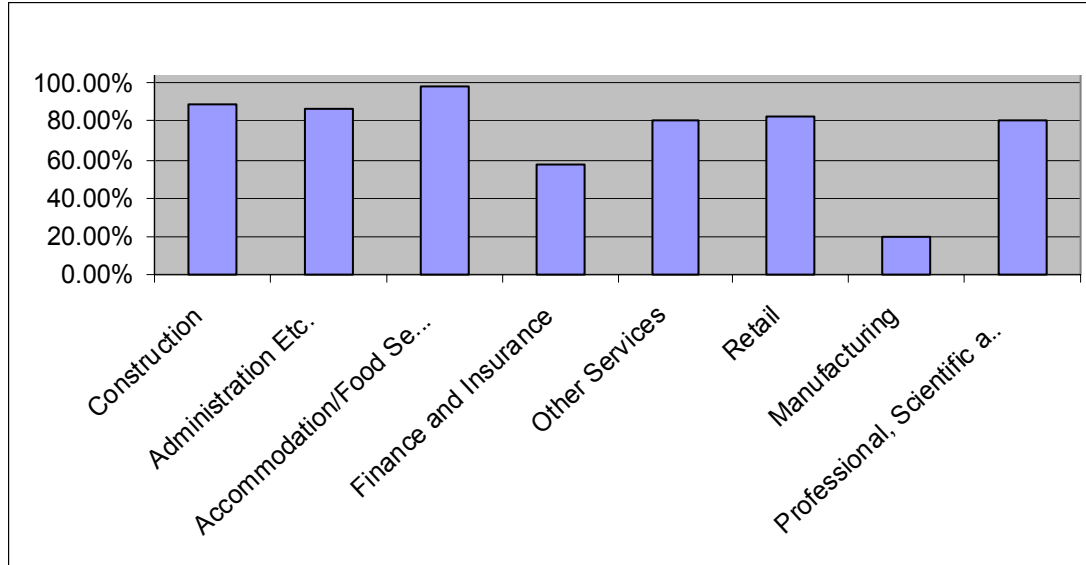
Establishment Type	Total Establishments	Percent of Sector Total	Percent of	
			Total Under 10 Employees	Establishment Type Total
Offices of certified public accountants	6	10.00%	6	100%
Engineering services	6	10.00%	4	67%
Custom computer programming services	6	10.00%	5	83%
Veterinary services	5	8.33%	4	80%
Offices of lawyers	4	6.67%	4	100%
Tax preparation services	4	6.67%	3	75%
Computer systems design services	4	6.67%	3	75%
Marketing consulting services	4	6.67%	3	75%
Other accounting services	3	5.00%	2	67%
Graphic design services	2	3.33%	2	100%
Admin & gen management consulting ser	2	3.33%	2	100%
Photography studios, portrait	2	3.33%	1	50%
<i>Total</i>	48	80.00%	39	81%

As this table indicates, these establishment types represent the majority of the businesses within each sector. Table 16 and Chart 7 illustrate the proportion of each industrial sector's businesses that are in these establishment types, as opposed to establishment types with only one business in Brunswick. This percentage indicates the degree to which businesses in a sector are concentrated in a small group of establishment types or are spread across a large number of establishment types.

Table 16: Establishment Type Concentration, 2001

Industrial Sector	Percent of Sector Total in Cluster Establishment Types
Construction	88.89%
Administration Etc.	86.67%
Accommodation/Food Service	98.21%
Finance and Insurance	57.14%
Other Services	80.77%
Retail	82.46%
Manufacturing	19.51%
Professional, Scientific and Technical Services	80.00%

Chart 7: Average Share per Establishment Type, 2001



As one might expect, most of the sectors show a relatively high level of concentration in establishment types that have more than one establishment in them, given that these percentages include establishment types that have only two businesses in Brunswick. The Manufacturing sector is the notable exception to this rule: of the 41 establishments in the Brunswick manufacturing sector, only 8 are in establishment types that have two or more businesses. The Finance & Insurance sector also shows relatively low levels of establishment type concentration.

It should also be noted that the relatively high concentration of Retail businesses in multiple-business establishment sectors is primarily a result of an extremely high number of establishment types with two entries. There are 18 businesses in establishment types with two entries, and another 24 in establishment types with three entries. Given the size of the retail sector in Brunswick, a two-business establishment type may not indicate any particular advantage, but may simply be a factor of the size of Brunswick's population and the amount of available space. Without the establishment types that have two businesses, the Retail sector's establishment type concentration factor is 66.67%

Finally, the tables above also allow us to analyze the relative establishment sizes of the businesses in multi-business establishment types as compared to the sector as a whole. This allows us to determine whether the size of establishments in the multi-business sectors differs from the sector as a whole.

Table 17: Difference in Establishment Size, 2001



Industrial Sector	Percentage of Multi-Business Establishment Types		Difference
	Less Than 10 Employees	Percentage of Sector Less than 10 Employees	
Construction	100.00%	80.00%	-20.00%
Administration Etc.	87.18%	78.05%	-9.13%
Accommodation/Food Service	54.55%	44.23%	-10.32%
Finance and Insurance	82.86%	78.79%	-4.07%
Other Services	84.13%	86.08%	1.95%
Retail	64.89%	66.07%	1.18%
Manufacturing	37.50%	38.24%	0.74%
Professional, Scientific and Technical Services	81.25%	80.00%	-1.25%
<i>Average</i>	74.04%	68.93%	-5.11%

In general, businesses in the multi-business establishment types are smaller in terms of the number of employees than the sector as a whole. This difference is particularly pronounced in the Construction sector, and indicated that the sector’s most dominant establishment types are dominated by a large number of very small establishments.

Section 6: Conclusions

- Brunswick experienced proportionately stronger growth in the late 1990s and early 2000s than did Medina County or the Cleveland MSA. Not only did Brunswick experience higher growth percentages in the number of establishments and employees, but it experienced a higher rate of payroll growth.
- Brunswick added an extremely high number of establishments in this period – nearly one in five net new businesses in Medina County were established in Brunswick.
- More than 90% of Brunswick’s businesses employed less than ten people. This proportion is even higher for businesses that fall within establishment type concentrations, indicating that much of Brunswick’s economic strength lies in very small businesses.
- Brunswick’s average payroll per employee has historically lagged that of the County and the Cleveland MSA, and Brunswick’s average payroll was still less than the average for the County and MSA in 2001. However, Brunswick experienced higher payroll growth per employee and per establishment during the study period.
- The Construction sector appears to be the most robust of Brunswick’s industries, as measured by growth in the number of establishments. Construction was the only sector with a high growth rate and a high share of the local market, and this was not the case in Medina County or the nation. The Brunswick Construction sector is strongly dominated by businesses with less than ten employees, and the majority of establishment types in the Brunswick Construction sector do specialized construction work, such as painting or plumbing.
- The Brunswick Retail sector had the highest share of establishments in 2001, but it had the second lowest growth rate. The Retail sector is not quite as dominated by very small establishments as some other sectors, but the majority of Retail sector businesses employ less than 10 people. Most significantly, the Retail sector shows very little concentration for a sector of its size – a rather small number of businesses are in establishment types that are shared by more than one other Brunswick business. There is a strong concentration of businesses in several auto-oriented establishment types, such as auto parts and accessories stores and gas stations, and a lesser concentration of businesses in food and pharmaceutical sales. Outside of these areas, however, Brunswick’s retail sector shows an exceptionally wide variety of establishment types.
- Small sectors (in terms of the number of establishments) that have experienced high growth in establishments in Brunswick include Manufacturing and Finance & Insurance. The economic impact of manufacturing is probably underestimated by this data due to the generally larger employment and payroll of manufacturing establishments. The significant growth in the manufacturing sector goes against the trend at both the county and national levels, where manufacturing sector growth has been flat or negative. The Brunswick Manufacturing sector is widely dispersed, with only three establishment types having more than one establishment in the City.



- Brunswick has an exceptionally large number of beauty salons, comprising over 23% of the Other Services sector. The Other Services sector has seen little net establishment growth.
- Several smaller sectors have experienced notable growth in Brunswick during the study period. Professional, Scientific & Technical Services; Wholesale Trade; Health Care & Social Assistance; and Accommodation & Food Service have all experienced solid growth. This growth is generally in line with or stronger than County and national growth trends, indicating robust local sectors.
- The Information sector is surprisingly absent from Brunswick, as compared to County and national trends.