

Shift-Share Analysis

While a location quotient measures the relative concentration of an industry sector at a given point in time, a shift-share analysis further accounts for the competitiveness of a specific region's industries, analyzes the local economic base by measuring the changes in the industry over time, and determines whether the changes are related to state or national trends or to a local competitive factor.

Shift-share analysis is used to account for the competitiveness of a region's industries and to analyze the local economic base. The analysis is primarily used to decompose employment changes within an economy over a specific period of time into three contributing factors:

- 1. Growth that is attributable to growth of the national economy*
- 2. Growth that is attributable to the mix of faster- or slower-than-average-growing industries*
- 3. Growth that is attributable to the competitive nature of the local industries*

For East Cocalico Township, our analysis was conducted in three steps:

Step One – We first calculated the actual change in employment by industry sector between 2003 and 2008 for East Cocalico Township and for Pennsylvania for comparison (see column A in Table 17).

Step Two – We calculated the expected change in each industry sector if East Cocalico Township had grown or declined at a rate that mirrored Pennsylvania's rate (see column B in Table 17).

Step Three – By subtracting the expected change in step two from the actual change in step one, we arrive at a number that measures employment change that reflects a competitive market for East Cocalico Township (see column C in Table 17).

Note that in cases in which an industry sector experienced growth in East Cocalico Township, but would have declined if it had changed at state trends, the change based on local factors is greater than the actual change, which indicates that the existing local factors give East Cocalico Township a competitive advantage in that particular industry sector. These local factors can include things such as workforce, market, natural resources, business clusters, etc. It should be noted, however, that shift-share analysis cannot specifically identify the actual comparative advantage. East Cocalico Township appears to have a competitive advantage in eight sectors, with a notable advantage in three sectors: (1) Manufacturing; (2) Retail Trade; and (3) Transportation and Warehousing.

A summary of East Cocalico Township's changes in employment numbers is presented in Table 16 and a summary of the results of the shift-share analysis is presented in Table 17 and Figure 5.

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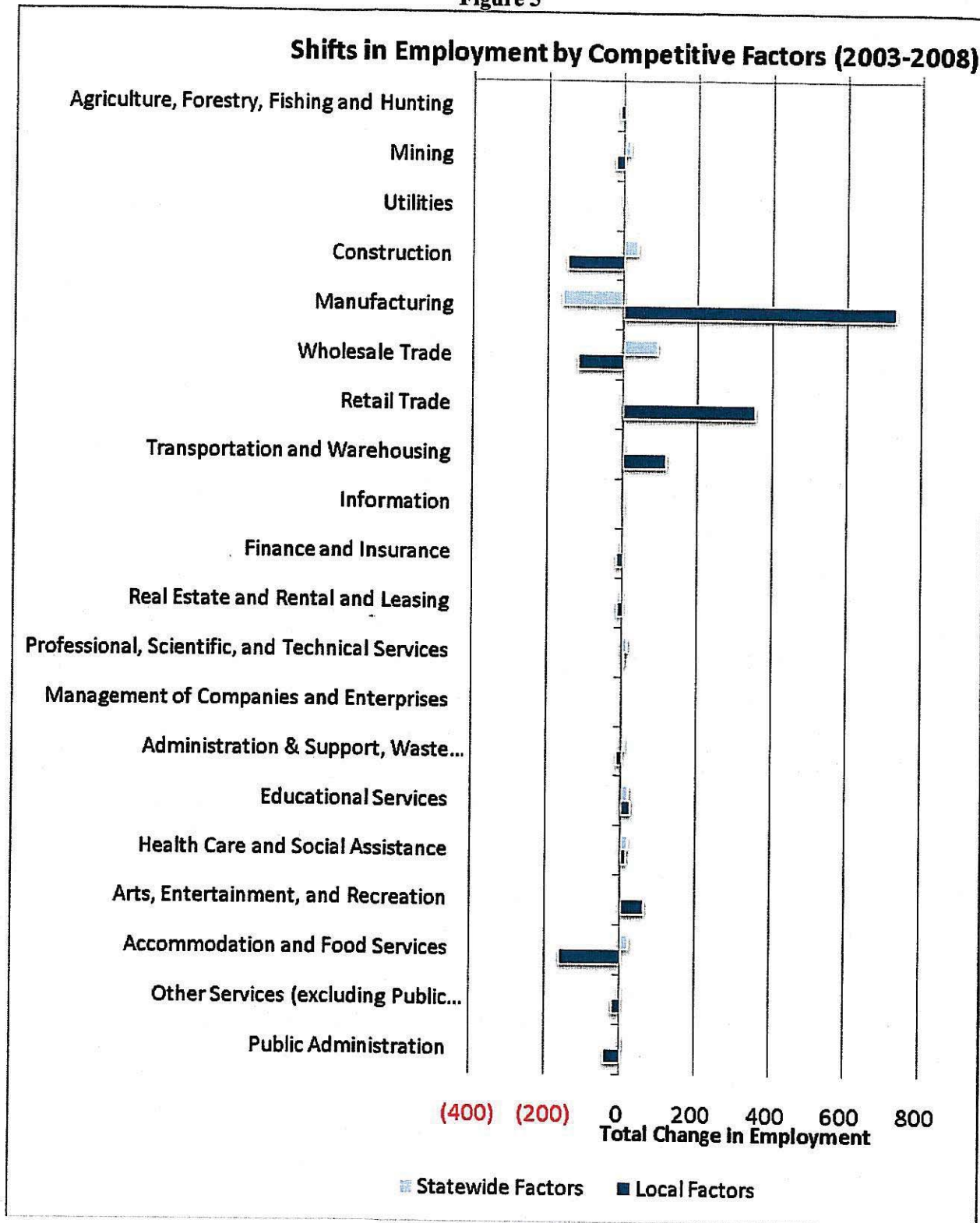
TABLE 16: EAST COCALICO EMPLOYMENT (2003-2008)				
INDUSTRY SECTOR	2003 Employment	2008 Employment	Count Change	Percent Change
Agriculture, Forestry, Fishing and Hunting	20	8	-12	-60.0%
Mining	69	65	-4	-5.8%
Utilities	5	10	5	100.0%
Construction	380	270	-110	-28.9%
Manufacturing	2,023	2,593	570	28.2%
Wholesale Trade	747	721	-26	-3.5%
Retail Trade	204	556	352	172.5%
Transportation and Warehousing	41	160	119	290.2%
Information	1	2	1	100.0%
Finance and Insurance	57	42	-15	-26.3%
Real Estate and Rental and Leasing	58	44	-14	-24.1%
Professional, Scientific, and Technical Services	89	111	22	24.7%
Management of Companies and Enterprises	0	0	0	0.0%
Administration & Support, Waste Management & Remediation	95	92	-3	-3.2%
Educational Services	383	429	46	12.0%
Health Care and Social Assistance	121	153	32	26.4%
Arts, Entertainment, and Recreation	0	62	62	0.0%
Accommodation and Food Services	418	280	-138	-33.0%
Other Services (excluding Public Administration)	143	123	-20	-14.0%
Public Administration	37	0	-37	-100.0%
Total	4,891	5,721	830	17.0%

Source: Local Employment Dynamics – U.S. Census Bureau

TABLE 17: SHIFT-SHARES IN EAST COCALICO (2003-2008)			
Industry Sector	(A) Actual Change in East Cocalico Employment	(B) Expected Change at State Trends	(C) Change Attributed to Local Advantage
Agriculture, Forestry, Fishing and Hunting	-12	-2	-10
Mining	-4	18	-22
Utilities	5	0	5
Construction	-110	38	-148
Manufacturing	570	-160	730
Wholesale Trade	-26	92	-118
Retail Trade	352	-3	355
Transportation and Warehousing	119	3	116
Information	1	0	1
Finance and Insurance	-15	-1	-14
Real Estate and Rental and Leasing	-14	-1	-13
Professional, Scientific, and Technical Services	22	15	7
Management of Companies and Enterprises	0	0	0
Administration & Support, Waste Management & Remediation	-3	9	-12
Educational Services	46	20	26
Health Care and Social Assistance	32	18	14
Arts, Entertainment, and Recreation	62	0	62
Accommodation and Food Services	-138	22	-160
Other Services (excluding Public Administration)	-20	1	-21
Public Administration	-37	4	-41
Total	830	830	756

Source: Local Employment Dynamics – U.S. Census Bureau

Figure 5



Nonresidential Projections

The AC discussed future projections in the retail, office, industrial, restaurant and hotel markets over several meetings. The consultants presented various methods by which the AC might consider future growth in the specific sectors in East Cocalico Township. These proposed projection scenarios in conjunction with the shift share and location quotient information and the local knowledge of the AC formed the basis by which the ultimate projections were made.

The committee considered three varying methods in predicting future growth. The consultant team presented information regarding potential growth in markets by looking at historical trends, employment projections and consumer spending habits. The methods included the following:

1. Historical Trended Method – This method quantifies the historical trend in the industry sector and calculates the development potential if this trend were to continue throughout the specified planning horizon.
2. Employment Projections – This method evaluates employment projections from outside sources for specific industry sectors and translates the employment projections into anticipated square footages by using industry standards.
3. Gravity Modeling – This method quantifies consumer spending and projects the likelihood that consumers will shop in a specific geographic location based on several factors including competitor locations and drive times.

Not all methods were used in each sector and the gravity model was only used for the retail projections. The appropriate methods were presented to the AC for each of the sectors where relevant information was available. The following sections summarize the information considered by the AC in each sector.

Retail

Method – Fixed Annual Historical Growth/Trended

Retail development includes general and specialty retail, and general service-related uses. Based on permit data from 1990 to 2009, East Cocalico Township saw an average annual growth of approximately 5,754 square feet of retail space. One method that the AC studied was a projection of East Cocalico Township's retail square footage over the next 25 years seen in **Table 18**. This projection estimates retail development by square-footage over the next 25 years by compounding the East Cocalico Township's retail permit average of 5,754 per year. If this past trend were to continue into the future of the East Cocalico Township, as demonstrated in **Table 18**, new retail in East Cocalico Township by 2034 would add approximately 143,850 square feet of retail space.

TABLE 18
PROJECTED ADDITIONAL RETAIL DEVELOPMENT – FIXED ANNUAL GROWTH

Year	Estimated Square Feet Added Annually
2010	5,754
2011	5,754
2012	5,754
2013	5,754
2014	5,754
2015	5,754
2016	5,754
2017	5,754
2018	5,754
2019	5,754
2020	5,754
2021	5,754
2022	5,754
2023	5,754
2024	5,754
2025	5,754
2026	5,754
2027	5,754
2028	5,754
2029	5,754
2030	5,754
2031	5,754
2032	5,754
2033	5,754
2034	5,754
Total Added	143,850

Source: East Cocalico Township

Method – Employee Growth Rates

An alternative method to evaluate future growth in the retail market is to evaluate job projections and try to estimate the impact of those jobs on the potential square footage of development. According to workforce information obtained from Lancaster County there will be an estimated 3,830 retail jobs in 2035, which is an estimated 1,932 additional retail employees from 2010. One method of calculating retail growth is by converting employment projections into square footage demands. Retail industry standards indicate that traditional retail establishments have on average one employee for every 400 square foot of space. Thus, for a growth of 1,932 more retail employees from 2010 to 2025, it might be expected that approximately 772,800 square feet of additional retail space will be needed in East Cocalico Township. **Table 19** estimates the total number of retail square feet per the projected number of retail employees located in East Cocalico Township.

TABLE 19: PROJECTED RETAIL DEVELOPMENT BASED ON EMPLOYMENT PROJECTIONS						
	2010	2020	2025	2030	2035	Difference
Estimated Number of Retail Employees	1,898	2,513	2,892	3,328	3,830	1,932
Estimated Square Feet of Retail	759,200	1,005,200	1,156,800	1,331,200	1,532,000	772,800
Based upon conversion: 1 retail employee = 400 square feet of retail space						

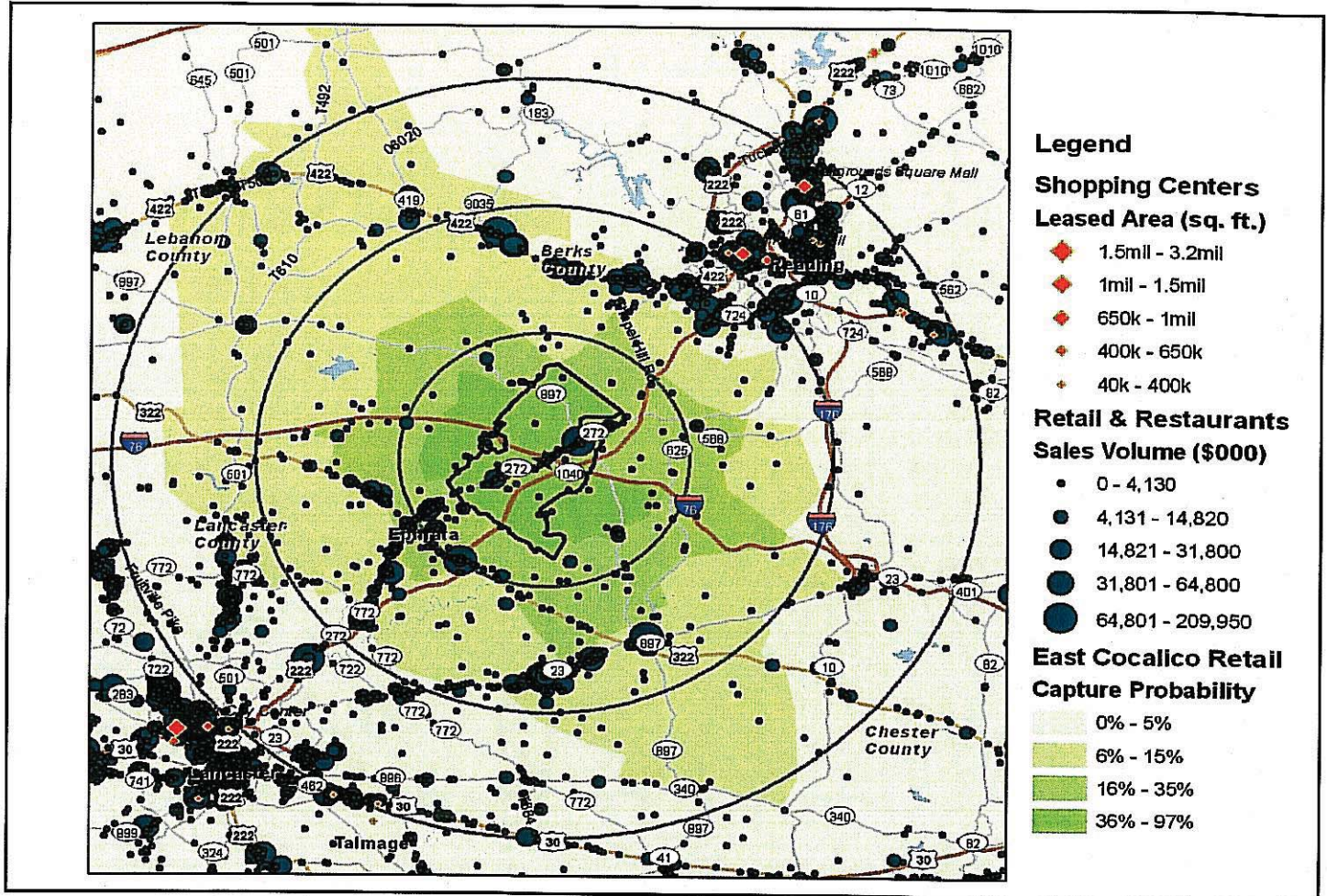
Method – Gravity Model

A third method to consider potential retail growth is to develop a gravity model. To estimate the potential additional retail that could be supported in East Cocalico Township, the following was calculated: (1) the potential demand for retail space based on current conditions and (2) the potential demand for retail space taking into consideration expected growth in the number of households. In order to calculate current demand, a Huff gravity model was utilized, which is a component of ESRI's Business Analyst software.

The gravity model calculated the probability that a resident within a 50-mile radius would shop in East Cocalico Township as opposed to other retail centers based on (1) the distance they would have to drive to get there and (2) how the clustered retail in East Cocalico Township compare in size to other major retail centers in the region. The gravity model also estimated the amount of retail spending that could potentially be captured in East Cocalico Township. **Figure 6** and **Table 20** and **Table 21** show the results of this analysis. Also, in order to calculate future demand, the expected growth in the number of households was estimated, the total annual spending by new households was estimated, and the capture rates as calculated by the gravity model were then applied to estimate the future retail potential. Assuming average sales per square foot of \$338 (as estimated in *Dollars and Cents of Shopping Centers*), an additional \$555,345 square feet of retail could potentially be supported by current residents, with an additional 47,822 over the next 25 years.

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Figure 6



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TABLE 20				
	5-Mile Radius	10-Mile Radius	15-Mile Radius	Total
Estimated Total Retail Spending	\$390,726,492	\$1,550,010,421	\$2,628,491,685	\$4,569,228,598
Assumed Capture Rate	42%	7%	1%	7%
Estimated Capture Potential	\$162,288,823	\$110,823,465	\$36,866,144	\$309,978,433
Estimated Sales/S.F.¹	\$338	\$338	\$338	\$338
S.F. Supported	480,144	327,880	109,071	917,096
Current S.F.				361,751
Variance				555,345
⁽¹⁾ <i>Dollars and Cents of Shopping Centers – U.S. Regional Centers – Median Sales/S.F.</i>				

TABLE 21: GRAVITY MODEL RESULTS	
New Residential Units (Projected 25 Years)	1,500
Estimated Household Retail Spending/Year	\$25,657
Estimated Total Additional Spending/Year	\$38,485,500
Estimated Capture Rate	42%
Estimated Capture Potential	\$16,328,780
Estimated Sales/Square Foot	\$338
Total Additional S.F. Supported	48,310

Advisory Committee's Projections for Retail

The AC reviewed and studied the different projection scenarios that are listed above. The AC determined to base future retail on the current economy and the number of increasing vacant retail properties located in East Cocalico Township and surrounding region. The AC took a close look at the gravity model, which anticipates East Cocalico Township having the capacity to capture approximately 603,655 square feet of retail development over the next 25 years. Currently, a new retail development called the Cocalico Commons received approval for 455,000 square feet, leaving approximately 148,655 square feet of retail growth, based on the demand predicted in the gravity model. The AC acknowledged that the Cocalico Commons will saturate the East Cocalico Township's retail market for some time but that over the next 25 years it is reasonable to expect an additional 148,655 square feet will be added in East Cocalico Township. The AC projected retail growth among the following parcels in East Cocalico Township, as shown in Table 22.

Table 22: Mapped Projected Retail Development			
TAZ	TSA	Parcel ID	Projected Square Footage
44	1	0809576900000	10,000
61	2	0804301500000	10,000
76	2	0800230800000	3,000
93	2	0809050900000	20,000
94	2	0804874600000	30,000
103	2	0801479800000	10,000
103	2	0803904800000	10,000
103	2	0804092700000	17,655
103	2	0805362200000	10,000
111	2	0804416300000	3,000
122	3	0803070000000	10,000
147	3	0807438800000	15,000
Total Projection			148,655

Source: East Cocalico Township Land Use Advisory Committee

It should be noted that for the purpose of this study future retail development was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that future development could just as easily occur on different parcels of similar zoning in the same general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of retail development will be in these general regions of the Township. The Township currently has sufficient undeveloped commercially zoned property that would allow considerable flexibility in how the future retail development is distributed. In many cases there are adjacent undeveloped parcels with similar commercial zoning which could also accommodate the square footage anticipated. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of retail development, so that the anticipated impact to the roadway network can be evaluated.

Office

Method – Fixed Annual Historical Growth/Trended

Typically, office space includes space for doctors, realtors, lawyers, and other service-oriented workers. Based on permit data from 1990 to 2009, East Cocalico Township saw an average annual growth of approximately 1,860 square feet of office space. One method of projecting office square footage in the next 25 years in East Cocalico Township is seen in **Table 23**, which shows projected additional office development by square footage for the next 25 years by compounding additional new square footage of office space per year of 1,860 square feet. If this past trend were to continue into the future of East Cocalico Township, and as demonstrated in **Table 23**, by 2034 there would be approximately 46,500 additional square feet of office space.

TABLE 23:
PROJECTED ADDITIONAL OFFICE DEVELOPMENT – FIXED ANNUAL GROWTH

Year	Estimated Square Feet Added Annually
2010	1,860
2011	1,860
2012	1,860
2013	1,860
2014	1,860
2015	1,860
2016	1,860
2017	1,860
2018	1,860
2019	1,860
2020	1,860
2021	1,860
2022	1,860
2023	1,860
2024	1,860
2025	1,860
2026	1,860
2027	1,860
2028	1,860
2029	1,860
2030	1,860
2031	1,860
2032	1,860
2033	1,860
2034	1,860
Total Added	46,500

Method – Employee Growth Rates

An alternative method to evaluate potential future growth in the office market is to evaluate job projections and try to estimate the impact of those jobs on the potential square footage of development. According to workforce information obtained from Lancaster County, there will be an estimated 11,972 office jobs in 2035, which is an estimated 10,220 additional office jobs from 2010. As in the retail projections, by using the method of calculating office growth by assuming an industry standard of one office employee for every 333 square feet of office space, approximately 3,403,260 square feet of additional office space will be needed in East Cocalico Township by 2035. **Table 24** estimates the total amount of new office development per the projected number of office employees located in East Cocalico Township.

TABLE 24: PROJECTED OFFICE DEVELOPMENT – LANCASTER COUNTY GIS DATA						
	2010	2020	2025	2030	2035	Difference
Estimated Number of Office Employees	1,752	3,779	5,550	8,151	11,972	10,220
Estimated Square Feet of Office Space	583,416	1,258,407	1,848,150	2,714,283	3,986,676	3,403,260
Based upon conversion: 1 office employee = 333 square feet of office space						

Using Local Employment Dynamics (LED) data from the U.S. Census Bureau, office-related employees worked in the following LED-categorized industry sectors, which are categorized using the North American Industry Classification System (NAICS) classification.

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Information
- Management of Companies and Enterprises
- Real Estate and Rental and Leasing
- Public Administration

By adding the total number of employees in the listed industry sectors above and finding the rate of change of those employees by using LED's 2003 and 2008 data, which is -3.8%, it can be projected that there will be an estimated 69 office jobs in 2035. This projection shows a loss of approximately 115 office employees from 2010, by using the projected -3.8% rate of change per year of office employees. By using the same conversion from the *Dollar & Cents of Shopping Centers* that approximately 333 office square feet are used per employee, approximately 38,295 square feet of office space will be unused and not needed in East Cocalico Township in 2030. **Table 25** estimates the total number of office space per square feet is needed per office employee located in East Cocalico Township.

TABLE 25: PROJECTED OFFICE DEVELOPMENT – LOCAL EMPLOYMENT DYNAMICS DATA						
	2010	2020	2025	2030	2035	Difference
Estimated Number of Office Employees	184	124	102	84	69	-115
Estimated Square Feet of Office	61,272	41,292	33,966	27,972	22,977	-38,295
Based upon conversion: 1 office employee = 333 square feet of office space						

Advisory Committee's Projections for Office Space

The AC reviewed and studied the different projection scenarios that are listed above. The AC ultimately decided that approximately 3,500 – 4,500 square feet of office space will be added per year, totaling approximately 87,500 square feet of office space over the next 25 years. Currently 3,600 square feet of office space is already planned for future development. Therefore, the committee decided that approximately 84,000 square feet of office space will be seen in East Cocalico Township over the next 25 years. **Table 26** shows the projected office space growth.

Table 26: Mapped Projected Office Development			
TAZ	TSA	Parcel ID	Projected Square Footage
44	1	0809576900000	20,000
93	2	0809050900000	10,000
104	2	0807412600000	20,000
111	2	0804416300000	3,000
147	3	0807438800000	10,000
154	3	0807053500000	7,000
154	3	0807294000000	4,000
158	3	0805744000000	10,000
Total Projection			84,000

Source: East Cocalico Township Land Use Advisory Committee

It should be noted that for the purpose of this study future office space development was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that future development could just as easily occur on different parcels of similar zoning in the same general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of office space development will be in these general regions of the Township. The Township currently has sufficient undeveloped commercially zoned property that would allow considerable flexibility in how the future office space development is distributed. In many cases there are adjacent undeveloped parcels with similar commercial zoning which could also accommodate the square footage anticipated. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of office space development, so that the anticipated impact to the roadway network can be evaluated.

Industrial

Method – Fixed Annual Historical Growth/Trended

Industrial use primarily consists of activities that involve or are related to warehousing, distribution, manufacturing, self-storage, mines, and quarries. Based on permit data from 1990 to 2009, East Cocalico Township saw an average annual growth of approximately 158,603 square feet of industrial development. One method of projecting industrial square footage for the next 25 years in East Cocalico Township is

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seen in Table 27, which projects industrial development by compounding average annual industrial growth per year for the next 25 years. Based on the growth projections in Table 27, industrial space in East Cocalico Township by 2034 is estimated to grow to approximately 3,965,075 of additional square feet.

TABLE 27: PROJECTED ADDITIONAL INDUSTRIAL DEVELOPMENT – FIXED ANNUAL GROWTH	
Year	Estimated Square Feet Added Annually
2010	158,603
2011	158,603
2012	158,603
2013	158,603
2014	158,603
2015	158,603
2016	158,603
2017	158,603
2018	158,603
2019	158,603
2020	158,603
2021	158,603
2022	158,603
2023	158,603
2024	158,603
2025	158,603
2026	158,603
2027	158,603
2028	158,603
2029	158,603
2030	158,603
2031	158,603
2032	158,603
2033	158,603
2034	158,603
Total Added	3,965,075

Method – Employee Growth Rates

An alternative method that was used to evaluate potential future growth in industrial market growth was the evaluation of job projections and estimating the impact of those jobs on the potential square footage of development. According to workforce information obtained from Lancaster County data, there will be an estimated 3,665 industrial-related jobs in East Cocalico Township in 2035, which is an estimated 336 additional industrial-related jobs from 2010. One method of calculating industrial growth is by assuming that for each employee, approximately 500 industrial square feet is needed. Thus, for a growth of 336 additional industrial-related jobs, approximately 168,000 square feet of additional industrial space will be needed in East Cocalico Township. Table 28 estimates the square footage of industrial space that will be needed in the East Cocalico Township over the next 25 years per industrial employees.

TABLE 28: PROJECTED INDUSTRIAL DEVELOPMENT – LANCASTER COUNTY GIS DATA						
	2010	2020	2025	2030	2035	Difference
Estimated Number of Industrial Employees	3,329	3,459	3,526	3,595	3,665	336
Estimated Square Feet of Industrial	1,664,500	1,729,500	1,763,000	1,797,500	1,832,500	168,000
Based upon conversion: 1 industrial employee = 500 square feet of industrial space						

Using Local Employment Dynamics (LED) data from the U.S. Census Bureau, industrial-related jobs include those listed in the Manufacturing and Transportation & Warehousing industry sectors. Once these sectors were combined, and the rate of change of employees between the given years of 2003 and 2008 was calculated, it was estimated that 13,041 industrial employees will be located within East Cocalico Township by 2035. With a rate of change of 5.9%, the LED data projects that an additional 9,952 industrial employees and an additional 4,976,000 square feet of industrial space will be needed in East Cocalico Township. Table 29 displays this data.

TABLE 29: PROJECTED INDUSTRIAL DEVELOPMENT – LOCAL EMPLOYMENT DYNAMICS DATA						
	2010	2020	2025	2030	2035	Difference
Estimated Number of Industrial Employees	3,089	5,496	7,331	9,778	13,041	9,952
Estimated Square Feet of Industrial	1,544,500	2,748,000	3,665,500	4,889,000	6,520,500	4,976,000
Based upon conversion: 1 industrial employee = 500 square feet of industrial space						

Source: Local Employment Dynamics – U.S. Census Bureau

Advisory Committee's Projections for Industrial

The AC reviewed and studied the different projection scenarios that are listed above. The AC acknowledged that currently there is approximately 199,000 square feet of industrial space that has been planned for development. Excluding this new space, the committee projected that approximately 3,250,000 square feet of industrial space will be added in East Cocalico Township over the next 25 years. The AC took a reduction of the average yearly trends from historical industrial growth within the Township as shown in Table 27 as industrial growth within the Township over the past 20 years has included several large developments such as Pepperidge Farm, SuperValu, and Four Seasons. Due to configuration of available zoned industrial parcels, it is projected that future industrial growth will consist of generally smaller developments and additions to existing facilities. Table 30 shows the projections that the committee made of where predicted future industrial space will be located.

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Table 30: Mapped Projected Industrial Development			
TAZ	TSA	Parcel ID	Projected Square Footage
40	1	0802462500000	5,000
41	1	0807689100000	400,000
43	1	0802043600000	5,000
43	1	0802873300000	5,000
43	1	0805279700000	5,000
43	1	0806702600000	60,000
44	1	0802125300000	375,000
45	1	0800723400000	90,000
45	1	0804299500000	230,000
45	1	0804299500000	60,000
45	1	0805038900000	100,000
46	1	0804430900000	60,000
48	1	0802011500000	50,000
98	2	0808472500000	50,000
100	2	0805685000000	100,000
102	2	0801396300000	10,000
102	2	0802596600000	75,000
102	2	0805578300000	100,000
102	2	0807664900000	50,000
103	2	0803904800000	120,000
103	2	0805362200000	75,000
105	2	0806096700000	90,000
105	2	0807257800000	55,000
105	2	0807395800000	55,000
119	2	0804997200000	50,000
119	2	0806217200000	140,000
120	2	0808141200000	120,000
121	2	0807525800000	15,000
126	3	0804299500000	100,000
126	3	0806887200000	40,000
127	3	0803973300000	85,000
127	3	0804750000000	80,000
127	3	0809273700000	150,000
128	3	0800776900000	220,000
128	3	0807351800000	15,000
131	3	0806561300000	10,000
Total Projection			3,250,000

It should be noted that for the purpose of this study future industrial development was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that future development could occur on different parcels of similar zoning in the same general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of industrial development will be in these general regions of the Township. The Township currently has sufficient undeveloped industrial zoned property that would allow some flexibility in how the future industrial space is distributed. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years or the amount of square footage on each, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of industrial development, so that the anticipated impact to the roadway network can be evaluated.

Restaurant

Based on permit data from 1990 to 2009, East Cocalico Township saw an average annual growth of approximately 144 square feet of restaurant space. **Table 31** projects additional restaurant development by square footage for the next 25 years by compounding the average square footage of restaurant space per year of 144 square feet. Based on the growth projections in **Table 31**, additional new restaurant space in East Cocalico Township is expected to increase by approximately 3,600 square feet over the next 25 years.

**TABLE 31: PROJECTED ADDITIONAL RESTAURANT DEVELOPMENT –
 FIXED ANNUAL GROWTH**

Year	Estimated Square Feet Added Annually
2010	144
2011	144
2012	144
2013	144
2014	144
2015	144
2016	144
2017	144
2018	144
2019	144
2020	144
2021	144
2022	144
2023	144
2024	144
2025	144
2026	144
2027	144
2028	144
2029	144
2030	144
2031	144
2032	144
2033	144
2034	144
Total Added	3,600

Advisory Committee's Projections for Restaurant

The AC reviewed and studied the projection scenario above. The AC projected that approximately 4,000 square feet of restaurant will be added in East Cocalico Township over the next 25 years. Table 32 shows the projection that the committee made of where the predicted future restaurant will be located. It should be noted that other restaurants are assumed to be included as part of the retail projections above.

Table 32: Mapped Projected Restaurant Development

TAZ	TSA	Parcel ID	Projected Square Footage
97	2	0808702300000	4,000
Total Projection			4,000

Source: East Cocalico Township Land Use Advisory Committee

It should be noted that for the purpose of this study future restaurant development was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that future development could occur on different parcels of similar zoning in the same

general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of restaurant development will be in these general regions of the Township. The Township currently has sufficient undeveloped commercially zoned property that would allow considerable flexibility in how the future restaurant development is distributed. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years or the amount of square footage on each, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of restaurant development, so that the anticipated impact to the roadway network can be evaluated.

Hotel

Between 1990 and 2009, East Cocalico Township saw an average annual increase of 436 square-feet of hotel space. **Table 33** projects additional hotel development by square footage for the next 25 years by compounding the average square footage of hotel space per year of 436 square feet. Based on the growth projections in **Table 33**, additional new hotel space in East Cocalico Township is expected to increase by approximately 10,900 square feet over the next 25 years.

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TABLE 33: PROJECTED ADDITIONAL HOTEL DEVELOPMENT – FIXED ANNUAL GROWTH

Year	Estimated Square Feet Added Annually
2010	436
2011	436
2012	436
2013	436
2014	436
2015	436
2016	436
2017	436
2018	436
2019	436
2020	436
2021	436
2022	436
2023	436
2024	436
2025	436
2026	436
2027	436
2028	436
2029	436
2030	436
2031	436
2032	436
2033	436
2034	436
Total Added	10,900

Advisory Committee's Projections for Hotel

The AC reviewed and studied the above projection scenario. The AC decided that within the next 25 years, approximately three 80-room hotel structures will be developed in East Cocalico Township. Table 34 shows the Committee's projections.

Table 34: Mapped Projected Hotel Development

TAZ	TSA	Parcel ID	Projected Number of Rooms
36	1	0800489000000	80
97	2	0808702300000	80
122	3	0800638100000	80
Total Projection			240

Source: East Cocalico Township Land Use Advisory Committee

It should be noted that for the purpose of this study future hotel development was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that

future development could occur on different parcels of similar zoning in the same general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of hotel development will be in these general regions of the Township. The Township currently has sufficient undeveloped commercially zoned property or developed property that could be redeveloped that would allow considerable flexibility in how the future hotel development is distributed. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years or the amount of rooms on each, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of hotel development, so that the anticipated impact to the roadway network can be evaluated.

Other Projections

The AC also made the following projections for development in East Cocalico Township over the next 25 years shown in **Table 35**.

Table 35: Other Mapped Projected Development				
TAZ	TSA	Parcel ID	Development Type	Projected Square Footage
36	1	0800489000000	Place of Worship	15,000
97	2	0808702300000	Place of Worship	15,000
150	3	0803478600000	School	20,000
Total Projection				50,000

Source: East Cocalico Township Land Use Advisory Committee

It should be noted that for the purpose of this study future “other” development (including places of worship) was projected or distributed on the above noted parcels, although it was discussed and acknowledge by the AC and consultants that future development could occur on different parcels of similar zoning in the same general vicinity of these parcels. By identifying these particular parcels the AC is not necessarily predicting that the future development will occur on, or be limited to, these particular parcels, instead the AC believes that the future distribution of these “other” types of development will be in these general regions of the Township. The Township currently has sufficient undeveloped commercially zoned property or developed property that could be redeveloped that would allow considerable flexibility in how the future “other” type of development is distributed. The AC is not intending to indicate a preference or recommendation on which specific parcels should develop in the next 25 years or the amount of square footage on each, but instead evaluated past growth history and current zoning to attempt to predict the number and general location of “other” development, so that the anticipated impact to the roadway network can be evaluated.

Overall Projected Growth

The projected growth for each type of land use is summarized below in **Table 36**. In the next 25 years, the AC estimates that an additional 541 residential units will be added to the East Cocalico Township’s housing stock. Retail and office space will increase by 148,655 square feet and 84,000 square feet, respectively, and industrial space will increase by 3,260,000 square feet. It is also projected that a 4,000 square foot restaurant will be added; three new hotels will be developed with a total of approximately

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240 rooms, two new places of worship that will be approximately 15,000 square feet each, and a new school that will be approximately 20,000 square feet.

TABLE 36: PROJECTED GROWTH FOR THE NEXT 25 YEARS	
Land Use	Projection
Residential	541 units
Retail	148,655 S.F.
Office	84,000 S.F.
Industrial	3,250,000 S.F.
Restaurant	4,000 S.F.
Hotel	240 rooms
Places of Worship	30,000 S.F.
School	20,000 S.F.

Source: East Cocalico Township Land Use Advisory Committee