

DEVELOPMENT OPPORTUNITIES

industry screening analysis. This analysis consists of two parts: an examination of basic versus non-basic industries using location quotients; and an exploration of local versus national components of job growth using shift-share analysis. These analytic methods are described in more detail below.

Location Quotient

The location quotient is a statistical tool for examining employment conditions in a geographic area (in this case a county) to determine a community's degree of self-sufficiency in a particular economic sector. The location quotient is used to identify exporting activity and is calculated by dividing the percentage of those employed locally in a particular sector by the percentage of those employed in the same sector nationally.

The location quotient (“LQ”) is a measure of industry concentration that can be used to interpret whether a county is self-sufficient, is an importer, or is an exporter in a particular sector. An LQ that is approximately one (.75-1.25) suggests self-sufficiency; a location quotient less than .75 shows that a county is probably an importer. If the location quotient is greater than 1.25, the county is considered an exporter in that sector. The greater the location quotient, the more significant that sector is to the local economy. Industries that are net exporters ($LQ > 1$, for this analysis are considered “basic” to the local economy while those that are net importers ($LQ < 1$, for this analysis are considered “non-basic”.

In general, industries providing basic-sector employment are considered more attractive from an economic development perspective, since they bring money in from outside the local economy and help to create supporting jobs in non-basic sectors.

Shift Share Analysis

Shift-share analysis is a technique for using employment data over time to explore components of local job growth. The analysis divides the change in local industry employment into three components:

National growth share – The share of local job growth that can be attributed to growth of the national economy. If the nation as a whole is experiencing employment growth, one would expect

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local economies to benefit as a result (“a rising tide lifts all boats”). This factor describes the change that would be expected simply by virtue of the fact that the local area is part of a changing national economy. Step one of the shift-share analysis is to separate the national growth share, or the number of jobs lost or gained in a local region if total employment in the area had changed at the same rate as overall total national employment.

Industry mix – The share of local job growth that can be explained by the region’s mix of industries being analyzed. This factor is the change in a local industry that would be attributable to the growth or decline of that particular industry sector nationwide. This component isolates the fact that nationwide, some industries have grown faster or slower than others. It represents the contribution that a specific industry nationally has made to the change in the number of jobs in the region.

Local share (Regional shift) – This share of local job growth describes the extent to which factors unique to the local area have caused growth or decline in regional employment of an industrial group. We observe that even during periods of general prosperity, some regions and some industries grow faster than others. This is usually attributed to some local comparative advantage such as natural resources, linked industries, or favorable local labor conditions. The local component aids in identifying a local area’s economic strengths. This element of the analysis is a representation of how a region’s competitive position can contribute to regional job growth. Shift-share, and the local share component in particular, can point to industries that enjoy local comparative advantage.

From an economic development perspective, industries with strong positive national growth and significant local advantages are the most desirable, as they have the greatest potential of seeing robust job growth locally in the future. For this analysis, we categorize nationally growing industries with positive local shares as “winners”.

Industries with strong local shares but negative national employment growth-- i.e. where the local economy has seen job growth (or slower job loss) despite national job declines – are categorized as “questionable”. These sectors may have potential for local growth, but that potential is in some question because of national performance.

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Industries that are declining nationally in terms of employment and also suffering locally are considered “losers” and are screened out of future economic development consideration, on the assumption that they present little potential for positive job growth.

Methodology

For the limited target industry analysis presented here, we use County Business Patterns data from the U.S. Census to examine job growth from 1998 to 2002 (the latest available year of data) in Boulder County, Larimer County, and Weld County. To develop location quotients and shift-share metrics, this county-level employment growth data is compared to national employment growth data. Industries are defined using NAICS (North American Industry Classification System) categories at the sector level.

Although Longmont is in Boulder County, shares employment infrastructure similarities with both Larimer and Weld Counties. Therefore, industries considered attractive for these counties (using criteria discussed above) should be considered to have economic development potential for Longmont as well.

Findings

Tables detailing results for each county follow the summary text shown below.

Boulder County - From 1998 to 2002, the U.S. economy entered a recessionary period, but still averaged job growth of 1.0 percent annually. Over the same time period, Boulder County employment grew at a slightly faster average pace of 1.3% per year. Several industry sectors experienced positive national growth and positive local share of growth. These “winner” sectors include:

- Information
- Finance & Insurance
- Real Estate, Rental & Leasing
- Professional, Scientific & Technical Services
- Administration, Support, Waste mgt., Remediation
- Accommodation & Food Services
- Auxiliaries, incl. Corporate Subsidiaries

Some industries grew locally at better than expected rates, but failed to grow at the national level. These “questionable” industries include:

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- Support for Agriculture and Related Services
- Mining (incl. Oil & Gas)
- Utilities
- Wholesale Trade

Of the winner and questionable sectors, we can further screen out industries having a location quotient (LQ) lower than 1.0. These industries have a lower than expected concentration in the local economy and are not likely to export (i.e. they do not attract net dollars from outside the local economy). For Boulder County, all questionable sectors had low LQ's:

- Support for Agriculture and Related Services
- Mining (incl. Oil & Gas)
- Utilities
- Wholesale Trade

Of the winner sectors, the following had low LQs:

- Finance & Insurance
- Administration, Support, Waste mgt., Remediation

Thus, for this exercise, the following industries for Boulder County are considered to be good candidates for economic development targeting because of their high job growth potential and positive net contribution to the local economy:

- *Information*
- *Real Estate, Rental & Leasing*
- *Professional, Scientific & Technical Services*
- *Accommodation & Food Services*
- *Auxiliaries, incl. Corporate Subsidiaries*

Weld County - From 1998 to 2002, Weld County employment grew at pace of 2.6% per year.

Several industry sectors experienced positive national growth and positive local share of growth.

These "winner" sectors include:

- Construction
- Transportation & Warehousing
- Information
- Finance & Insurance
- Real Estate, Rental & Leasing

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- Professional, Scientific & Technical Services
- Management of Companies & Enterprises
- Education Services
- Healthcare and Social Assistance
- Other Services (except public administration)
- Auxiliaries, incl. Corporate Subsidiaries

Of these winners, however, all had LQs less than 1.0, suggesting that they are non-basic industries, screening them from future consideration.

Only one industry in Weld County, *Transportation & Warehousing*, was both questionable and basic, suggesting it should be kept as a candidate for economic development retention and expansion efforts.

Larimer County - From 1998 to 2002, Weld County employment grew at pace of 2.3% per year. Several industry sectors experienced positive national growth and positive local share of growth. These “winner” sectors include:

- Construction
- Retail Trade
- Information
- Finance & Insurance
- Real Estate, Rental & Leasing
- Professional, Scientific & Technical Services
- Management of Companies & Enterprises
- Education Services
- Healthcare and Social Assistance
- Arts, Entertainment & Recreation
- Other Services (except public administration)
- Auxiliaries, incl. Corporate Subsidiaries

Of the winner sectors, we can further screen out industries having a location quotient (LQ) lower than 1.0. These industries have a lower than expected concentration in the local economy and are not likely to export (i.e. they do not attract net dollars from outside the local economy). For Larimer County, these sectors included:

- Information
- Finance & Insurance
- Management of Companies & Enterprises

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- Education Services
- Healthcare and Social Assistance
- Arts, Entertainment & Recreation
- Other Services (except public administration)
- Auxiliaries, incl. Corporate Subsidiaries

As with Weld County, only Warehousing was both questionable and basic. Thus, assuming that Larimer County industries may provide some insight into job growth potential for Longmont, we could add the following industries to the list of Boulder County candidates for economic development:

- Construction
- Retail Trade

These, however, are industries which tend to closely follow strong residential growth, with basic growth potential that is more temporary in nature. As such, no new industries, aside from the questionable Warehousing sector, appear to warrant further consideration in Longmont, above and beyond the list suggested by the analysis of Boulder County alone.

Conclusion

Based on the analyses summarized above and in Tables 7, 8, 9 and 10, the following industries and business groups have been identified as having potential for local investment. They reflect the competitive advantages of the Longmont sub-regional market areas. These industry groups suggest potential for future growth in sales and employment, both regionally and nationally, and they are considered compatible with Longmont's sub-regional markets.

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Table 7
 Target Industry Opportunities
 Longmont Planning Area

NAICS	Industry
51	Information
53	Real Estate, Rental & Leasing
54	Professional, Scientific & Technical Services
72	Accommodation & Food Services
95	Auxiliaries, incl. Corporate Subsidiaries
48	Transportation & Warehousing

Source: County Business Patterns and Leland Consulting Group. 
 NAICS = North American Industry Classification System

It is important to reiterate at this point: the value of the Target Industry Analysis is to provide direction to future marketing efforts, as well as assist in identifying necessary land uses and services within a planning area. The likelihood of all of these industries locating within Longmont market areas is extremely remote, while the potential for one or a combination of these industries is greater. Additionally, the potential for any of these industries, or a similar industry within the industry group, to locate within Longmont is very possible, given the similarities of location criteria among the various industry groups. Thus, the value of the Target Industry Analysis as it impacts the Midtown Redevelopment Plan is significant.

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Table 6
Target Industry Analysis
Boulder County

NAICS	Industry	Boulder County		U.S.		National Industry Growth Rate	Total Regional Job Growth (5- yrs)	Growth due to...			National Industry CAGR	Local Industry CAGR	LQ	winner, question, loser
		1998 employees	2002 employees	1998 employees	2002 employees			Overall National Job Growth Share	National Growth by Industry Share	Local Share by Industry				
51	Information	5,869	7,372	3,141,957	3,536,120	0.13	1,503	232	504	767	3.0%	5.9%	1.63	w
52	Finance & insurance	3,645	4,225	5,770,209	6,414,583	0.11	580	144	263	173	2.7%	3.8%	0.52	w
53	Real estate & rental & leasing	2,406	2,719	1,812,621	2,017,347	0.11	313	95	176	41	2.7%	3.1%	1.06	w
54	Professional, scientific & tech. services	17,000	22,016	6,051,636	7,046,205	0.16	5,016	673	2,120	2,222	3.9%	6.7%	2.45	w
56	Admin, support, waste mgt, remediation	8,494	9,488	7,774,610	8,299,217	0.07	994	336	237	421	1.6%	2.8%	0.90	w
72	Accommodation & food services	12,962	15,201	9,466,088	10,048,875	0.06	2,239	513	285	1,441	1.5%	4.1%	1.18	w
95	Auxiliaries (corp., subsidiary, etc)	905	4,032	916,349	1,011,496	0.10	3,127	36	58	3,033	2.5%	45.3%	3.12	w
11	Support for agriculture and related svcs.	15	100	187,133	181,162	-0.03	85	1	-1	85	-0.8%	60.7%	0.43	q
21	Mining	117	212	497,843	465,775	-0.06	95	5	-12	103	-1.7%	16.0%	0.36	q
22	Utilities	290	310	682,217	648,254	-0.05	20	11	-26	34	-1.3%	1.7%	0.37	q
42	Wholesale trade	5,849	8,597	5,884,946	5,860,256	0.00	2,748	232	-256	2,773	-0.1%	10.1%	1.15	q
23	Construction	7,081	6,434	5,798,261	6,307,370	0.09	-647	281	341	-1,269	2.1%	-2.4%	0.80	l
31	Manufacturing	26,368	18,289	16,945,834	14,393,609	-0.15	-8,079	1,045	-5,016	-4,108	-4.0%	-8.7%	0.99	l
44	Retail trade	17,624	18,047	14,240,726	14,819,904	0.04	423	698	19	-294	1.0%	0.6%	0.95	l
48	Transportation & warehousing	1,307	958	3,462,472	3,581,013	0.03	-349	52	-7	-394	0.8%	-7.5%	0.21	l
55	Management of companies & enterprises	4,394	2,149	2,703,798	2,913,798	0.08	-2,245	174	167	-2,586	1.9%	-16.4%	0.58	l
61	Educational services	2,086	2,198	2,323,744	2,701,675	0.16	112	83	257	-227	3.8%	1.3%	0.64	l
62	Health care and social assistance	12,030	12,937	13,757,996	14,900,148	0.08	907	477	522	-92	2.0%	1.8%	0.68	l
71	Arts, entertainment & recreation	2,071	2,274	1,583,783	1,800,991	0.14	203	82	202	-81	3.3%	2.4%	0.99	l
81	Other services (except public admin.)	5,585	5,983	5,037,866	5,420,087	0.08	398	221	202	-26	1.8%	1.7%	0.86	l
99	Unclassified establishments	48	8	77,642	32,769	-0.58	-40	2	-30	-12	-19.4%	-36.1%	0.19	l
Total		136,146	143,549	108,117,731	112,400,654						1.0%	1.3%		
National Employment Growth Rate		0.040												

Source: County Business Patterns; and Leland Consulting Group

Winner = positive national growth and positive local share of growth for that industry sector

Questionable = positive local share of growth, but industry is shrinking nationally

Loser = negative national growth and negative local share of growth for that industry

LQ = sector's share of employment locally relative to nationally (if LQ > 1, sector jobs are a greater percentage of total jobs in the region than they are in the nation)

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Table 7
Target Industry Analysis
Larimer County

NAICS	Industry	Larimer County		U.S.		National Industry Growth Rate	Total Regional Job Growth (5- yrs)	Growth due to...			National Industry CAGR	Local Industry CAGR	LQ	winner, question, loser
		1998 employees	2002 employees	1998 employees	2002 employees			Overall National Job Growth Share	National Growth by Industry Share	Local Share by Industry				
23	Construction	7,770	8,702	5,798,261	6,307,370	0.09	932	308	374	250	2.1%	2.9%	1.61	w
44	Retail trade	14,193	15,646	14,240,726	14,819,904	0.04	1,453	562	15	876	1.0%	2.5%	1.23	w
51	Information	2,035	2,613	3,141,957	3,536,120	0.13	578	81	175	323	3.0%	6.4%	0.86	w
52	Finance & insurance	2,752	3,170	5,770,209	6,414,583	0.11	418	109	198	111	2.7%	3.6%	0.58	w
53	Real estate & rental & leasing	1,686	2,033	1,812,621	2,017,347	0.11	347	67	124	157	2.7%	4.8%	1.18	w
54	Professional, scientific & tech. services	5,014	6,606	6,051,636	7,046,205	0.16	1,592	199	625	768	3.9%	7.1%	1.09	w
55	Management of companies & enterprises	493	619	2,703,798	2,913,798	0.08	126	20	19	88	1.9%	5.9%	0.25	w
61	Educational services	897	1,441	2,323,744	2,701,675	0.16	544	36	110	398	3.8%	12.6%	0.62	w
62	Health care and social assistance	9,003	11,111	13,757,996	14,900,148	0.08	2,108	357	391	1,361	2.0%	5.4%	0.87	w
71	Arts, entertainment & recreation	1,052	1,447	1,583,783	1,800,991	0.14	395	42	103	251	3.3%	8.3%	0.94	w
81	Other services (except public admin.)	3,999	4,575	5,037,866	5,420,087	0.08	576	158	145	273	1.8%	3.4%	0.98	w
95	Auxiliaries (corp., subsidiary, etc)	875	1,539	916,349	1,011,496	0.10	664	35	56	573	2.5%	15.2%	1.78	w
11	Support for agriculture and related svcs.	44	81	187,133	181,162	-0.03	37	2	-3	38	-0.8%	16.5%	0.52	q
21	Mining	143	172	497,843	465,775	-0.06	29	6	-15	38	-1.7%	4.7%	0.43	q
22	Utilities	213	245	682,217	648,254	-0.05	32	8	-19	43	-1.3%	3.6%	0.44	q
42	Wholesale trade	2,590	5,315	5,884,946	5,860,256	0.00	2,725	103	-113	2,736	-0.1%	19.7%	1.06	q
99	Unclassified establishments	33	70	77,642	32,769	-0.58	37	1	-20	56	-19.4%	20.7%	2.49	q
31	Manufacturing	14,121	11,914	16,945,834	14,393,609	-0.15	-2,207	559	-2,686	-80	-4.0%	-4.2%	0.97	l
48	Transportation & warehousing	1,269	1,051	3,462,472	3,581,013	0.03	-218	50	-7	-261	0.8%	-4.6%	0.34	l
56	Admin, support, waste mgt, remediation	8,376	5,953	7,774,610	8,299,217	0.07	-2,423	332	233	-2,988	1.6%	-8.2%	0.84	l
72	Accommodation & food services	11,372	12,033	9,466,088	10,048,875	0.06	661	450	250	-39	1.5%	1.4%	1.40	l
Total		87,930	96,336	108,117,731	112,400,654						1.0%	2.3%		
	National Employment Growth Rate		0.040											

Winner = positive national growth and positive local share of growth for that industry sector

Questionable = positive local share of growth, but industry is shrinking nationally

Loser = negative national growth and negative local share of growth for that industry

LQ = sector's share of employment locally relative to nationally (if LQ > 1, sector jobs are a greater percentage of total jobs in the region than they are in the nation)

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Table 8
Target Industry Analysis
Weld County

NAICS	Industry	Weld County		U.S.		National Industry Growth Rate	Total Regional Job Growth (5- yrs)	Growth due to...			National Industry CAGR	Local Industry CAGR	LQ	winner, question, loser
		1998 employees	2002 employees	1998 employees	2002 employees			National Job Growth Share	National Growth by Industry Share	Local Share by Industry				
23	Construction	6,230	8,393	5,798,261	6,307,370	0.09	2,163	247	300	1,616	2.1%	7.7%	2.55	w
48	Transportation & warehousing	1,201	1,408	3,462,472	3,581,013	0.03	207	48	-6	166	0.8%	4.1%	0.75	w
51	Information	544	751	3,141,957	3,536,120	0.13	207	22	47	139	3.0%	8.4%	0.41	w
53	Real estate & rental & leasing	589	817	1,812,621	2,017,347	0.11	228	23	43	161	2.7%	8.5%	0.78	w
54	Professional, scientific & tech. services	1,213	2,119	6,051,636	7,046,205	0.16	906	48	151	707	3.9%	15.0%	0.58	w
55	Management of companies & enterprises	994	1,449	2,703,798	2,913,798	0.08	455	39	38	378	1.9%	9.9%	0.95	w
61	Educational services	184	407	2,323,744	2,701,675	0.16	223	7	23	193	3.8%	22.0%	0.29	w
62	Health care and social assistance	5,566	6,694	13,757,996	14,900,148	0.08	1,128	220	242	666	2.0%	4.7%	0.86	w
72	Accommodation & food services	4,172	4,896	9,466,088	10,048,875	0.06	724	165	92	467	1.5%	4.1%	0.93	w
81	Other services (except public admin.)	1,906	2,179	5,037,866	5,420,087	0.08	273	76	69	128	1.8%	3.4%	0.77	w
95	Auxiliaries (corp., subsidiary, etc)	7	30	916,349	1,011,496	0.10	23	0	0	22	2.5%	43.9%	0.06	w
21	Mining	544	680	497,843	465,775	-0.06	136	22	-57	171	-1.7%	5.7%	2.80	q
22	Utilities	270	316	682,217	648,254	-0.05	46	11	-24	59	-1.3%	4.0%	0.93	q
31	Manufacturing	11,260	9,760	16,945,834	14,393,609	-0.15	-1,500	446	-2,142	196	-4.0%	-3.5%	1.30	q
42	Wholesale trade	2,816	2,694	5,884,946	5,860,256	0.00	-122	112	-123	-110	-0.1%	-1.1%	0.88	q
99	Unclassified establishments	24	11	77,642	32,769	-0.58	-13	1	-15	1	-19.4%	-17.7%	0.64	q
11	Support for agriculture and related svcs.	82	48	187,133	181,162	-0.03	-34	3	-6	-31	-0.8%	-12.5%	0.51	l
44	Retail trade	7,135	7,393	14,240,726	14,819,904	0.04	258	283	8	-32	1.0%	0.9%	0.96	l
52	Finance & insurance	3,704	4,060	5,770,209	6,414,583	0.11	356	147	267	-58	2.7%	2.3%	1.21	l
56	Admin, support, waste mgt, remediation	3,978	4,093	7,774,610	8,299,217	0.07	115	158	111	-153	1.6%	0.7%	0.94	l
71	Arts, entertainment & recreation	476	465	1,583,783	1,800,991	0.14	-11	19	46	-76	3.3%	-0.6%	0.49	l
Total		52,895	58,663	108,117,731	112,400,654						1.0%	2.6%		
National Employment Growth Rate		0.040												

Winner = positive national growth and positive local share of growth for that industry sector

Questionable = positive local share of growth, but industry is shrinking nationally

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LQ = sector's share of employment locally relative to nationally (if LQ > 1, sector jobs are a greater percentage of total jobs in the region than they are in the nation)

CAGR = Compound Annual Growth Rate