Economic Impact Study of Shiloh Road Land Use Options

Submitted to:

College Township and Shiloh Road Land Use Study Committee

Submitted by:

The Louis Berger Group, Inc.

Draft Report: September 2004

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1.0 INTRODUCTION

The Fiscal and Economic Impact Study of Land Use Options for the Shiloh Road Study Area analyzes the fiscal and economic impacts of four different land use scenarios within the Shiloh Road Study Area. The fiscal and economic analysis will enable decision-makers to determine the overall economic impacts that each scenario creates on College Township and the region. Through an in-depth analysis of the direct and indirect impacts associated with each scenario, College Township and the Centre Regional Planning Agency will be able to tailor a scenario that maximizes the economic benefits to College Township and surrounding municipalities while efficiently using finite resources.

The Shiloh Road Study Area currently consists of farmland and natural open space. The area is located between Interstate 99 and College Avenue. The newly built Shiloh Road Interchange of Interstate 99 has created tremendous demand for development within this area since it offers greater accessibility to the region. The majority of the Shiloh Road Study Area is located within the College Township with a portion in Benner Township. According to the *Centre Region Comprehensive Plan*, the area is designated as a "Potential Growth Boundary Expansion Area" and is the only area with this designation in the Region. In order for this area to become an expansion of the Growth Boundary, the development application must receive approval from a majority of the municipalities within the Centre Regional Planning Agency. This procedure ensures regional cooperation for the land use planning of the region.

The development area is separated into three different areas, called pods, for finer definition. Pod A is the closest area to Interstate I-99 and is currently serviced by Spring Valley Road with two new roads planned for the area. This Pod spans Shiloh Road; however, most of the area is located on the west side of road. Pod B is located northwest of Shiloh Road and currently does not contain any access roads except for Shiloh Road. Pod C is located between Benner Pike and College Avenue and contains a planned road for the pod. Pod C is the closest area to the existing commercial and industrial areas of College Township.

The four scenarios, labeled Blue, Green, Gold, and Red, range from development consistent with existing zoning, to more developed options that contain a variety of residential, office, and commercial uses. Both the Blue and Green land use scenarios are according to the existing zoning regulations; however, the Blue scenario contains sewer service while the Green scenario is without sewer service. Sewer service enables a greater amount of commercial and office development (see Figure 1). The Gold and Red land use scenarios contain more commercial development with significantly more residential development.

Table 1: Overview of Development Scenarios

	Scenarios			
	Blue	**Green**	**Red**	**Gold**
	existing zoning w/ sewer	existing zoning w/o sewer	multi-story with traffic circles	"main street"
POD A				
Commercial	305,000 sf	70,000 sf	610,000 sf	300,000 sf
Office	480,000 sf	100,000 sf	475,000 sf	340,000 sf
Residential			250 apartments 120 townhomes	
Public/Semi-Public				100,000 indoor regional recreation facility
Roads (feet)				3,250
Intersections	1	1	1	3
POD B				
Commercial			80,000 sf	
Office				
Residential			138 single family 60 duplex 200 townhomes	190 single family 24 duplex 170 townhomes
Public/Semi-Public	45,000 (church and school)	45,000 (church and school)	45,000 (church, school, and park)	
Roads (feet)			3,000	3,000
Intersections	6	6	7	7
POD C				
Commercial			100,000 sf	150,000 sf
Office	50,000 sf	50,000 sf	107,000 sf	
Residential	100 detached homes	100 detached homes	220 single family 112 townhomes	330 single family 40 townhomes
Public/Semi-Public			23,500 (park and open space)	45,000 (park)
Roads (feet)	3,000	3,000	3,000	3,000
Intersections	3	3	3	3
Sewer Service	**Yes**	**No**	**Yes**	**Yes**

The economic impact study analyzes each scenario according to the fiscal and economic impacts each scenario creates on College Township and the region. The fiscal impact analysis calculates the net revenue impact attributable to the Township government and the State College Area School District. The assessment considers the cost of maintaining the current level of service with the additional demands placed on the Township from the proposed development.

The economic impact analysis calculates regional impacts to jobs, earnings, and local sales from both construction expenditures and on-going operations. An essential element of the economic impact analysis is the market analysis, which uses the retail gravity model to quantify the local demand for the different scenarios and the prospective changes in demand to the Township and region's businesses. The analysis then differentiates the impacts to each municipality within the Centre Region Council of Governments.

The results from both the fiscal analysis and the economic impact analysis are used to form final conclusions on the economic costs and benefits of each land use scenario to both College Township and the region. Using these summary costs and benefits, the study makes recommendations regarding the different land use scenarios.

2.0 FISCAL IMPACT ANALYIS

Fiscal impact analysis compares the public costs and public revenues associated with residential or nonresidential growth to local municipalities. If costs exceed revenues, a deficit is incurred, which would entail an increase in taxes; if revenues exceed expenditures, a surplus is generated. Through an in-depth analysis of the fiscal impacts from a large development proposal, a community can make effective decisions on how to grow reasonably and efficiently.

For the Shiloh Road Land Use Study, fiscal impacts were estimated using a combination of different methodologies – per capita and case study. The specific method was chosen for each measurement according to the data available and the accuracy of the measurement. The per capita method determines current public service costs on a per unit basis, i.e., per resident, mileage of road, level of property tax, student, etc. produced by the development. The costs per unit are based on the existing level of service and the population served. The case study method relies on intensive site-specific interviews. These interviews were conducted with municipal and county department heads and other important stakeholders to determine the approximate additional demand that new residents or employees from a development will place on the current level of service.

The projected revenues from the different development scenarios were gathered using similar methodologies. The township and school budgets were analyzed to determine various sources of revenue and the unit of measurement for each. The case study method was used to gather comparable real estate values, particularly from the "Colonnade" developments on the I-99 Waddle Road interchange and other comparable properties.

Table 2: Taxable Values per SF (based on comparable properties)

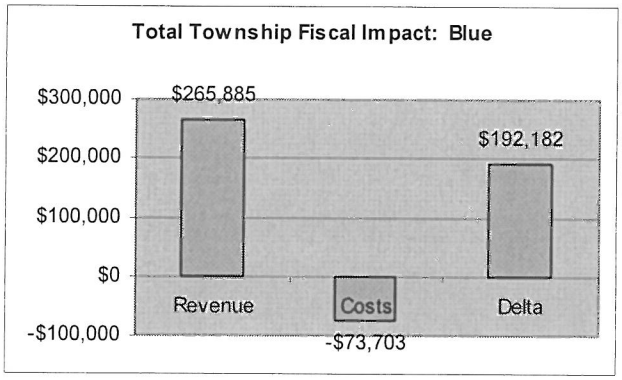
Category	Value/SF
Hotel/Motel	$27.79
Restaurant	$59.13
Office	$43.59
Big Box Retail	$30.68
Small Specialty	$37.55
SFR	$42.78
Duplex	$42.60
Townhouse	$41.60
Multi-story Apt.	$24.61
Recreation	$20.73

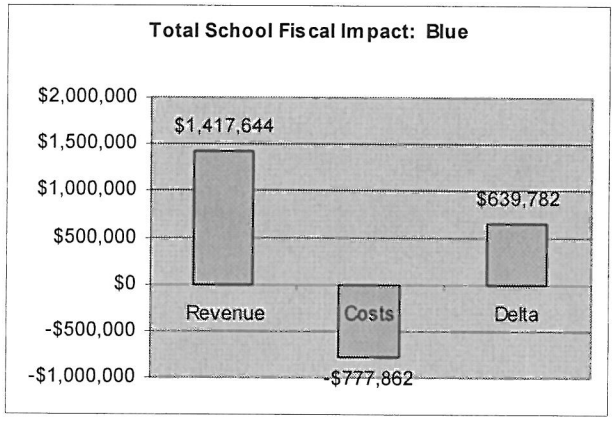
Since the College Township and State College Area School District operate independently, the fiscal assessment is separated into cost/revenue attributed to the Township and the School District. Using a combination of the per capita and case study method, the costs to the Township are divided into the following categories: general government, police service, fire protection, code enforcement/zoning administration, public works, transportation, parks, and miscellaneous. The cost for each of these, at the current level of service, is estimated and produces a total cost to the Township for the development scenario. The school costs are straightforward since they are based on a cost of $10,803.64 per student. This number is based on a recent study that the School District completed and was confirmed by the School District Superintendent. For a more detailed description of the calculations within each category see the worksheets in the Appendix.

The revenue to the Township from each scenario was divided into the following categories: property taxes, income taxes, administrative revenue, and public facilities revenue. The revenue accrued from each of these sources is calculated using the same formula as used when collected by the Township, i.e., population, length of roads, assessed value. The revenue for the School District was divided into local, State, and Federal sources. The local source is the largest contributor to the School District and is comprised of a variety of sources including property taxes, earned income taxes, rental income, and other incomes. These sources are calculated using a combination of students and tax revenue associated with each scenario. For a more detailed description of the calculations within each category see the worksheets in the Appendix.

The following are the results of the fiscal impact by development scenario:

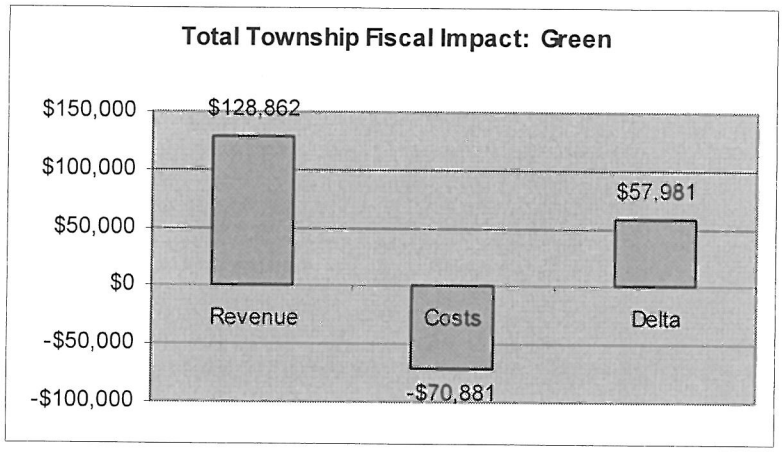
Figures 1A and 1B: Blue Scenario Impacts

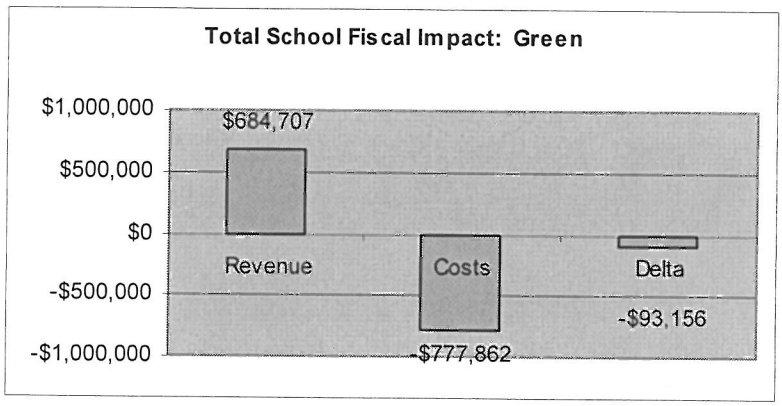




The Blue Scenario's net benefit to the Township is approximately $192,182, which is the third best out of the four scenarios. The net benefit to the school is $639,782, which is the best out of the four scenarios. The higher amount of commercial and office development with the lower amount of residential is one of the reasons for the very positive impact compared to the relatively small size.

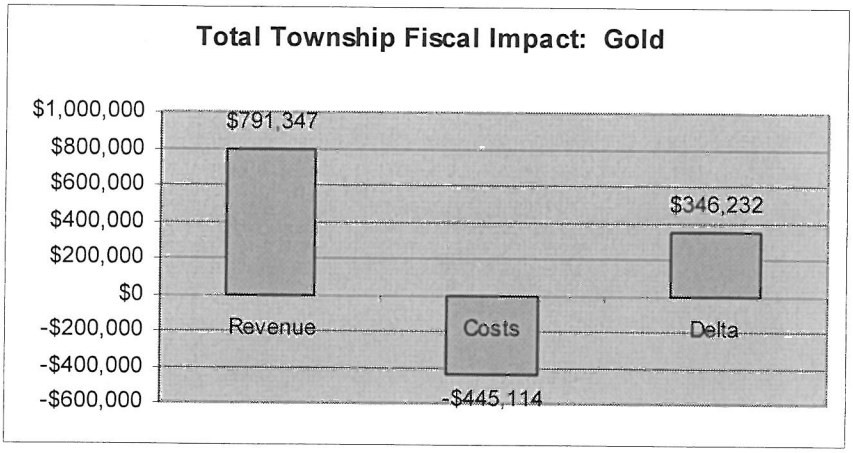
Figures 2A and 2B: Green Scenario Impacts

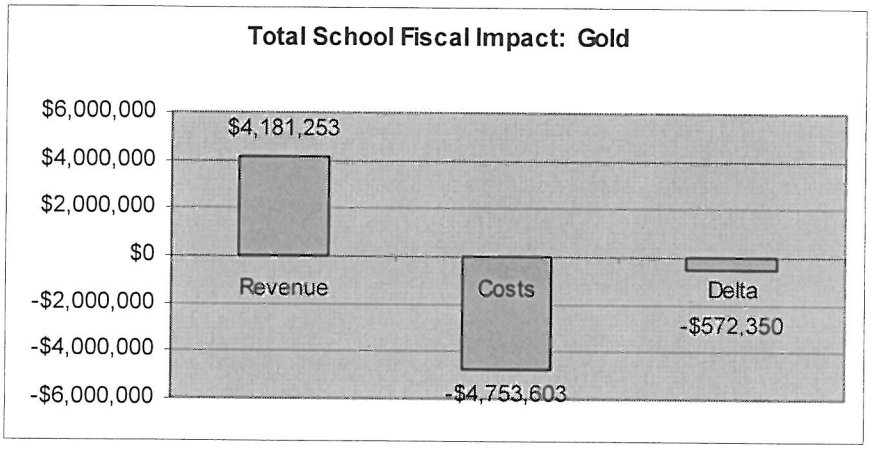




The Green Scenario's net benefit to the Township is approximately $57,981, which is the worst out of the four scenarios. The net benefit to the school is a deficit of –($93,156), which is third out of the four scenarios. The small amount of overall commercial and office development with the inclusion of residential development is one of the main reasons this scenario faired poorly.

Figures 3A and 3B: Gold Scenario Impacts





The Gold Scenario's net benefit to the Township is approximately $346,232, which is the second best out of the four scenarios. The net benefit to the school is a deficit of –($572,350), which is the worst out of the four scenarios. Because of the overall size of this development, it created significant impacts both positively and negatively. The large amount of commercial and office development created large positive impact on the Township while the large amount of single family residential development created significant pressure on the schools without enough revenue to balance it out.

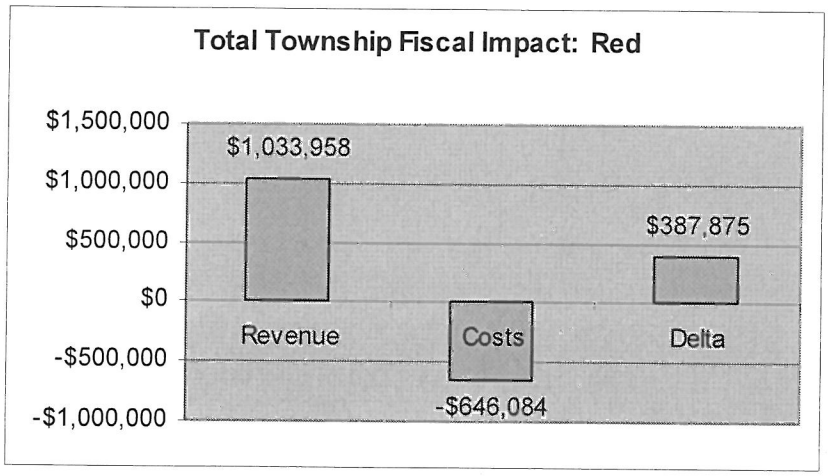
The development within the Gold Land Use Scenario will be created using a "new urbanist" style of planned development. New Urbanism is characterized by a set of design principles often referred to as neotraditional planning. New urbanists use these principles to change the sprawling development pattern. The principles that distinguish traditional neighborhood development from a conventional subdivision are: 1) mixed land uses and mixed housing types; 2) higher density, 3) more public space, 4) interconnected street networks, and 5) pedestrian-oriented design.

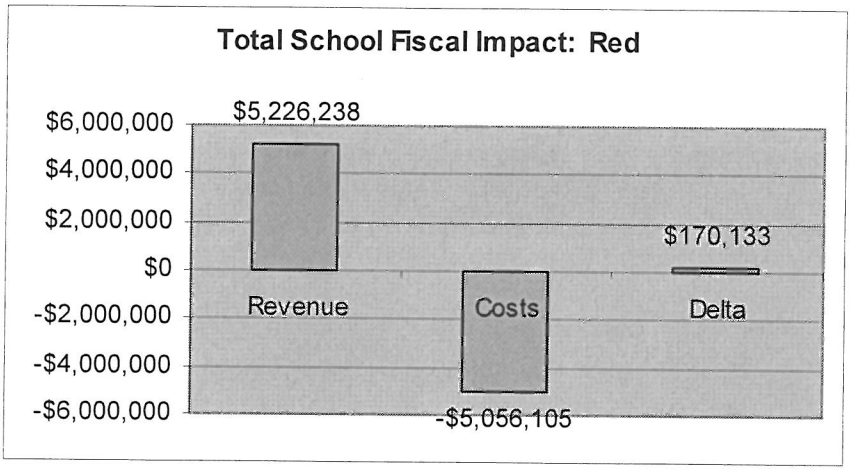
The Gold Land Use Scenario will utilize neotraditional planning in the design of the development by creating a main street with smaller specialty retail stores combined with public recreation space and office development. Surrounding these uses will be a mixture of residential dwelling types including duplexes, townhomes, and single family houses. The street network will consist of a grid pattern with sidewalks and public open spaces.

Recent research has shown the popularity and higher economic values of new urbanist style development. An in-depth study published in the Fall 1999 issue of *Real Estate Economics* compares real estate transactions and several hedonic price models to study the premium on communities with new urbanist features. The study compared Kentlands, Maryland, a new urbanist development by Duany and PlaterZyberk (DPZ), to conventional subdivisions. The empirical evidence from the study reveals that consumers are willing to pay a premium to locate in new urbanist developments. The analysis indicates that consumers are willing to pay a 12% premium for properties in this type of development.

In order to capture this premium, the fiscal impact analysis incorporated a 12% premium on property valuations for the Gold Scenario. The increased value within the property valuations will correctly represent in the greater demand that this type of development within the Centre Region will generate.

Figures 4A and 4B: Red Scenario Impacts





The Red Scenario's net benefit to the Township is approximately $387,875, which is the best out of the four scenarios. The net benefit to the school is $170,133, which is the second best out of the four scenarios. The large amount of commercial and office development with the lower amount of public and semi-public is one of the main reasons that the scenario contains the best overall impact.

The overall results from the fiscal impact analysis reveal that the scenario with the largest Township budget surpluses is the Red Scenario. The scenario with the largest school budget surpluses is the Blue scenario. The scenario with the largest combined budget surpluses for the Township and school revenue is the Blue scenario. By this metric, the largest deficit to the Township finances is associated with the Green scenario. It is clear that the overall level of residential development, as a proportion of commercial development, is a critical indicator of fiscal performance. Residential development, by

its very nature, represents a net drain on municipal finances. In this case, the impact to the local school district of new residential development, often dwarfs the impacts to municipal finances. It must be noted that the type of residential development is critical; smaller and more dense housing units generate far fewer school age children and thus incur far less fiscal costs.

3.0 ECONOMIC IMPACT ANALYIS

3.1 Economic Impacts of New Development

The economic impacts, in contrast to the fiscal impacts, represents the "region-wide" level of economic activity that could occur due to the introduction of the new development. A traditional economic impact study is based upon two basic premises. Firstly, it assumes full commercial viability of the proposed development. Secondly, it assumes that the new development (retail and commercial) represents entirely new economic activity to the region. While this level of analysis is often useful to determine the total amount of economic activity that is captured within a region (through the use of Input Output models), it should be supplemented with a more comprehensive evaluation of the potential negative impacts to existing providers of commercial services. This more rigorous approach, that incorporates a retail gravity model, and an office market absorption study, is described in the subsequent section of the report. In this section, the results of a traditional economic impact study are presented.

Economic Assessment Methodology - A regional input-output (I/O) model developed utilizing methods established by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) has been used to quantify the economic effects of the proposed project. The model assesses the total potential economic impacts of facility projects utilizing multipliers specific to the region of the proposed action, in this case, Centre County.

Three broad types of measurable economic impacts result from the proposed developments; direct, indirect, and induced economic effects:

- ***Direct Impact*** - The direct impact of a project is defined as the initial change in final demand in which expenditures are made for materials and labor, and retail and commercial services in the region. The direct impact to the region from the proposed project investment is represented by the *local* purchase of materials and services.

- ***Indirect Impact*** – The initial direct expenditure impacts prompt further "indirect" economic activity by supplying industries that furnish input materials and services to the industries directly involved in the development. These *indirect impacts* reflect the intermediate production or increased economic activity to supply services, materials, and machinery necessary to support the development.

- ***Induced Impact*** – In turn, the labor force will use a significant portion of their wage earnings on various consumer expenditures, producing an "induced" effect. The

induced impact is the effect of increased consumer spending by wage earners in the study industry and other supporting industries.

The successive "rounds" of economic activity stimulated by the initial expenditure of funds is the ripple or "multiplier effect." The ripple effect can account for a significant portion of the total regional economic impact. Together, the indirect and induced impacts constitute the multiplier effect, the extent to which the direct impact results in additional economic activity. Expressed numerically, a multiplier of 2.5 indicates that for every dollar directly generated by the industry under study, an additional $1.50 of ripple effects are felt within the local region, for a total impact of $2.50. The model, which derives multipliers specific to the region, has been used to quantify the economic effects of the proposed project.

Temporary Construction Impacts

The temporary direct and indirect impacts of construction spending were calculated for each scenario. While temporary, these economic impacts often represent significant "one-off" sources of economic activity for a region.

Table 3: Typical Construction Costs (per SF)

Land Use	Cost
Hotel	$100
Restaurant	$113
Residential	$110
Retail <75k	$80
Retail >75k	$66
Commercial	$107
Source: RS Means Construction	

Table 4: Direct Construction Spending

Scenario	Cost
Green	$55,600,000
Blue	$120,700,000
Red	$349,900,000
Gold	$284,700,000

Table 5: Total Economic Impacts of Construction – Centre County

Scenario	Output (Sales)	Employee Earnings	Employment (man years)
Green	$111,365,702	$31,867,908	1489
Blue	$241,814,411	$69,196,523	3233
Red	$700,052,291	$200,323,811	9359
Gold	$569,652,314	$163,009,141	7616

Permanent Operation of Retail and Commercial Impacts

Berger calculated the direct economic impacts of each land use scenario based upon typical wage rates, square footage per worker, and sales per worker. This analysis assumes that the assumed retail and office mix are commercially viable and capture sufficient market share to survive.

Table 6: Direct Economic Impacts

Scenario	Output (Sales)	Employee Earnings	Employment
Green	$28,693,781	$14,212,486	544
Blue	$83,649,559	$41,422,277	1575
Red	$197,213,137	$51,143,366	2167
Gold	$141,735,413	$37,132,464	1547

In addition, the total indirect and induced effects of the direct spending were calculated. These impacts represent the "flow on" economic activity that occurs due to any new economic activity within the region. The boundary of economic activity was the Centre County border.

Table 7: Total Economic Impacts – Centre County

Scenario	Output (Sales)	Employee Earnings	Employment
Green	$43,779,464	$14,020,408	859
Blue	$138,975,146	$44,527,466	2498
Red	$396,277,396	$126,099,970	10996
Gold	$263,555,175	$83,872,377	7542

3.2 Economic Impacts to Existing Businesses

In general, a new development that introduces new residential, retail, and office land uses to a region has the potential to impact *existing* businesses (and this impact may well be beneficial). In order to adequately evaluate the actual impact of a land use proposal,

these impacts should also be considered. Overall, there are four ways in which such a development can impact existing businesses:

1. Lost activity due to New Retail Presence;
2. Increased Retail Activity due to new Residents in the Development;
3. Increased Retail Activity due to new Office Workers Residing Within Region;
4. Lost Office Commercial Activity due to due Displacement (net transfer to new development).

The impacts to existing retailers were captured using a retail gravity model. The impacts to existing office developments were captured using an absorption analysis. Both approaches are discussed subsequently.

3.2.1. Retail Impacts

In contrast to typical economic impact studies, this analysis included a retail gravity model to predict the net *loss* of employment that might occur within each surrounding township, under each scenario. To complete the retail market analysis, the team employed a modified Huff Model to estimate the capture rate of new development in Shiloh Road and the loss in market share for existing retailers. Through a calculation of the project's net capture, the retail market analysis estimates the marginal effect of additional participants in a given retail niche.

Model Specification - Berger employed a three-step retail market analysis to investigate the effect of additional retail space in the Centre County marketplace. The analysis includes the following: first, a calculation of existing and future supply; second, a calculation of existing and future demand; and finally, the projected "distribution" of future retail demand.

The arithmetical formulation is presented hereafter:

$$P_{ij} = \frac{S_j^a / D_j^b}{\sum S_j^i / D_j^i}$$

Where:

P_{ij} is the probability that a consumer located in neighborhood i will purchase goods at store j;
S_j is the square footage of the store;
D_{ij} is the driving distance between tract i and j; and
a and b are model parameters.

For the initial estimates, the model parameters are as follows, a, the exponent for square footage, equals 1 and b, the exponent for driving distance equals 2. Sensitivity testing confirmed that adjusting the exponents has a significant effect on the outcomes of the modeling effort. Without a detailed survey, however, estimating the appropriate exponent is impracticable. The team adjusted the exponents to facilitate parameter estimation.

Existing Supply - For each of the retail scenarios provided by township representatives, the team tabulated the total square footage of proposed new development and the total area of existing retail establishments, of similar type, located in Centre County. The team used the Urban Land Institute publication, *The Dollars and Cents of Shopping Centers*, to estimate the anticipated level of employment for each of the proposed retail types. The team supplemented the evaluation with the US Census Bureau, *Economic Census* and *County Business Patterns* reports.

The source of the existing supply of retail establishments is a proprietary database distributed by InfoUSA.[1] The team then imported the database into ArcGIS and used the geocoding function to address-match the retail to a base map of Centre County. The initial address-matching effort yielded a success rate of over 80-percent and an second-round manual effort brought the match rate to approximately 90-percent.

Retail Sub-Markets – To reflect the highly specialized nature of most new retail developments (the advent of the big box "category killer"), the team organized the retail database into the three-digit NAICS codes to investigate the anticipated Shiloh Road retail mix and its effect on specific retail market niches. Essentially, the model consists of multiple sub-models reflecting categories of retail, rather than aggregating all establishments as one.

Table 8 summarizes the existing inventory of Centre County businesses in 2001, according to the Census Bureau, *County Business Patterns*.

Table 8: Centre County Retail and Accommodations Business Inventory

NAICS Code	Description	Employees	Payroll (in $1,000s)		Establishments
			1st Quarter	Annual	
----	**Total**	**46,374**	**136,279**	**1,158,006**	**3,163**
44---	**Retail Trade**	**8,038**	**31,340**	**131,251**	**597**
4413	Automotive parts, accessories & tire stores	309	1,747	7,336	27
442	Furniture and Home Furnishings Stores	189	798	3,127	34
443	Electronics and Appliance Stores	266	1,178	5,018	29
444	Building Material and Garden Equipment	585	2,972	13,064	57
445	Food and Beverage Stores	1,436	4,265	17,342	76
448	Clothing and Clothing Accessories Stores	905	2,448	10,057	88
451	Sporting Goods, Hobby, Book, and Music Stores	479	1,265	5,081	39
452	General Merchandise Stores	1,349	5,538	21,109	18
72---	**Accommodation & food services**	**5,730**	**12,962**	**58,351**	**287**
722	Food services & drinking places	4,829	10,073	44,264	225

Source: US Census Bureau, *County Business Patterns* (2001).

[1] InfoUSA provides full documentation on its website at: http://list.infousa.com/cgi-bin/abicgi/abicgi.pl?bas_session={bas_session}&bas_elements=4&bas_vendor=190000&bas_type=BLB&bas_page=7025&bas_action=BusinessDatabase#.

For the purposes of evaluating the proposed "Main Street" scenario, the team also created a selection-set of the four competing "main street" retail centers: including, State College Borough; Bellefonte Borough; Boalsburg, Lemont; and Pine Grove Mills. It is more realistic that the clusters of small specialty stores in the area would compete with one another for customers.

Existing Demand - Existing demand refers to the existing retail demand at the household level within a specific geographic scale (in this instance, the census tract) in the local market. For the study, the team included the 29 tracts in Centre County and tract 9051.00 in Huntingdon County. The team included the Huntingdon County tract because of its proximity and accessibility to the Shiloh Road site and State College Borough.

According to the 2000 Census, aggregate household income in 1999, for the local market equaled approximately $2.4 billion. Per capita household income stood at approximately 48,000 distributed among 50,000 households in Centre County. The Bureau of Labor Statistics (BLS) reported 64,590 employed persons in Centre County in 1999 (revised and benchmarked for the 2000 census). The number of employed residents peaked in 2002, only to decline in 2003. In the first half of 2004, the number of employed persons had begun to increase on a year-on-year (i.e., June 2003 versus June 2004) basis, but estimates remain below the 2002 peak. Nevertheless, the unemployment rate, in the 2nd Quarter of 2004, remains higher than comparable figures in either 2003 or 1999. This discrepancy is a manifestation of the sustained growth in the local labor force, which increased by approximately 3.6-percent between 1999 and 2003. Notwithstanding a slight decline off its 2002 peak, recent labor force data suggest a return to growth in 2004, albeit at a rate below the 3.6-percent increase between 1999 and 2003.

Like resident employment, payroll jobs (based on the establishment survey) in Centre County also peaked in 2002 at approximately 71,800 non-agricultural jobs. Payroll jobs declined only slightly in 2003 to approximately 71,000. In the first and second quarters of 2004, the number of payroll jobs appears to have stabilized at approximately 71,000. Compared to payroll jobs in 1999, however, the 2004 level indicates an increased of approximately 4.0-percent. According to the Pennsylvania Department of Labor and Industry, wages came under pressure between 2001 and 2002 and declined slightly. The decline in real wages coincided with sustained growth in the labor force, despite slowing job growth. As job growth accelerates and supply and demand begin to equilibrate in the labor market, wages should stabilize and resume their upward trajectory.

For this study, however, the team relied on the implied local demand embodied in the aggregate household income data distributed amongst the census tracts described previously. Macroeconomic trends, however, do play a fundamental factor in determining market feasibility for new and existing retail facilities. Moreover, the ratio of resident workers to payroll jobs indicates that Centre County is a net destination for regional commutation. Undoubtedly, non-resident workers also contribute to aggregate retail demand in Centre County.

Distribution of Demand - After accounting for existing demand and retail supply, the next step in the market analysis process involves estimating the existing market share of each of the competing firms in the market niches described above. After determining

existing market share, the team used the estimated retail mix anticipated in the Shiloh Road development to determine the amount of change in relative market share experienced by each of the existing retailers. To estimate market share both with and without the proposed development, the team employed the gravity-based assignment algorithm described previously. After estimating comparison market shares, the team calculated the net change in sales resulting from the lost market share. Lost employment was estimated using the sales per employee estimates derived from the InfoUSA database. Finally, the team estimated lost wages using industry-specific estimates of payroll per employee gleaned from the US Census Bureau, *County Business Patterns* data. The team then multiplied the earnings per employee estimates by the estimation of lost employees associated with the new stores.

3.2.2 Office Market Impacts

In order to capture the impact on existing office space in surrounding municipalities, the existing inventory of office space was compiled and compared to the type and amount proposed for each scenario. New office developments are competitive to existing office buildings in a different manner than new retail establishments are to existing retail. The presence of new office space often has the potential to draw its own demand; businesses will be attracted to the area due to the presence of the new space (and other important parameters). Existing office tenants in the area will also be attracted to the new space. As such, a certain proportion of new office space will attract existing tenants from office space in surrounding areas. This analysis uses "absorption ratios" to calculate the potential for lost office employment in surrounding areas due to tenants who relocate to the area. The initial results assume an absorption ratio of 90 % (that is 10 % of new office development represents a net loss to existing office employment centers in the region, and 90 % represents new economic activity). This ratio will obviously vary depending upon the market. It must be noted that is unlikely that developers will be interested in building excessive square footage of new office space, and this will tend to self-limit the amount of tenant transfer that could occur.

3.2.3 Economic Impacts – Other Municipalities

A critical component of this study was the quantification of economic impacts to existing retail and office developments. In particular, the overall impacts to economic activity for each of the surrounding municipalities, was calculated. As such, results of the retail gravity model, and the office market analysis, were "post-processed" into terms of total town impacts. Economic activity, as measured by employee earnings, was calculated for State College Borough, College Township, Ferguson Township, Harris Township, and Patton Township. These town specific impacts are presented below. More detailed commentary of these results is presented in the report conclusion.

Table 9: State College Borough

Scenario	Retail Employment Impact (earnings)	Office Employment Impact (earnings)	Total (earnings)
Green	$250k - $500k	($250k) – ($500k)	0 - $250k
Blue	$500k - $1,000k	($500k) - ($1,000k)	0 - $250k
Gold	($1,000k) - ($2,000k)	($500k) - ($1,000k)	($2,000k) - ($3,000k)
Red	($500k) - ($1,000k)	($500k) - ($1,000k)	($1,000k) - ($2,000k)

Table 10: College Township

Scenario	Retail Employment Impact (earnings)	Office Employment Impact (earnings)	Total (earnings)
Green	0 - $250k	($250k) - ($500k)	0 - ($250k)
Blue	0 - $250k	($1,000k) - ($2,000k)	($500k) - ($1,000k)
Gold	$250k - $500k	($500k) - ($1,000k)	($250k) - ($500k)
Red	0 - $250k	($1,000k) - ($2,000k)	($1,000k) - ($2,000k)

Table 11: Ferguson Township

Scenario	Retail Employment Impact (earnings)	Office Employment Impact (earnings)	Total (earnings)
Green	0 - $250k	($250k) - ($500k)	($250k) – ($500k)
Blue	0 - $250k	($1,000k) - ($2,000k)	($1,000k) – ($2,000k)
Gold	0	($500k) - ($1,000k)	($500k) – ($1,000k)
Red	0 – ($250k)	($1,000k) - ($2,000k)	($1,000k) - ($2,000k)

Table 12: Harris Township

Scenario	Retail Employment Impact (earnings)	Office Employment Impact (earnings)	Total (earnings)
Green	0 - $250k	0 – ($250k)	0 – ($250k)
Blue	0 - $250k	0 – ($250k)	0 – ($250k)
Gold	0 – ($250k)	0 – ($250k)	($250k) – ($500k)
Red	0 – ($250k)	0 – ($250k)	($250k) – ($500k)

Table 13: Patton Township

Scenario	Retail Employment Impact (earnings)	Office Employment Impact (earnings)	Total (earnings)
Green	0	0 – ($250k)	0 – ($250k)
Blue	0 - $250k	0 – ($250k)	0 – ($250k)
Gold	0 – ($250k)	0 – ($250k)	($250k) – ($500k)
Red	($250k) – ($500k)	0 – ($250k)	($250k) – ($500k)

4.0 COMMERCIAL VIABILITY

4.1 Viable Retail Tenant Mix

To determine the feasibility of alternative tenant mixtures in the Shiloh Road Development, the Berger Team assembled a dataset of existing retail businesses, using the US Census Bureau, *Economic Census* and *County Business Patterns* and a proprietary dataset maintained by ESRI Business Information Solutions. The team estimated existing retail demand using the Bureau of Labor Statistics, *Consumer Expenditure Survey* and *Current Employment Statistics* (for estimating current earnings) and the ESRI Business Information Solutions dataset.

By comparing estimated consumer expenditures to existing retail sales in each of the disaggregate retail sectors, the Team identified a group of retail segments where aggregate supply fell short of aggregate demand. The existence of a shortfall suggests that Centre County consumers are "importing" goods in the sector from outside the region, or existing businesses in this sector are experience above average retail activity.

Using this methodology, the following markets are considered to be "under-represented"

- Home Improvement
- Chain Restaurants
- Auto Parts and Accessories

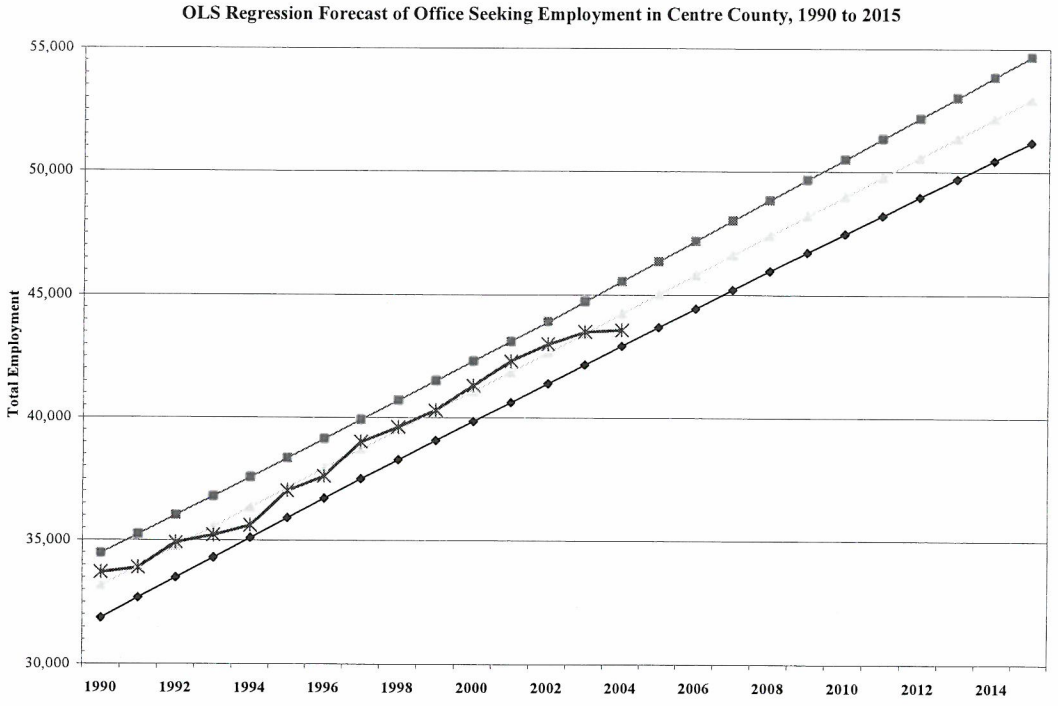
Certain markets have adequate coverage. Long term increases in real wages, and population increases, would create demand in these sectors

- Grocery Stores
- Furniture Stores

Such a snapshot analysis suggests a viable retail development of about 300,000-400,000 SF.

4.2 Future Demand for Office Space

Continued employment growth, in office-seeking occupations, will dictate future office space demand in Centre County. Since 1990, employment in office-seeking occupations, including Information, Financial Activities, Professional and Business Services and Government has increased annually by approximately 1.86-percent. Despite a marked slowdown since 2002, office-seeking employment growth in Centre County remains positive. As growth begins increase inline with the long-run trend, the robust growth will



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induce a concomitant increase in office space demand.

To prepare a projection of future employment growth and derive an estimate of office space demand, the team developed an econometric forecast, with parameter estimates, for future office-seeking employment growth in Centre County. As the chart above illustrates, office-seeking employment in Centre County will likely continue to advance at a rate of approximately 1.52-percent per year. By 2015, total employment in the office-seeking industries likely will total between 51,000 to 55,000, up from 2004 estimated 46,000 positions.

The projected employment growth yields a significant increase in office space demand over the 2015 time horizon. By 2015, demand for Centre County office space would likely rise to a range of between 4.9m and 5.3m square feet.

Table 14: Estimated Demand for Commercial Office Space

Year	Low Estimate	Projected	High Estimate
2005	4,210,000	4,340,000	4,470,000
2006	4,280,000	4,410,000	4,550,000
2007	4,360,000	4,490,000	4,630,000
2008	4,430,000	4,570,000	4,710,000
2009	4,500,000	4,640,000	4,790,000
2010	4,570,000	4,720,000	4,870,000
2011	4,650,000	4,800,000	4,950,000
2012	4,720,000	4,870,000	5,030,000
2013	4,790,000	4,950,000	5,110,000
2014	4,860,000	5,020,000	5,190,000
2015	4,930,000	5,100,000	5,270,000
The Louis Berger Group, Inc.			

5.0 CONCLUSIONS

One of the most critical findings of this fiscal and economic evaluation is the impact of balance of land use for the different scenarios for the Shiloh road development. There are three basic forms of land use proposed; residential, office commercial, and retail. In the State College region, each of these land uses has the potential to both benefit, and negatively impact, the existing economic activity. It must be noted that these impacts are not uniformly experienced across the entire cross-section of the economy, rather each municipality within State College experiences its own net gain or loss, dependent upon the inventory of existing retail, commercial, and residential land use within its boundaries. As such, this study determined that any development should be based on a careful balance of the three land uses.

Retail Development - New retail development will inevitable impact the pattern of demand experienced by existing retailers. The only way to ameliorate this impact in the short term is to introduce new retail demand. This can be accomplished through attracting new residents to an area, and/or through attracting new office commercial activity to the area that represents a net *increase* in economic activity to the area. These new businesses then support new residential growth in other municipalities that create new retail demand. In this context, State College Borough, which is dominated by smaller specialty stores, may experience loss of employment under scenarios that create new walkable small store destinations unless sufficient additional retail demand is created. College Township, on the other hand, does not possess an existing "mainstreet" competitor, and will attract the greatest share of new residents (i.e.: new consumers). For College Township, all scenarios represent a net *gain* (*not* including the new economic activity on the site), to existing retailers for College Township. Ferguson Township possesses a smaller inventory of existing retail space, which is dominated by a small stretch of retailers on North Atherton Street in the vicinity of the Northland Center. The township's retailers also tend to capture more of the retail demand on the other south side of the State College region. As such, Ferguson is not significantly impacted by the introduction of new retail outlets. The major retail development in Patton Township is in the vicinity of the Colonnade near the Waddle Road interchange. Many of these retailers would be direct competitors to new retail developments on Shiloh Road. Consequently, this township is negatively impacted by scenarios with high levels of retail development; new residents will not locate close enough to the Colonnade development to compensate for the lost sales due to new retail outlets. Harris Township possesses a small inventory of existing retail, mainly concentrated on the downtown Boalsburg strip. As expected, those scenarios that contain the competing "mainstreet" developments have the proportionally biggest impact on economic activity in Harris Township.

Office Development - while vital to balance new retail and residential development, the introduction of new office space also has the greatest potential to re-distribute economic activity between the municipalities. New office development that exceeds demand (that can't be met by attracting *new* businesses to the area), will represent net losses to existing commercial developments, as existing businesses vacate existing premises and transfer to

the new space (which is assumed to offer superior amenities). This redistributed activity will increase vacancy rates and depress rental rates in the overall market. Some local towns, such as College Township and Ferguson Township, will experience a disproportionate share of the impact due to the large volume of existing space within the township. State College, with a smaller inventory, is affected less. Both Harris and Patton townships have comparatively small inventories of office space, and thus are least affected by the introduction of new space to the market. In short, office development is critical, but care must be taken to provide a *commercially viable* quantity of space.

Residential Development – as can be witnessed from the results of the fiscal impact analysis, developments containing higher proportions of residential land use create the greatest fiscal burden on municipalities. Net deficits, especially in relation to schools expenditures, can only be met with corresponding increases in local taxation. However, viewed from an economy-wide perspective, new residential developments represent new consumers to existing businesses, and are a source of new labor to facilitate the attraction of new businesses to the area. Consequently, the argument for new residential development may seem counter-intuitive at a municipal finance level. In the case of the Shiloh Road development, the results of the retail model highlight the importance of balancing the introduction of new retail premises with a corresponding increase in retail consumers. By introducing these new residents in geographical proximity to new retail establishments, it compensates existing State College region retailers, especially within State College Borough, and College Township. Furthermore, in land use scenarios that include areas of small walk-able "mainstreet" developments, new local residents are often essential to achieve "critical mass" for the area; supporting new retail establishments in non-business hours and on weekends.

Commercially Viable Development – as part of the evaluation of the fiscal and economic impacts of the different land use scenarios, Berger undertook simple demand analyses for both retail and office commercial development to determine what is a reasonable, or commercially viable, amount of new development that could be generated by the current market. Certain retail markets were identified as under-represented, or where demand is currently in equilibrium with supply. Given modest increases in population and real wages, Berger then identified particular retail categories that might attract developer interest. This potential developer interest corresponds to an approximate area of viable development; in this case, about 350,000 SF. Office market demand was based upon a historical relationship with local employment growth. Assuming a return to trend growth in non-hospitality service employment in the area, office demand for new space should approach approximately 400,000 SF within 4 years.

Recommendations – in order to aid interpretation of the analysis, Berger has made certain broad recommendations regarding the suitability and impact of the different proposed land uses.

Firstly, it must be noted that it is *not* possible to create a combination of residential, office, and retail land uses that does not create any negative impacts to existing economic activity in surrounding townships (barring an unrealistic scenario that contains *no* new

retail, and a perfectly optimal level of new office space). Each township has a particular retail mix, and is geographically situated to capture different proportions of regional retail expenditure.

Nevertheless, it is possible to minimize the negative impacts in an overall aggregate approach. College Township, and related stakeholders, should first determine the level of new office development that is realistic and for which there is a viable market (this study suggests a modest increase of approximately 400,000 SF). New residential development can then be included in the development, as the new office market tax contribution will offset potential tax deficits related to new residents. The type of new residential development is critical in this case; denser, less car-dependent developments often incur fewer fiscal costs, and have the potential to increase property values for all land uses. Dependent upon the size of the commercial development, approximately 750 units of new residential could be realistic. This level of new office and residential development will then dictate the amount of new retail development that should be allowed to occur. Limiting development to an amount slightly less than the overall area of office space (less than 350,000), and carefully targeting small clusters of small specialty stores to immediately local residents and workers, would create the least impact to existing businesses.

APPENDIX A: Assumptions for Retail Mix in New Development

ASSUMPTIONS FOR RETAIL MIX IN NEW DEVELOPMENT

Blue
POD A
3 hotels
3 family restaurants
480,000 square feet of office

POD B
45,000 square feet of planned church and school

POD C
50,000 square feet of office

Green
POD A
1 hotel
1 family restaurant
100,000 square feet of office

POD B
45,000 square feet of church and school

POD C
50,000 square feet of office

Red
POD A
2 hotels
120,000 square feet of specialty retail stores
Big Box – 1 home improvement store
1 grocery store
1 home furnishing store
475,000 square feet of office

POD B
Big Box – 1 electronics store
1 book and music store
1 clothing department store

POD C
33,330 square feet of specialty retail stores
Big Box- 1 automotive parts and accessories store

1 sporting goods store
107,000 square feet of office

Gold
POD A
120,000 square feet of specialty retail stores
Big Box 1 home improvement store
1 grocery store
340,000 office space
100,000 recreation facility

POD C
Big Box Home Furnishings
70,000 square feet of specialty retail stores

APPENDIX B: Fiscal Impact Worksheets

ANNUAL COSTS

Red Scenario

2003 Population	8,829
Extra Population	2,699
2003-2004 School Enrollment	7,328
NEW School Age Children	468
2003 Total Dwelling Units	3,422
New Dwelling units	1100
2004 Total Roads (snow plowed)	58
Additional Road Mileage	1.67
Existing Park Area	60
New Park Area	1.60

	Metric	Existing	Incremental Increase	Total Annual Charge	Total Extra Cost	Notes
General Government	Population	8,829	2,699	$1,004,558	$307,091	Item 400-408 minus Fire Protection and capital reserve
Police Services	Ind*	8,829	2,699	$836,359	$55,000	As per consultation with Chief Thomas King
Fire Protection Service	Population	8,829	2,699	$116,638	$35,656	Acct. 41.357.200 + Acct. 41.358.200 from CRCG Fire Protection
Fire Protection (Hydrants etc.)	Population	8,829	2,699	$134,038	$52,511	
Code Enforcement/ Zoning Administration	Population	8,829	2,699	$119,802	$36,623	
Public Works - Sanitation	Population	8,829	2,699	$18,850	$5,762	Item 413 +414
Snow and Ice Removal	Road Mileage - Snow Service	58	2	$156,436	$3,626	
Traffic signals and signs	Road Mileage	58	2	$97,546	$2,331	
Street Lighting	Road Mileage	58	2	$54,348	$1,295	
Tool/Machinery Repair	Road Mileage	58	2	$130,063	$3,108	
Highway/road Maintenance	Road Mileage	58	2	$114,592	$2,738	
Parks	Park Area	60	2	$186,000	$4,960	
Transit	Population	8,829	2,699	$57,850	$17,685	
Library	Population	8,829	2,699	$83,870	$25,639	
Miscelleneous	Population	8,829	2,699	$301,141	$92,058	
Total costs				$3,412,091	$646,084	

School	Scenario costs	2003-2004 Total	Costs per student
Total costs	$5,056,105	$79,169,104	$10,803.64
SCHOOL TOTAL	$5,056,105	$79,169,104	$10,803.64

ANNUAL COSTS

Blue Scenario

2003 Population	8,829
Extra Population	265
2003-2004 School Enrollment	7,328
NEW School Age Children	72
2003 Total Dwelling Units	3,422
New Dwelling units	100
2004 Total Roads	58
Additional Road Mileage	1.67
Existing Park Area	60
New Park Area	0

	Metric	Existing	Incremental Increase	Total Annual Charge	Total Extra Cost	Notes
General Government	Population	8,829	265	$1,004,558	$30,183	Item 400-408 minus Fire Protection and capital reserve
Police Services	Ind*	8,829	265	$836,359	$1,460	As per consultation with Chief Thomas King
Fire Protection Service	Population	8,829	265	$116,638	$3,505	Acct. 41.357.200 + Acct. 41.358.200 from CRCG Fire Protection
Fire Protection (Hydrants etc.)	Population	8,829	265	$134,038	$5,161	
Code Enforcement/ Zoning Administration	Population	8,829	265	$119,802	$3,600	
Public Works - Sanitation	Population	8,829	265	$18,850	$566	Item 413 +414
Snow and Ice Removal	Road Mileage - Snow Service	58	2	$156,436	$4,504	
Traffic signals and signs	Road Mileage	58	2	$97,546	$2,809	
Street Lighting	Road Mileage	58	2	$54,348	$1,565	
Tool/Machinery Repair	Road Mileage	58	2	$130,063	$3,745	
Highway/road Maintenance	Road Mileage	58	2	$114,592	$3,299	
Parks	Park Area	60	0	$186,000	$0	
Transit	Population	8,829	265	$57,850	$1,738	
Library	Population	8,829	265	$83,870	$2,520	
Miscelleneous	Population	8,829	265	$301,141	$9,048	
Total costs				$3,412,091	**$73,703**	

School	Scenario costs	2003-2004 Total	Costs per student
Total costs	$777,862	$79,169,104	$10,803.64
SCHOOL TOTAL	$777,862	$79,169,104	$10,803.64

ANNUAL COSTS

	Gold Scenario
2003 Population	8,829
Extra Population	1,959
2003-2004 School Enrollment	7,328
NEW School Age Children	440
2004 Total Roads	58
Additional Road Mileage	1.67
Existing Park Area	60
New Park Area	1

	Metric	Existing	Incremental Increase	Total Annual Charge	Total Extra Cost	Notes
General Government	Population	8,829	1,959	$1,004,558	$222,894	Item 400-408 minus Fire Protection and capital reserve
Police Services	Ind*	8,829	1,959	$836,359	$13,000	As per consultation with Chief Thomas King
Fire Protection Service	Population	8,829	1,959	$116,638	$25,880	Acct. 41.357.200 + Acct. 41.358.200 from CRCG Fire Protection
Fire Protection (Hydrants etc.)	Population	8,829	1,959	$134,038	$38,114	
Code Enforcement/ Zoning Administration	Population	8,829	1,959	$119,802	$26,582	
Public Works - Sanitation	Population	8,829	1,959	$18,850	$4,182	Item 413 +414
Snow and Ice Removal	Road Mileage - Snow Service	58	2	$156,436	$3,626	
Traffic signals and signs	Road Mileage	58	2	$97,546	$2,331	
Street Lighting	Road Mileage	58	2	$54,348	$1,295	
Tool/Machinery Repair	Road Mileage	58	2	$130,063	$3,108	
Highway/road Maintenance	Road Mileage	58	2	$114,592	$2,738	
Parks	Park Area	60	1	$186,000	$3,100	
Transit	Population	8,829	1,959	$57,850	$12,836	
Library	Population	8,829	1,959	$83,870	$18,609	
Miscelleneous	Population	8,829	1,959	$301,141	$66,818	
Total costs				$3,412,091	**$445,114**	

School	Scenario costs	2003-2004 Total	Costs per student
Total costs	$4,753,603	$79,169,104	$10,803.64
SCHOOL TOTAL	$4,753,603	$79,169,104	$10,803.64

ANNUAL COSTS

Green Scenario

2003 Population	8,829
Extra Population	265
2003-2004 School Enrollment	7,328
NEW School Age Children	72
2004 Total Roads	58
Additional Road Mileage	1.67
Existing Park Area	60
New Park Area	0

	Metric	Existing	Incremental Increase	Total Annual Charge	Total Extra Cost	Notes
General Government	Population	8,829	265	$1,004,558	$30,183	Item 400-408 minus Fire Protection and capital reser
Police Services	Ind*	8,829	265	$836,359	$1,460	As per consultation with Chief Thomas King
Fire Protection Service	Population	8,829	265	$116,638	$3,505	Acct. 41.357.200 + Acct. 41.358.200 from CRCG Fire Protection
Fire Protection (Hydrants etc.)	Population	8,829	265	$134,038	$5,161	
Code Enforcement/ Zoning Administration	Population	8,829	265	$119,802	$3,600	
Public Works - Sanitation	Population	8,829	265	$18,850	$566	Item 413 +414
Snow and Ice Removal	Road Mileage - Snow Service	58	2	$156,436	$4,504	
Traffic signals and signs	Road Mileage	58	2	$97,546	$2,809	
Street Lighting	Road Mileage	58	2	$54,348	$1,565	
Tool/Machinery Repair	Road Mileage	58	2	$130,063	$3,745	
Highway/road Maintenance	Road Mileage	58	2	$114,592	$3,299	
Parks	Park Area	60	0	$186,000	$0	
Transit	Population	8,829	265	$57,850	$1,738	
Library	Population	8,829	265	$83,870	$2,520	
Miscelleneous	Population	8,829	265	$301,141	$9,048	
Total costs				$3,412,091	$73,703	

School	Scenario costs	2003-2004 Total	Costs per student
Total costs	$777,862	$79,169,104	$10,803.64
SCHOOL TOTAL	$777,862	$79,169,104	$10,803.64

Annual REVENUE

Red Scenario

2003 Population	8,829
Extra Population	2,699
2003-2004 School Enrollment	7,328
NEW School Age Children	468
2004 Total Roads	58
Road Mileage	1.67

Revenue Source	Existing Revenue	Metric	Incremental Revenue
Real property taxes	1,148,000	Assessed Value	$498,461
Occupation taxes	$500	Population	$152.85
Act 511 taxes - Occupational Privilege		(from Economic)	$21,610
Act 511 taxes - Local Income Tax	$1,230,075	(from Economic)	$220,000
Penalties and interest on delingent txs	$2,725	Property Tax	$1,183
Licenses and permits	$85,000	Property Tax	$36,907
Fines and forfeits	$128,200	Property Tax	$55,664
Interest, rents and royalties	$82,360	Property Tax	$35,761
Intergovernmental revenue			
Pension Grant	$62,582	Population	$19,131.14
PennDOT Snow Removal	$17,995	Roads	$518
Foreign Fire Insurance Tax	$81,316	Population	$24,858.07
PSU Impact Agreeement	$330,000	No Impact	$0.00
General govemment revenue	$207,417	Property Tax	$90,060
Public safety revenue	$600	Population	$183.42
Highways and street revenue	$1,000	Roads	$29
Culture-Recreation	$22,475	Population	$6,870.54
Transit system revenue	$12,029	Population	$3,677.23
Water system revenue	$61,800	Population	$18,892.08
TOTAL	$3,474,074		$1,033,958
School			
LOCAL SOURCES			
	Existing Revenue	Metric	Incremental Revenue
Current taxes	$45,393,517	Assessed Value	$3,869,276
Current year interim RE	$697,204	Property Tax	$59,429
Interim taxes	$150,000	Property Tax	$12,786
Utility taxes	$75,000	Property Tax	$6,393
Payment in lieu of taxes	$250,000	Property Tax	$21,310
Act 511 occupation tax-flat	$315,000	NA	$0
Act 511 earned income taxes	$10,750,000	From Economic	$418,000
Act 511 transfer tax	$1,100,000	Property Tax	$93,762
Delinquent taxes	$1,000,000	Property Tax	$85,239
Declinquent Act 511 O.A.T	$150,000	Property Tax	$12,786
Investment earnings	$450,000	Property Tax	$38,357
Rental income	$10,000	No. S.A.C	$639
Tuition income	$100,000	No. S.A.C	$6,386
Adult education tuition	$160,000	No. S.A.C	$10,218
Miscellaneous revenue	$75,000	No. S.A.C	$4,790
STATE SOURCES - ESBE	$5,462,000	1% increase	$54,620
STATE SOURCES - Other	7319000	No. S.A.C	$467,425
FEDERAL SOURCES	$1,015,000	No. S.A.C	$64,823
TOTAL	$74,471,721		$5,226,238

Annual REVENUE

Gold Scenario

2003 Population	8,829
Extra Population	1,959
2003-2004 School Enrollment	7,328
NEW School Age Children	440
2004 Total Roads	58
Road Mileage	1.67

Revenue Source	Existing Revenue	Metric	Incremental Revenue
Real property taxes	1,148,000	Assessed Value	$393,964
Occupation taxes	$500	Population	$110.94
Act 511 taxes - Occupational Privilege		(from Economic)	$18,951
Act 511 taxes - Local Income Tax	$1,230,075	(from Economic)	$150,800
Penalties and interest on delingent txs	$2,725	Property Tax	$935
Licenses and permits	$85,000	Property Tax	$29,170
Fines and forfeits	$128,200	Property Tax	$43,995
Interest, rents and royalties	$82,360	Property Tax	$28,264
Intergovernmental revenue			
Pension Grant	$62,582	Population	$13,885.85
PennDOT Snow Removal	$17,995	Roads	$518
Foreign Fire Insurance Tax	$81,316	Population	$18,042.59
PSU Impact Agreeement	$330,000	No Impact	$0.00
General government revenue	$207,417	Property Tax	$71,180
Public safety revenue	$600	Population	$133.13
Highways and street revenue	$1,000	Roads	$29
Culture-Recreation	$22,475	Population	$4,986.81
Transit system revenue	$12,029	Population	$2,669.02
Water system revenue	$61,800	Population	$13,712.33
TOTAL	$3,474,074		$791,347
School			
LOCAL SOURCES			
	Existing Revenue	Metric	Incremental Revenue
Current taxes	$45,393,517	Assessed Value	$3,058,127
Current year interim RE	$697,204	Property Tax	$46,970
Interim taxes	$150,000	Property Tax	$10,105
Utility taxes	$75,000	Property Tax	$5,053
Payment in lieu of taxes	$250,000	Property Tax	$16,842
Act 511 occupation tax-flat	$315,000	NA	$0
Act 511 earned income taxes	$10,750,000	From Economic	$286,520
Act 511 transfer tax	$1,100,000	Property Tax	$74,106
Delinquent taxes	$1,000,000	Property Tax	$67,369
Declinquent Act 511 O.A.T	$150,000	Property Tax	$10,105
Investment earnings	$450,000	Property Tax	$30,316
Rental income	$10,000	No. S.A.C	$600
Tuition income	$100,000	No. S.A.C	$6,004
Adult education tuition	$160,000	No. S.A.C	$9,607
Miscellaneous revenue	$75,000	No. S.A.C	$4,503
STATE SOURCES - ESBE	$5,462,000	1% increase	$54,620
STATE SOURCES - Other	$7,319,000	No. S.A.C	$439,460
FEDERAL SOURCES	$1,015,000	No. S.A.C	$60,944
TOTAL	$74,471,721		$4,181,253

Annual REVENUE

Blue Scenario

2003 Population	8,829
Extra Population	265
2003-2004 School Enrollment	7,328
NEW School Age Children	72
2004 Total Roads	58
Road Mileage	1.67

Revenue Source	Existing Revenue	Metric	Incremental Revenue
Real property taxes	1,148,000	Assessed Value	$153,641
Occupation taxes	$500	Population	$15.01
Act 511 taxes - Occupational Privilege		(from Economic)	$17,135
Act 511 taxes - Local Income Tax	$1,230,075	(from Economic)	$20,000
Penalties and interest on delingent txs	$2,725	Property Tax	$365
Licenses and permits	$85,000	Property Tax	$11,376
Fines and forfeits	$128,200	Property Tax	$17,157
Interest, rents and royalties	$82,360	Property Tax	$11,023
Intergovernmental revenue			
Pension Grant	$62,582	Population	$1,878.38
PennDOT Snow Removal	$17,995	Roads	$518
Foreign Fire Insurance Tax	$81,316	Population	$2,440.68
PSU Impact Agreeement	$330,000	No Impact	$0.00
General government revenue	$207,417	Property Tax	$27,759
Public safety revenue	$600	Population	$18.01
Highways and street revenue	$1,000	Roads	$29
Culture-Recreation	$22,475	Population	$674.58
Transit system revenue	$12,029	Population	$361.05
Water system revenue	$61,800	Population	$1,854.91
TOTAL	$3,474,074		$266,246
School			
LOCAL SOURCES			
	Existing Revenue	**Metric**	**Incremental Revenue**
Current taxes	$45,393,517	**Assessed Value**	**$1,192,635**
Current year interim RE	$697,204	Property Tax	$18,318
Interim taxes	$150,000	Property Tax	$3,941
Utility taxes	$75,000	Property Tax	$1,970
Payment in lieu of taxes	$250,000	Property Tax	$6,568
Act 511 occupation tax-flat	$315,000	NA	$0
Act 511 earned income taxes	$10,750,000	From Economic	$38,000
Act 511 transfer tax	$1,100,000	Property Tax	$28,901
Delinquent taxes	$1,000,000	Property Tax	$26,273
Declinquent Act 511 O.A.T	$150,000	Property Tax	$3,941
Investment earnings	$450,000	Property Tax	$11,823
Rental income	$10,000	No. S.A.C	$98
Tuition income	$100,000	No. S.A.C	$983
Adult education tuition	$160,000	No. S.A.C	$1,572
Miscellaneous revenue	$75,000	No. S.A.C	$737
STATE SOURCES - ESBE	$5,462,000	No Extra	$0
STATE SOURCES - Other	$7,319,000	No. S.A.C	$71,912
FEDERAL SOURCES	$1,015,000	No. S.A.C	$9,973
TOTAL	$74,471,721		$1,417,644

Annual REVENUE

Green Scenario

2003 Population	8,829
Extra Population	265
2003-2004 School Enrollment	7,328
NEW School Age Children	72
2004 Total Roads	58
Road Mileage	1.67

Revenue Source	Existing Revenue	Metric	Incremental Revenue
Real property taxes	1,148,192	Assessed Value	$66,642
Occupation taxes	$500	Population	$15.01
Act 511 taxes - Occupational Privilege		(from Economic)	$5,440
Act 511 taxes - Local Income Tax	$1,230,075	(from Economic)	$20,000
Penalties and interest on delingent txs	$2,725	Property Tax	$158
Licenses and permits	$85,000	Property Tax	$4,933
Fines and forfeits	$128,200	Property Tax	$7,441
Interest, rents and royalties	$82,360	Property Tax	$4,780
Intergovernmental revenue			
Pension Grant	$62,582	Population	$1,878.38
PennDOT Snow Removal	$17,995	Roads	$518
Foreign Fire Insurance Tax	$81,316	Population	$2,440.68
PSU Impact Agreeement	$330,000	No Impact	$0.00
General government revenue	$207,417	Property Tax	$12,039
Public safety revenue	$600	Population	$18.01
Highways and street revenue	$1,000	Roads	$29
Culture-Recreation	$22,475	Population	$674.58
Transit system revenue	$12,029	Population	$361.05
Water system revenue	$61,800	Population	$1,854.91
TOTAL	$3,474,266		$129,223

School

LOCAL SOURCES

	Existing Revenue	Metric	Incremental Revenue
Current taxes	$45,393,517	**Assessed Value**	**$517,305**
Current year interim RE	$697,204	Property Tax	$7,945
Interim taxes	$150,000	Property Tax	$1,709
Utility taxes	$75,000	Property Tax	$855
Payment in lieu of taxes	$250,000	Property Tax	$2,849
Act 511 occupation tax-flat	$315,000	NA	$0
Act 511 earned income taxes	$10,750,000	From Economic	$38,000
Act 511 transfer tax	$1,100,000	Property Tax	$12,536
Delinquent taxes	$1,000,000	Property Tax	$11,396
Declinquent Act 511 O.A.T	$150,000	Property Tax	$1,709
Investment earnings	$450,000	Property Tax	$5,128
Rental income	$10,000	No. S.A.C	$98
Tuition income	$100,000	No. S.A.C	$983
Adult education tuition	$160,000	No. S.A.C	$1,572
Miscellaneous revenue	$75,000	No. S.A.C	$737
STATE SOURCES - ESBE	$5,462,000	No Extra	$0
STATE SOURCES - Other	$7,319,000	No. S.A.C	$71,912
FEDERAL SOURCES	$1,015,000	No. S.A.C	$9,973
TOTAL	$74,471,721		$684,707

APPENDIX C: Assumptions for Fiscal Impact Analysis

Property Tax – Tax records for existing comparable properties have been obtained. In particular, tax records for many of the "Colonnade" developments on the I-99 Waddle Road interchange were used for comparison purposes (amongst others). An average tax rate/ SF for different types of property was developed and applied to the proposed developments within each scenario.

Act 511 Income Tax – Fiscal revenue, accrued due to local income tax, has been calculated from an analysis of the number and types of employment and residential growth expected to occur on the site. In this respect, this revenue item is directly related to the output of the separate Economic Impact Analysis.

Police, Fire and School services – These cost items have been determined through direct consultation with the relevant service provider. In general, the provider was given a description of the different land use scenarios (and assumptions regarding related population, no. of school age children, etc), independent calculations were then made to determine the new "charge" that the provider would levy on the municipality (inclusive of all annual and capital costs) that maintained the *existing level of service*.

Level of Service Assumptions – Throughout the analysis, we have calculated the *incremental* increase in fiscal costs that would be related to maintaining the *existing* (2003/2004) level of service. As a theoretical example, if one of the scenarios would warrant the purchase of a new truck for snow plowing purposes, this analysis calculates the incremental increase in all "snow plowing equipment" that is required to ensure that new development has the same "snow plow equipment-per road mile" as the township currently enjoys. This may, or may not, equal the entire purchase price of a new vehicle; the additional investment over and above that amount required to maintain level of service is not included in this analysis.

Level of Taxation Assumptions – Similarly, this analysis calculates the incremental increase in property and personal income taxes given the existing tax structure. As such, we have used 2003/2004 millage and per capita tax rates.

Capital Charge Assumptions – If new capital investment is required to maintain existing levels of service, this analysis calculates the up-front charge of incremental increases to plant and equipment only (as in the previous snow plow equipment example). Property such as public township buildings, and infrastructure, is not incrementally charged to the new development.

Population Assumptions - Based on County 2000 Census Data for average population per household, the household rates are:
Single Family Detached - 2.65 persons
Single Family Attached - 2.48 persons
Multi Family Households - 2.12 persons

Total populations are:

Blue- 265
Green – 265
Red – 2,699
Gold – 1,959

School Age Children Assumptions - Assumptions based on "Population Projections: State College Area School District" from December 8, 2003. We used the following values for student generation:

Single Family Detached: 0.722 students per household
Single Family Attached and Multifamily: 0.284 students per household

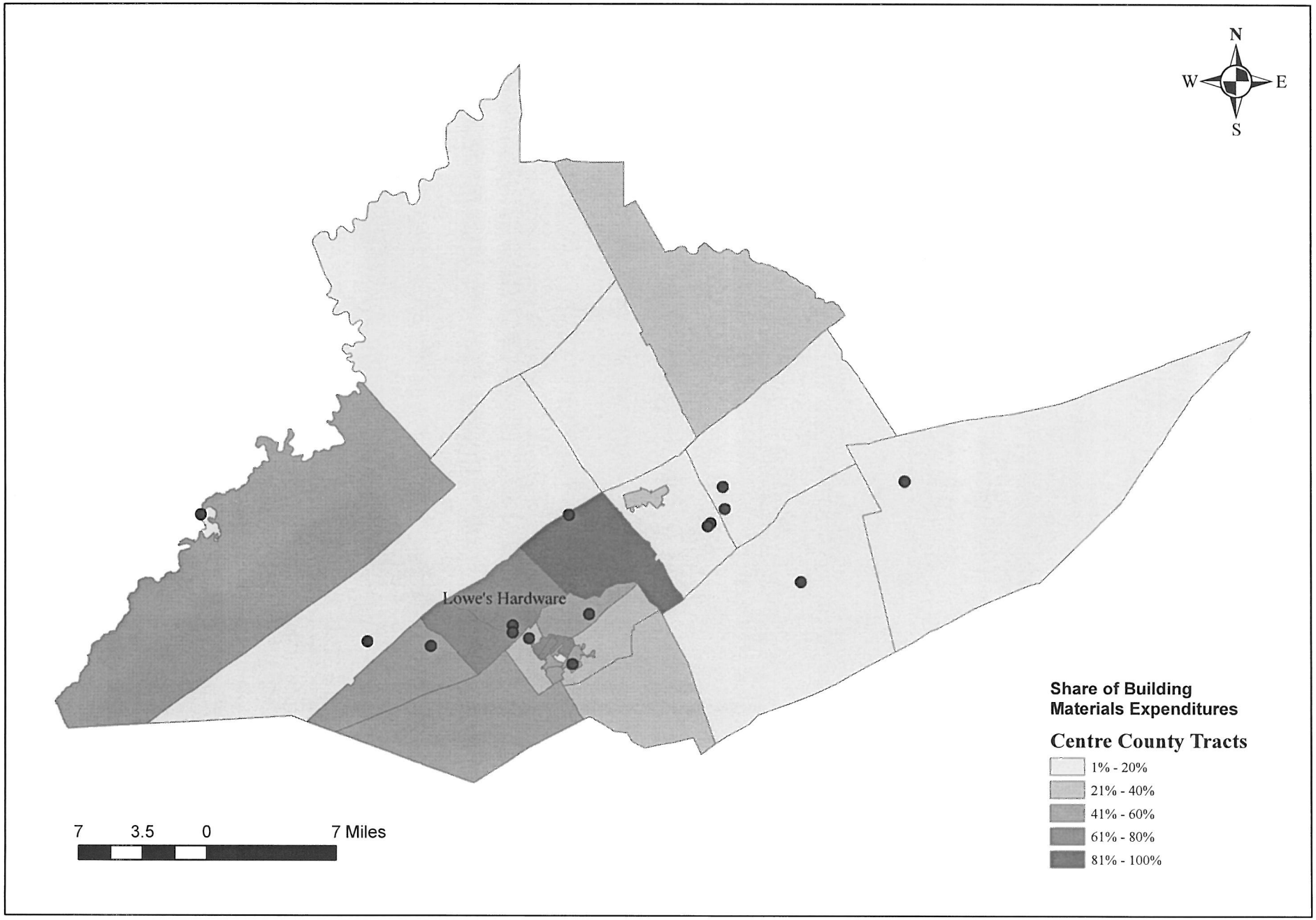
Distribution rates:

Elementary	0.443
Middle	0.252
Senior/High	0.314

Total New Students:
Blue 72
Green 72
Red 468
Gold 440

APPENDIX D: Graphical Example of Retail Gravity Model

Lowe's Hardware Market Share of Existing Building Materials Expenditures



Lowe's Hardware Market Share of Building Materials Expenditures Following Completion of Shiloh Road Gold Scenario