

Fiscal Impact Analysis of Development Scenarios

Prepared for:

The City of Champaign, Illinois



February 5, 2010

Prepared by:



February 5, 2010

Mr. Rob Kowalski, AICP, Assistant Planning Director
City of Champaign
102 N. Neil Street
Champaign, Illinois 61820

Dear Mr. Kowalski:

I am pleased to present to you the results of the *Fiscal Impact Analysis of Development Scenarios* study for the City of Champaign. As you are aware, this study examines whether revenues generated by *new growth* are sufficient to cover the resulting costs for service and facility demands placed on the City over the next twenty years. TischlerBise evaluated the fiscal impact analysis of two scenarios:

- Scenario 1: **Growth Within the Service Area**—all growth occurs within the current sanitary sewer service area.
- Scenario 2: **Growth Beyond the Service Area**—growth occurs both within and outside of the current sanitary sewer service area.

A cursory review of the results would lead the reader to believe that the City will be able to cover the costs of growth under the conditions of Scenario One but not under Scenario Two. However, this conclusion would fail to consider several factors:

1. The fiscal impact analysis results for each scenario are a snapshot based on the FY2009 budget and levels of service. Thus, it is assumed that these *current levels of service* will continue through the 20-year analysis period. If any levels of service are insufficient or the City raises any levels of service, costs will increase reducing the net fiscal impacts.
2. Road projects and fire station construction are assumed to be debt financed over a period of twenty years. Thus, the debt payments extend beyond the time period of this analysis. *Remaining debt service* for the Growth **Within** the Service Area scenario totals \$52.5 million eliminating the positive impact of this scenario while the remaining

debt service for the Growth **Beyond** the Service Area totals \$96.4 million creating a more extreme deficit.

When all debt service is included in the calculations, both scenarios result in net deficits: \$19.7 million in Scenario One and \$116.1 million in Scenario Two. Thus, the City is unable to cover the cost of growth in either scenario when all capital costs are considered.

3. The Growth **Beyond** the Service Area also requires expansion of the sanitary sewer service area with four projects including the extension of interceptor sewers and new lift stations. These sewer project costs have not been captured in this analysis because sanitary sewer service is not provided by the City but by the Urbana-Champaign Sanitary District. These costs and the difficulty of the projects should be considered in addition to the net fiscal impact, as the City often carries the cost of sewers and is reimbursed as development occurs.

Consideration of these factors and the fact that both scenarios will result in fiscal deficits leads to the following conclusions:

- The current revenue sources available to the City to fund capital improvements to serve new development are limited. Thus, the City should consider **alternative financing sources** such as impact fees for growth-related infrastructure.
- Related to the above bullet point, the implementation of a **tiered impact fee program** that charges more for development outside the current sanitary sewer service area could assist the City in directing development in a phased manner.
- **Easing the burden on the operating budget to offset capital expenditures** will allow the City to devote more resources to road maintenance, which has not had adequate funding, as well as other services that have been reduced in the FY2010 budget including police, fire, and public works staffing.
- It is important to acknowledge that **fiscal issues are only one way** to evaluate development and growth trends. Environmental, land use, and social issues should also be taken into consideration when determining what is best for the City.

I look forward to discussing the results and options for addressing the City's capital revenue deficit with you further.

Sincerely,

L. Carson Bise
President, TischlerBise

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I. EXECUTIVE SUMMARY

A. BACKGROUND

TischlerBise is under contract with the City of Champaign, Illinois, to evaluate the fiscal impact of development under two growth scenarios. Growth within each of the two scenarios is allocated to seven different fiscal analysis zones (FAZs) in the City. A fiscal impact analysis determines whether revenues generated by *new growth* are sufficient to cover the resulting costs for service and facility demands placed on the City. It can be regarded as a snapshot of the current budget. For this analysis, FY2009 budget is used to represent a “snapshot” of current revenues, costs, and levels of service.

The revenue and cost projections are based on the assumption that in most cases the current level of spending, as provided in the FY2009 budget, will continue over time. The current level of spending is referred to as the current level-of-service in this type of analysis. Enterprise funds (i.e., self-funded operations) and internal services funds are not included in this analysis since revenues generated from fees are assumed to cover costs to provide those services. In addition, current 2009 dollars are used throughout and all results are shown in \$1,000s.

The first step of the analysis was to determine current service levels and capacities and associated revenues and costs. This was done through on-site interviews with City staff and other relevant personnel as well as a review of the City’s FY2009 Budget and other relevant documents. Results are provided in the Appendix to this report—*Levels of Service / Revenue and Cost Assumptions* document (*LOS Document*)—issued under separate cover. The *LOS Document* contains the revenue and cost projection assumptions that are used in the customized fiscal impact model for this analysis.

The *Fiscal Impact Analysis of Development Scenarios* report herein provides the results of the fiscal impact analysis of the two scenarios as well as a detailed breakdown of the results within each of the seven fiscal analysis zones.

B. DEVELOPMENT SCENARIOS

TischlerBise evaluated the fiscal impact analysis of two scenarios, which are summarized below.

- Scenario 1: **Growth Within the Service Area**—all growth occurs within the current sanitary sewer service area.
- Scenario 2: **Growth Beyond the Service Area**—growth occurs both within and outside of the current sanitary sewer service area.

While the pace of growth in each scenario is very similar, the mix of land uses varies as does the amount of growth in each of the fiscal analysis zones. Land uses are based on approved

developments as well as the assumptions in the *Champaign Tomorrow* plan. The seven areas of the City examined in the study are defined by central transportation nodes:

- Area A: Olympian Drive at Prospect Avenue;
- Area B: Olympian Drive Extended (future interchange with I-74);
- Area C: Bradley Avenue at Staley Road;
- Area D: Staley Road at Kirby Avenue;
- Area E: Southwest Champaign (area surrounding the I-57 and Curtis Road interchange);
- Area F: Curtis Road Interchange with I-57; and
- Area G: Infill development in the urban core of the City.

An overview map of the seven FAZs can be seen in Section II; more detailed maps of each area are included in Appendix B. A summary of the two development scenarios and base year data is shown below.

Figure 1: Summary of Scenarios

	Base Year*	Net Increase 2009-2029	
		Sc. 1: Growth Within Service Area	Sc. 2: Growth Beyond Service Area
Population	75,254	18,452	19,332
Housing Units	31,860	8,453	8,453
Jobs	39,906	9,785	10,885
Nonres. Floor Area (1,000 sf)	15,345	3,985	3,688

* Base year population data is taken from the Draft *Champaign Tomorrow: Existing Conditions Report*, housing units are based on 2007 Special Census and 2000 U.S. Census, jobs data is from the Illinois Workforce Information Center, and nonresidential floor area data is estimated based on the number of jobs.

C. FISCAL IMPACT RESULTS

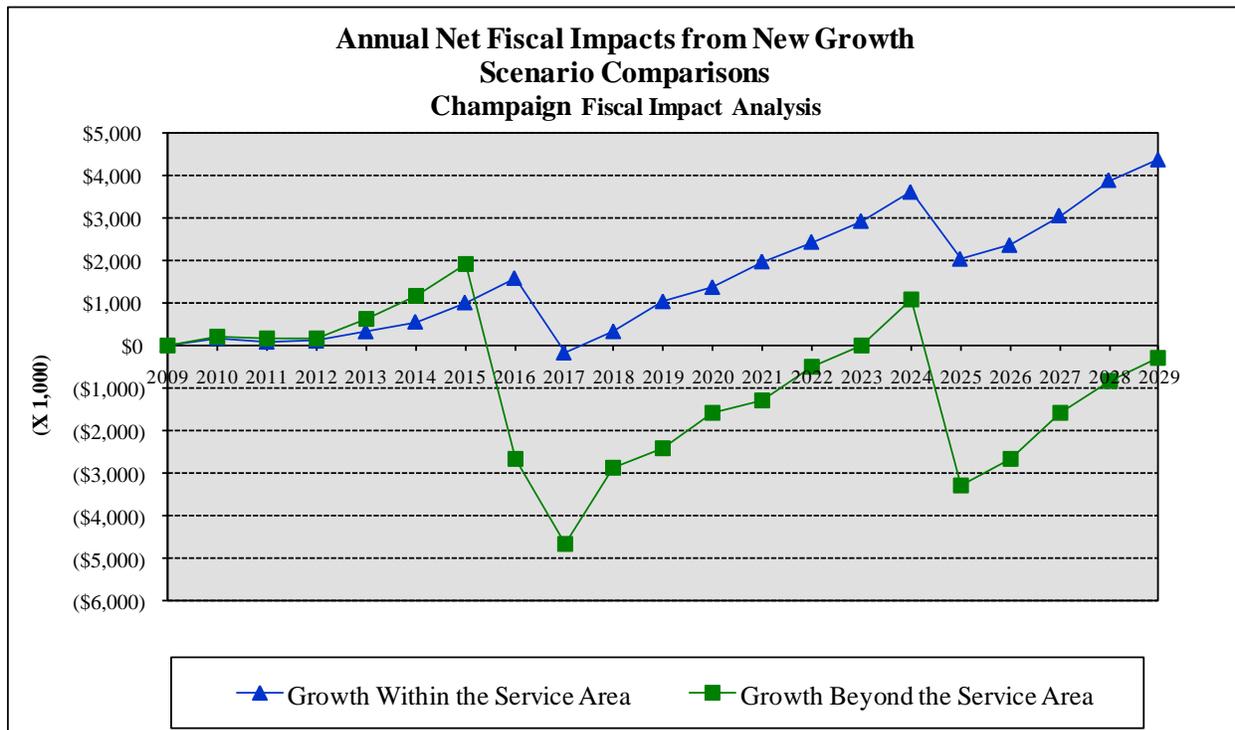
Fiscal impact results are shown in different ways. First, *annual* net results are discussed and show the fiscal impacts from one year to the next for each of the scenarios. *Cumulative* results are shown reflecting total revenues, expenditures, and net fiscal results over the 20-year development timeframe. Finally, results *by FAZ* are then presented detailing the difference between results in the two scenarios for each FAZ.

1. ANNUAL NET RESULTS

Figure 2 shows the *annual* (year to year) net results to the City for each of the growth scenarios over the twenty-year study time horizon. Each year reflects total revenues generated minus total expenditures incurred in the same year. Both capital and operating costs are included. By showing the results annually, the magnitude, rate of change, and timeline of deficits and

revenues can be observed over time. The “bumpy” nature of the annual results during particular years represents the opening of capital facilities and/or major operating costs being incurred. Data points above the \$0 line represent net positive annual results; points below the \$0 line represent annual deficits. Each year’s result is *not* carried forward into the next year. This enables a comparison from year-to-year of the net results without distorting the revenue or cost side of the equation. In reality, those net positive results would be carried forward or deficits would be funded through other means such as debt financing for capital improvements where there is a shortfall.

Figure 2: Annual Net Results of Two Growth Scenarios



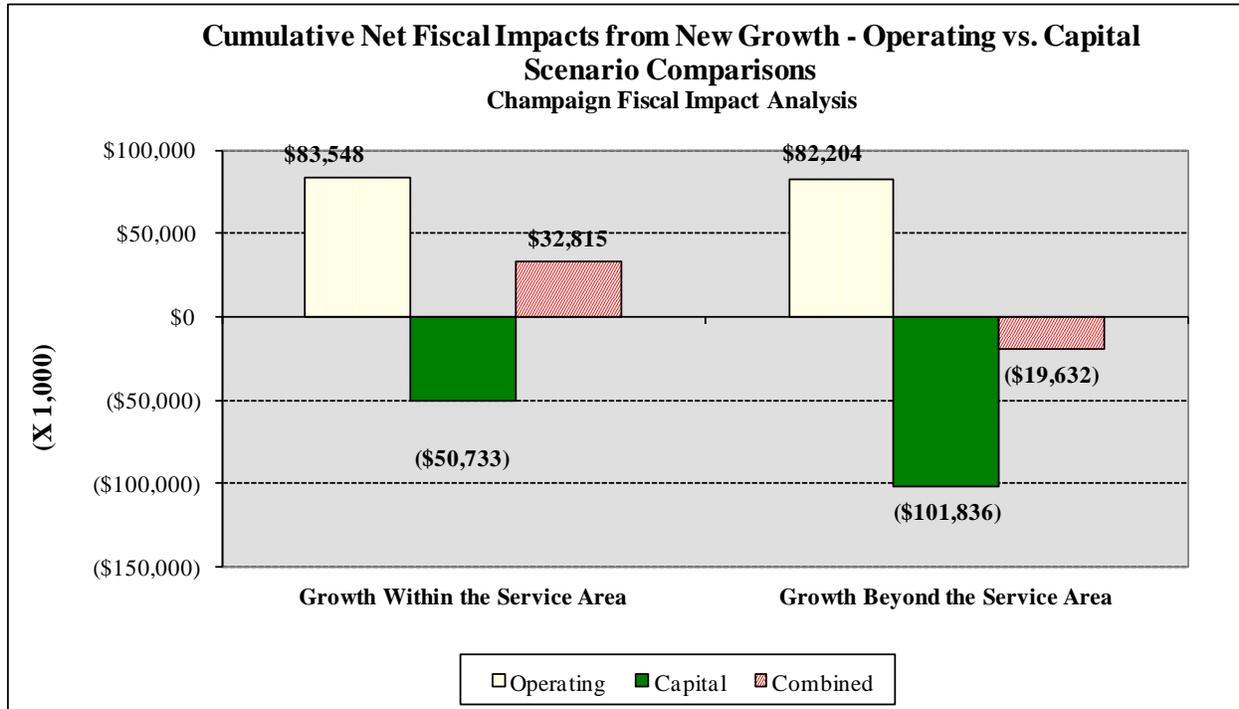
As shown in Figure 2, the annual net fiscal impact is neutral or positive for both scenarios through FY2017. After this year, major variances can be explained by the need to construct capital projects. For the Growth **Within** the Service Area scenario, road projects are triggered in FY2017 and FY2025 causing decreases in the net fiscal impact. The net fiscal impact remains neutral or positive in all years for this scenario.

The decrease in the net fiscal impact begins in FY2016 for the Growth **Beyond** the Service Area scenario; this decrease is caused by the beginning of road projects. The net deficit increases in FY2017 when a new fire station is constructed and fire station #4 is relocated. Another significant decrease in the net fiscal impact occurs when the second set of road projects begin in FY2025.

2. CUMULATIVE NET RESULTS

The largest changes in the net fiscal impact from one year to another for each of the growth scenarios are triggered by capital projects. *Cumulative* figures comparing the net operating and net capital impacts make this even clearer. The relative size of each of these cumulative net positive and negative results as well as a comparison of the cumulative net fiscal impact can be seen in Figure 3 below.

Figure 3: Cumulative Net Results of Two Growth Scenarios



Although the operating results are similar, the cumulative capital deficit for the Growth **Beyond** the Service Area scenario is nearly double that of the Growth **Within** the Service Area capital deficit making the combined results quite different for each scenario. The \$83.5 million net positive operating result for Growth **Within** the Service Area offsets the \$50.7 million capital deficit for a total net positive impact of \$32.8 million while the Growth **Beyond** the Service Area's net fiscal impact is a deficit of \$19.6 million due to the \$101.8 million capital deficit and the \$82.2 million net positive operating result.

Three additional factors must be considered when analyzing these fiscal results:

1. The fiscal impact analysis results for each scenario are a snapshot based on the FY2009 budget and levels of service. Thus, it is assumed that these *current levels of service* will continue through the 20-year analysis period. If any levels of service are insufficient or the City raises any levels of service, costs will increase reducing the net fiscal impacts.

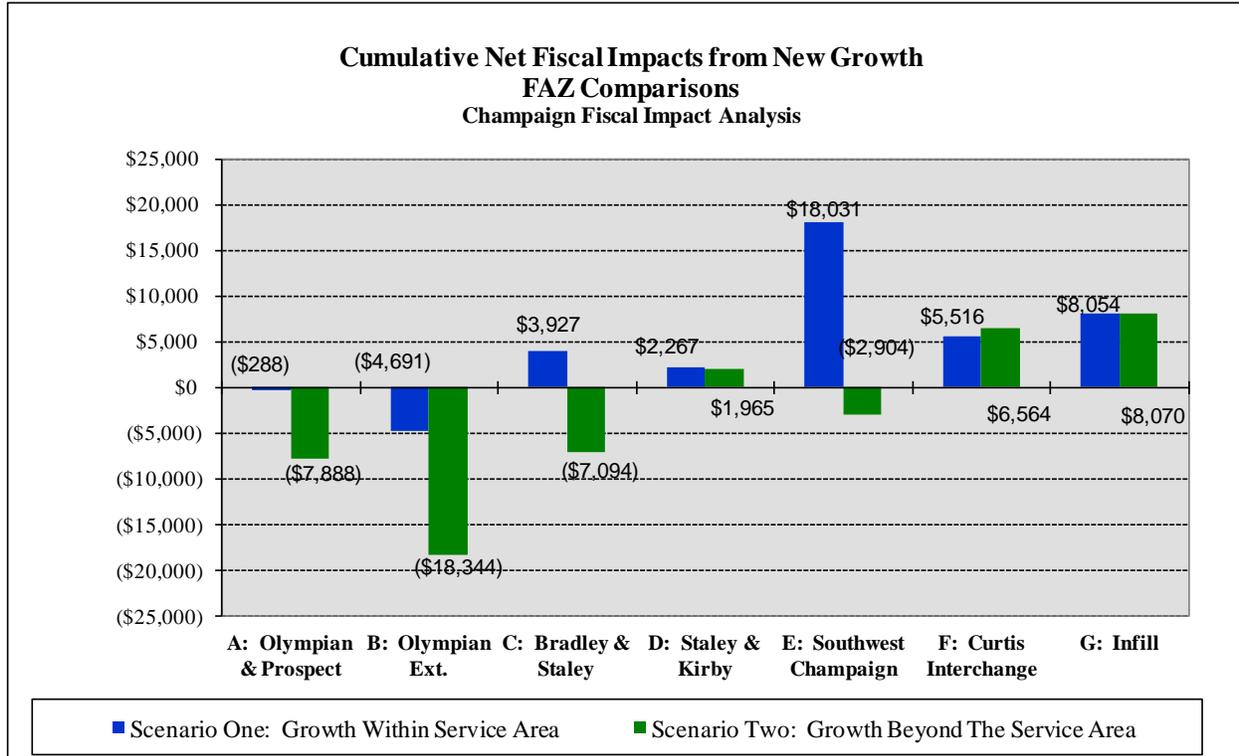
2. Road projects and fire station construction are assumed to be debt financed over a period of twenty years. Thus, the debt payments extend beyond the time period of this analysis. *Remaining debt service* for the Growth **Within** the Service Area scenario totals \$52.5 million eliminating the positive impact of this scenario while the remaining debt service for the Growth **Beyond** the Service Area totals \$96.4 million creating a more extreme deficit.
3. The Growth **Beyond** the Service Area also requires expansion of the sanitary sewer service area with four projects including the extension of interceptor sewers and new lift stations. These sewer project costs have not been captured in this analysis because sanitary sewer service is not provided by the City but by the Urbana-Champaign Sanitary District. These costs and the difficulty of the projects should be considered in addition to the net fiscal impact. However the City often carries the cost of sewers and is reimbursed as development occurs.

3. FISCAL ANALYSIS ZONES

This section provides a summary of the fiscal impact analysis results for each fiscal analysis zone (FAZ). The *cumulative* figures reflect total revenues generated minus operating and capital expenditures over the 20-year development timeframe.

As shown in Figure 4, three of the FAZs with positive net cumulative results in the Growth **Within** the Service Area scenario maintain positive results in the Growth **Beyond** the Service Area scenario: Staley and Kirby, Curtis Interchange, and Infill FAZs. In fact, the Curtis Interchange and Infill FAZs show very little difference in fiscal impact in the two scenarios and maintain net positive impacts in each year of the analysis. Two FAZs, Olympian and Prospect as well as Olympian Extended, have net deficits in both scenarios. Only the Bradley and Staley and Southwest Champaign FAZs change from a net positive result to a net deficit.

Figure 4: Net Fiscal Impacts by FAZ



Net deficits can be attributed to capital costs including road improvements and construction that occur in all FAZs except the Curtis Interchange and Infill; the Bradley and Staley FAZ has no road projects in the Growth **Within** the Service Area scenario. In the Growth **Beyond** the Service Area Scenario, there are also fire capital expenditures in the Olympian Extended, Bradley and Staley, and Staley and Kirby FAZs. More details on revenues and expenditures specific to each FAZ can be found in Section VI of this study.

Debt service payments beyond the twenty-year timeframe of this study must also be considered. Both road projects and the new public works building are assumed to be debt financed over a period of twenty years. Because of this, additional debt service is owed on these improvements after the projection period, thereby increasing overall costs. Additional debt service beyond year 20 totals \$52.5 million for the Growth **Within** the Service Area FAZ and totals \$96.4 million for the Growth **Beyond** the Service Area scenario; a breakdown by FAZ and the impact on the net fiscal impact in each scenario is shown in Figure 5 below.

Figure 5: Additional Debt Service Beyond Year 20 with Revised Net Fiscal Impact

	ADDITIONAL DEBT SERVICE						
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Scenario One: Growth Within Service Area							
Additional Debt Service	\$10,853	\$6,899	\$132	\$19,233	\$15,287	\$51	\$51
Net Fiscal Impact including Additional Debt Service	(\$11,141)	(\$11,590)	\$3,795	(\$16,966)	\$2,744	\$5,465	\$8,003
Scenario Two: Growth Beyond The Service Area							
Additional Debt Service	\$18,705	\$16,221	\$12,282	\$21,591	\$27,456	\$120	\$48
Net Fiscal Impact including Additional Debt Service	(\$26,593)	(\$34,565)	(\$19,376)	(\$19,626)	(\$30,360)	\$6,444	\$8,022

Within both scenarios, additional debt service has a significant impact on the results particularly in the Olympian and Prospect, Olympian Extended, and Staley and Kirby FAZs. In the Growth **Beyond** the Service Area Scenario, it also deepens the deficit in the Bradley and Staley FAZ and eliminates the net positive impact in the Southwest Champaign FAZ. Only the Curtis Interchange and Infill FAZs maintain positive results, as they have no road projects.

For the Development **Beyond** the Service Area, the City must consider the cost and difficulty of the sanitary sewer extension projects to serve each of these FAZs together with their net fiscal impacts. Figure 6 below shows the net fiscal impacts together with descriptions of the sewer projects.

Figure 6: Scenario Two Net Fiscal Impacts and Sanitary Sewer Extension Projects

FAZ	Growth Beyond Scenario Net Fiscal Impact	Sanitary Sewer Projects
A: Olympian & Prospect	(\$7,888)	North: Easy with developer costs
B: Olympian Extended	(\$18,344)	North: Easy with developer costs Northwest: difficult and very costly
C: Bradley & Staley	(\$7,094)	Northwest: difficult and very costly
D: Staley & Kirby	\$1,965	West: difficult and expensive
E: Southwest Champaign	(\$2,904)	West: difficult and expensive South: easy with moderate costs
F: Curtis Interchange	\$6,564	South: easy with moderate costs
G: Infill	\$8,070	None

Given the considerations of the additional debt service and the sanitary sewer projects, the Infill and Curtis Interchange are the most fiscally appealing areas for development in the Growth **Beyond** the Service Area scenario. For the Growth **Within** the Service Area scenario, these two FAZs are fiscally appealing; the Bradley and Staley, Staley and Kirby, and Southwest Champaign FAZs also generate net positive impacts for the City in this scenario.

D. CONCLUSIONS

Based on the results presented above, a number of conclusions can be drawn:

- Cumulative fiscal results for the City are \$52 million more favorable for the Growth **Within** the Service Area scenario than the Growth **Beyond** the Service Area scenario. The net fiscal impact of the Growth **Within** the Service Area scenario is a \$32.8 million positive impact while it is a \$19.6 million deficit for the Growth **Beyond** the Service Area scenario.
- It is important to note the **debt service** for public works and road projects that goes **beyond the twenty-year timeframe** of this study must be considered, as it totals \$52.5 million in the Growth **Within** the Service Area scenario and \$96.4 million in the Growth **Beyond** the Service Area scenario, creating an overall deficit in each of the scenarios. The City must also weigh the cost and difficulty of the **sanitary sewer projects** necessary in the Growth **Beyond** the Service Area scenario.
- **While positive impacts are generated in the operating budget, the City is severely constrained as to the amount of revenue available for support of capital improvements needed to serve new development.** The City's primary sources for funding capital infrastructure are intergovernmental revenues and an annual transfer made from the General Fund to the Capital Improvements Project Fund. However, most of these funds go simply to maintain existing City infrastructure. The amount of this transfer is driven by what the City can afford in a given year and often comes in as a lower priority than ongoing operations funding. The City also utilizes capital-specific property tax and General Obligation bonds, which are financed over a period of 20 years and paid back through property tax.
- The **average annual net fiscal impacts** of the Growth **Within** the Service Area Scenario show positive results for years 1-10 and years 11-20 as well as over the entire twenty-year period while they are deficits for the Growth **Beyond** the Service Area scenario. For both scenarios, the results are more favorable in the first ten years than in years 11-20.
- **New growth under both scenarios generates net positive impacts in the operating budget.** This is because the City's revenue structure has **two large growth-related revenue sources** in the sales tax and property tax. Additionally, most City departments interviewed indicated that they have **capacity available** to serve new development which resulted in lower operating expenditures.
- Within the operating budget, the Growth **Beyond** the Service Area scenario is \$1.3 million less favorable than the Growth **Within** the Service Area scenario. Both revenues and expenditures are higher for the Growth **Beyond** the Service Area scenario. The **mix of development**—including more single family detached housing

units as well as more office space, more retail, and less industrial development—results in **7% higher property tax revenues and 17% more sales tax revenue** which nearly offset the higher expenditures.

- The difference in fiscal impact results of the two scenarios is driven mainly by much higher capital costs—\$52.3 million higher—for the Growth **Beyond** the Service Area scenario. The acreage available for development in this scenario is more than double that of the Growth **Within** the Service Area scenario; the larger area available leads to a more scattered and leapfrog approach to development which requires the expansion of fire service areas as well as the road network. As the results show, this is an inefficient development pattern.
- The current revenue sources available to the City to fund capital improvements to serve new development are so limited. Thus, the City should consider **alternative financing sources** such as impact fees for growth-related infrastructure, particularly for road projects.
- Related to the above bullet point, the implementation of a **tiered impact fee program**, that charges more for development outside the current water and sanitary sewer service area, could assist the City in directing development in a phased manner.
- **Easing the burden on the operating budget to offset capital expenditures** will allow the City to devote more resources to road maintenance, which has not had adequate funding, as well as other services that have been reduced in the FY2010 budget including police, fire, and public works staffing.
- The City may choose to **encourage development in certain FAZs**. With no new capital revenue sources, infill development would provide the best fiscal impact for the City followed by the Curtis Road Interchange and Bradley and Staley FAZs.
- **The analysis does show that the City benefits from encouraging revitalization of the urban core.** Over the twenty-year timeframe, the development of 419 higher value multi-family units and 371,000 square feet of retail development in the form of mixed-use mid-rise buildings in the urban core area generates over \$400,000 annually to the City. The findings specific to this FAZ are representative of this type and amount of development within any area of the current City that would not require any increase in the levels of service.
- If new capital revenues are identified that offset capital costs, all FAZs are attractive with **positive operating results**. The most favorable result is in Staley and Kirby FAZ followed by Southwest Champaign and Olympian and Prospect FAZs.
- As discussed throughout this report and as detailed in the *LOS Document*, the costs assumed are based on **current levels of service for services and infrastructure**. For some

services, City staff have indicated a need for an improved level of service. An improved level of service would result in less favorable fiscal impacts.

- It is important to acknowledge that **fiscal issues are only one way** to evaluate development and growth trends. Environmental, land use, and social issues should also be taken into consideration when determining what is best for the City.
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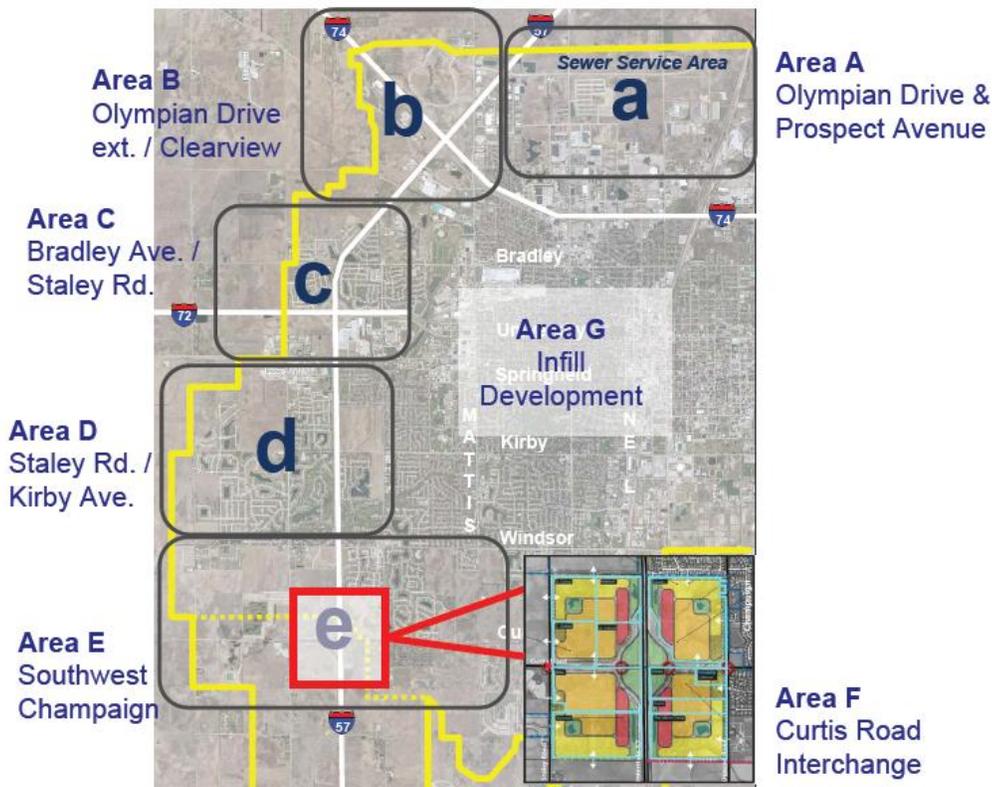
II. DEVELOPMENT SCENARIOS

Two growth scenarios were developed to be analyzed for their impact on the City's operating and capital budgets. For purposes of the fiscal impact analysis, these scenarios were developed for seven subareas, or fiscal analysis zones (FAZ):

- Area A: Olympian Drive at Prospect Avenue;
- Area B: Olympian Drive Extended (future interchange with I-74);
- Area C: Bradley Avenue at Staley Road;
- Area D: Staley Road at Kirby Avenue;
- Area E: Southwest Champaign (area surrounding the I-57 and Curtis Road interchange);
- Area F: Curtis Road Interchange with I-57; and
- Area G: Infill development in the urban core of the City.

Please see Appendix B for more information on the forecasted demographics in each area and Appendix C for the methodology used to develop demographic projections for each area. Figure 7 below shows the location of the various fiscal analysis zones.

Figure 7: Overview Map of Fiscal Analysis Zones



The two scenarios are intended to show the fiscal implications of public policy decisions about key planning issues on broad land use patterns. The Development **Within** the Service Area

scenario illustrates the impact of development within the current sanitary sewer service area; it assumes that no new sewer projects will be completed to serve the FAZs. Additionally, the only infrastructure specific to each FAZ required is road construction. The Development **Beyond** the Service Area scenario assumes that the sanitary sewer service area will be extended with four capital projects described in Figure 8 below.

Figure 8: Sanitary Sewer Projects Necessary for Development Beyond the Service Area Scenario

Geographic Location	Boundaries of Area (approximate)	FAZ Served	Difficulty of Project	Cost of Project
North	<u>North:</u> Ford Harris Road <u>South:</u> current sanitary sewer service area boundary <u>East:</u> Urbana boundary line <u>West:</u> just west of Duncan Road	<u>Area A:</u> Olympian Drive at Prospect Ave. <u>Area B:</u> eastern portions of Olympian Extended	Easy	Developer costs per current requirements for extending sewers
Northwest	<u>North:</u> Ford Harris Road <u>South:</u> I-72 <u>East:</u> just west of Duncan Road & current sanitary sewer service area boundary <u>West:</u> sanitary district boundary line	<u>Area B:</u> western portions of Olympian Extended <u>Area C:</u> Bradley Ave. at Staley Rd.	Very difficult due to topography & distance to treatment plant	Very costly
West	<u>North:</u> I-72 <u>South:</u> Curtis Road <u>East:</u> current sanitary sewer service area boundary <u>West:</u> Barker Road	<u>Area D:</u> Staley Road at Kirby Avenue <u>Area E:</u> Southwest Champaign	Difficult due to topography & distance to treatment plant	Expensive
South	<u>North:</u> current sanitary sewer service area boundary <u>South:</u> Old Church Road <u>East:</u> I-57/Duncan Road <u>West:</u> Rising Road	<u>Area E:</u> Southwest Champaign <u>Area F:</u> Curtis Rd. Interchange	Easy – currently being considered	Moderate

Because sanitary sewer services are provided through an enterprise fund, the cost of these infrastructure projects is not included in this analysis. However, the difficulty and cost of extending the sanitary sewer service areas to each FAZ should be considered when land use decisions are made.

In addition to these sewer infrastructure projects, the area available for development in the Development **Beyond** the Service Area scenario would also require other City services, which are included in the study, to extend their service areas to a wider geographic area. For example, to maintain current levels of service, one fire station would need to be relocated and a new first station established.

A. SCENARIO ONE: DEVELOPMENT WITHIN THE SERVICE AREA

The Development **Within** the Service Area scenario continues existing development trends and assumes that total population growth is consistent with the recent slowdown in the beginning and then increases to average level of the past ten years by FY2019. Job growth grows proportionate to population growth by holding the current population to jobs ratios of 1.89 constant.

Growth within each FAZ is dependent upon the approved developments and acreage available for uncommitted development. As Figure 9 below indicates, the City’s population is projected to increase by 18,700 persons over twenty years. At the fiscal analysis zone level (FAZ), the largest population increases are in the Olympian Drive and Prospect Avenue (6,141) and Southwest Champaign (4,509) FAZs, closely followed by the Staley Road and Kirby Avenue (3,984) FAZ. In keeping with the population growth assumed in these four FAZ’s, the housing unit increases are the highest as well.

The mix of residential units is driven primarily by the type of housing units that have been approved in a given FAZ. For example, in the Olympian Drive and Prospect Avenue FAZ, a large number of multi-family units have been approved while the Infill Development FAZ is expected to only be mixed-use developments with multi-family units and first floor neighborhood retail. For more detail on the mix of development within each FAZ, please see Appendices B and C.

Figure 9: Summary of Development Within the Service Area Scenario

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Population	6,141	769	1,820	3,984	4,509	778	699	18,700
<i>Housing Units</i>								
Single Family Detached High PP	41	25	26	174	170	0	0	435
Single Family Detached Medium PP	356	116	210	646	565	55	0	1,948
Single Family Detached Low PP	329	66	68	269	452	0	0	1,183
Attached Housing	86	51	272	243	352	130	0	1,134
Multi-family Units	2,361	43	244	174	294	217	419	3,752
Total Housing Units	3,173	300	819	1,506	1,833	402	419	8,453
Nonresidential Building Area	1,476,958	109,855	605,853	970,993	722,696	94,770	129,718	4,110,843
<i>Employment</i>								
Industrial	1,138	14	652	690	0	0	0	2,494
Office	1,438	357	137	624	1,048	122	0	3,725
Neighborhood Retail	680	37	176	799	1,343	187	371	3,593
Big Box Commercial	0	0	0	0	0	0	0	0
Total Employment	3,256	408	965	2,113	2,391	309	371	9,812

Total employment in the City is projected to increase by 9,812 jobs by 2029. The Olympian Drive and Prospect Avenue FAZ has the largest increase in employment, with 3,256 new jobs. This FAZ also has the largest increase in nonresidential building area, with a net increase of 1.5 million square feet. Note that the mix of nonresidential development varies among the FAZs. The Olympian Drive and Prospect Avenue FAZ is expected to have far more industrial

development than any other FAZ while the Curtis Road Interchange is the only FAZ with big box commercial development.

B. SCENARIO TWO: DEVELOPMENT BEYOND THE SERVICE AREA

The Development **Beyond** the Service Area scenario has the same level of total growth as scenario one, which is consistent with current and past development trends. Although the pace of total growth in Scenario Two is the same as Scenario One, new developments are more scattered throughout each FAZ. This is due to the fact that each FAZ (except Area G, which is infill development) is larger in area as a result of the assumed expansion of the sanitary sewer service area. Because the increase in acreage of each FAZ from scenario one to scenario two is different, the allocation of new housing units and nonresidential space has shifted.

Growth occurs in each Fiscal Analysis Zone based on the amount of land the zone has available. More development occurs in those areas where the land area increases the most from scenario one to scenario two. For example, the acreage of the Olympian Extended FAZ in scenario two is 3.4 times its area in scenario one while the acreage of the Olympian Drive and Prospect Avenue FAZ in scenario two is only 1.7 times larger than in scenario one. Thus, development shifts from Olympian and Prospect to other areas because there is relatively less land available while Olympian Extended attracts more development because more land is available.

Despite these shifts in where development occurs, the area with the greatest population growth remains the Olympian Drive and Prospect Avenue (4,113) FAZ. However, in this scenario, it is closely followed by the Staley Road and Kirby Avenue (3,976) and Olympian Extended (3,457) FAZs. In keeping with the population growth assumed in these four FAZ's, the housing unit increases are the highest as well. Like scenario one, the mix of housing units varies by FAZ; in this scenario, there is more development of uncommitted land and thus the mix of housing units and nonresidential development in each FAZ is different from in scenario one. For example, the number of multi-family units in the Olympian Drive and Prospect Avenue FAZ actually declines while the number of single family units of all types increases. The mix of development has implications for both revenues and costs, as different types of land uses generate different revenues and demand different services.

Figure 10: Summary of Development Beyond the Service Area Scenario

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Population	4,113	3,457	2,357	3,976	3,133	1,706	699	19,440
<i>Housing Units</i>								
Single Family Detached High PP	89	109	74	158	123	0	0	553
Single Family Detached Medium PP	372	467	289	549	390	119	0	2,187
Single Family Detached Low PP	312	291	197	353	312	0	0	1,466
Attached Housing	184	227	229	287	243	286	0	1,457
Multi-family Units	950	314	197	229	203	478	419	2,790
Total Housing Units	1,907	1,408	986	1,577	1,273	883	419	8,453
Nonresidential Building Area	1,004,037	517,252	434,806	752,812	502,060	208,338	129,718	3,549,023
<i>Employment</i>								
Industrial	790	79	118	240	0	0	0	1,227
Office	936	1,455	496	819	728	300	0	4,735
Neighborhood Retail	456	299	635	1,049	933	0	371	3,743
Big Box Commercial	0	0	0	0	0	604	0	604
Total Employment	2,181	1,833	1,250	2,108	1,661	905	371	10,309

In this scenario, job growth is highest in the Olympian and Prospect (2,181) FAZ followed closely by the Staley and Kirby (2,108) FAZ. The Olympian and Prospect FAZ also has the greatest increase in nonresidential building area (1 million square feet). Like the residential land uses, the mix of nonresidential land uses in each FAZ are different than they were in scenario one. The overall amount of industrial development has decreased while office and retail have increased.

III. APPROACH AND MAJOR ASSUMPTIONS

A fiscal impact analysis determines whether revenues generated by new growth are sufficient to cover the resulting costs for service and facility demands placed on the City. It can be regarded as a snapshot of each jurisdiction's current budget. For this analysis, FY2009 budget is used to represent a "snapshot" of current revenues, costs, and levels of service. The current level of spending as depicted in the budget is referred to as the current level of service in this type of analysis.

The *LOS Document* in Appendix A discusses services and facilities provided by the City included in this analysis that will be impacted by new development. The service level, revenue, and cost assumptions are based on TischlerBise's on-site interviews with staff, a detailed analysis of the current fiscal year budget and other documents, and the Cost of Land Use Analysis conducted previously.

The assumptions outlined below are utilized along with growth scenario projections to calculate the fiscal impact on the City's budget—including operating and capital expenditures—over a 20-year period. Calculations are performed using a customized fiscal impact model designed specifically for this assignment.

A. COST AND REVENUE FACTORS

All costs and revenues directly attributable to new development are included in this analysis. Some costs and revenues are not expected to be impacted by demographic changes, and are considered as fixed costs and revenues in this analysis. To determine fixed costs and revenues, TischlerBise reviewed the FY2009 budget and all available supporting documentation. In other cases, the costs are variable based on certain factors. Personnel and other operating costs are projected as are capital expenditures. Projections of capital costs are based on discussions with staff. Capital costs vary by development scenario.

B. LEVEL OF SERVICE

The cost projections are based on the "snapshot approach" in which it is assumed the current level of service, as funded in the City's FY2009 budget, will continue through the 20-year analysis period. Current demand base data was used to calculate unit costs and service level thresholds. Examples of demand base data include population, housing units, employment by type, and vehicle trips. In summary, the "snapshot" approach does not attempt to speculate about how levels of service, costs, revenues and other factors will change over 20 years. Instead, it evaluates the fiscal impact to the City as it currently conducts business. A discussion is provided in the *LOS Document* and results under this assumption are provided herein.

C. COST AND REVENUE STRUCTURE

The analysis includes the General Fund, non-self sustaining Special Revenue Funds, and Capital Revenues/Expenditures. Only those funds affected by new development are included in the analysis. Furthermore, only those revenues and costs *directly attributed* to new development are assumed. Indirect, or spin-off, impacts are not included.

D. CASE STUDY-MARGINAL APPROACH

This fiscal impact analysis conducted by TischlerBise incorporates the case study-marginal cost approach wherever possible. The case study-marginal methodology is the most realistic method for evaluating fiscal impacts. This methodology takes site or geographic-specific information into consideration. Therefore, any unique demographic or locational characteristics of new development are accounted for, as well as the extent to which a particular infrastructure or service operates under, over or close to capacity. Therefore, available facility capacity determines the need for additional capital facilities and associated operating costs. Many of the administrative/general government costs that are impacted by general growth in the City, regardless of location, are projected using a marginal/average cost hybrid methodology that attempts to determine capacity and thresholds for staffing but projects non-salary operating costs using an average cost approach.

E. INFLATION RATE

The rate of inflation is assumed to be zero throughout the projection period, and cost and revenue projections are in constant 2009 dollars. This assumption is in accord with current budget data and avoids the difficulty of forecasting as well as interpreting results expressed in inflated dollars. In general, including inflation is complicated and unpredictable. This is particularly the case given that some costs, such as salaries, increase at different rates than other operating and capital costs such as contractual and building construction costs. And these costs, in turn, almost always increase in variation to the appreciation of real estate, thus affecting the revenue side of the equation. Using constant 2009 dollars reinforces the snapshot approach and avoids these problems.

F. NON-FISCAL EVALUATIONS

It should be noted that while a fiscal impact analysis is an important consideration in planning decisions, it is only one of several issues that should be considered. Environmental, social and public safety issues, for example, should also be considered when making planning and policy decisions. The above notwithstanding, this analysis will enable interested parties to understand the fiscal implications of future development.

IV. FISCAL RESULTS: COMPARING TWO SCENARIOS

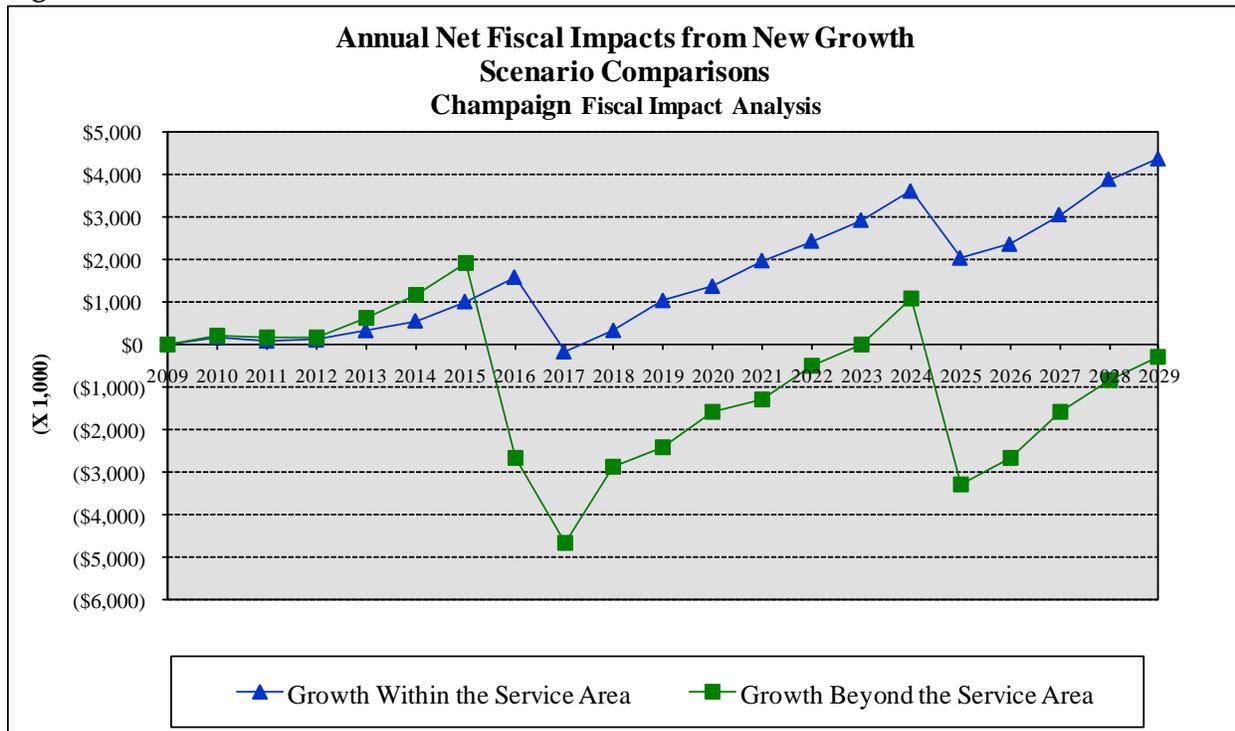
The following section compares the results of the two potential growth scenarios: Growth **Within** the Service Area and Growth **Beyond** the Service Area. For each scenario, the results shown are the sum of the results in each of the seven fiscal analysis zones (FAZs). More details on the FAZ-specific results are provided in sections V and VI.

Fiscal impact results are shown in a number of different ways. First, *annual* net results are discussed and show the fiscal impacts from one year to the next. *Average annual* results are then shown to summarize the general fiscal impacts over time. Finally, *cumulative* results are shown reflecting total revenues, expenditures, and net fiscal results over the 20-year development timeframe.

A. ANNUAL NET RESULTS

Figure 11 shows the *annual* (year to year) net results to the City for each of the growth scenarios over the twenty-year study time horizon. Each year reflects total revenues generated minus total expenditures incurred in the same year. Both capital and operating costs are included. By showing the results annually, the magnitude, rate of change, and timeline of deficits and revenues can be observed over time. The “bumpy” nature of the annual results during particular years represents the opening of capital facilities and/or major operating costs being incurred. Data points above the \$0 line represent positive annual results; points below the \$0 line represent annual deficits. Each year’s result is *not* carried forward into the next year. This enables a comparison from year-to-year of the net results without distorting the revenue or cost side of the equation. In reality, those positive impacts would be carried forward or deficits would be funded through other means such as debt financing for capital improvements where there is a shortfall.

Figure 11: Annual Net Results of Two Growth Scenarios



As shown in Figure 11, the annual net fiscal impact is neutral or positive for both scenarios through FY2016. After this year, major variances can be explained by the capital projects.

In FY2017, there is a significant decrease in the net fiscal impact for the Growth Within the Service Area scenario which is caused by the beginning of road projects; additional road projects begin in FY2025. An accompanying downturn in the net fiscal impact is seen this year as well. The slight leveling of the net fiscal impact between FY2019 and FY2020 and FY2025 and FY2026 is caused by the triggering of new streets maintenance workers and new snow removal trucks coupled with added police officers and vehicles. However, the net fiscal impact remains positive in all years except FY2017.

The decrease in the net fiscal impact begins in FY2016 for the Growth Beyond the Service Area; this decrease is caused by the beginning of road projects. The net deficit increases in FY2017 when the new fire station and moving fire station #4 both occur. Another significant decrease in the net fiscal impact occurs when the second set of road projects begin in FY2025.

B. AVERAGE ANNUAL NET RESULTS

Figure 12 below shows the *average annual* net fiscal results (average revenues minus average operating and capital expenditures) for all funds included in the analysis. The results shown are for three time periods—(1) Years 1-10; (2) Years 11-20; and (3) Years 1-20 (entire 20-year development timeline). The costs and revenues included are those that are defined and discussed throughout this report and the *LOS Document*. All operating and new capital costs

are included in the net fiscal results and represent those accruing from growth in each of the three development scenarios.

Figure 12: Average Annual Net Fiscal Impact

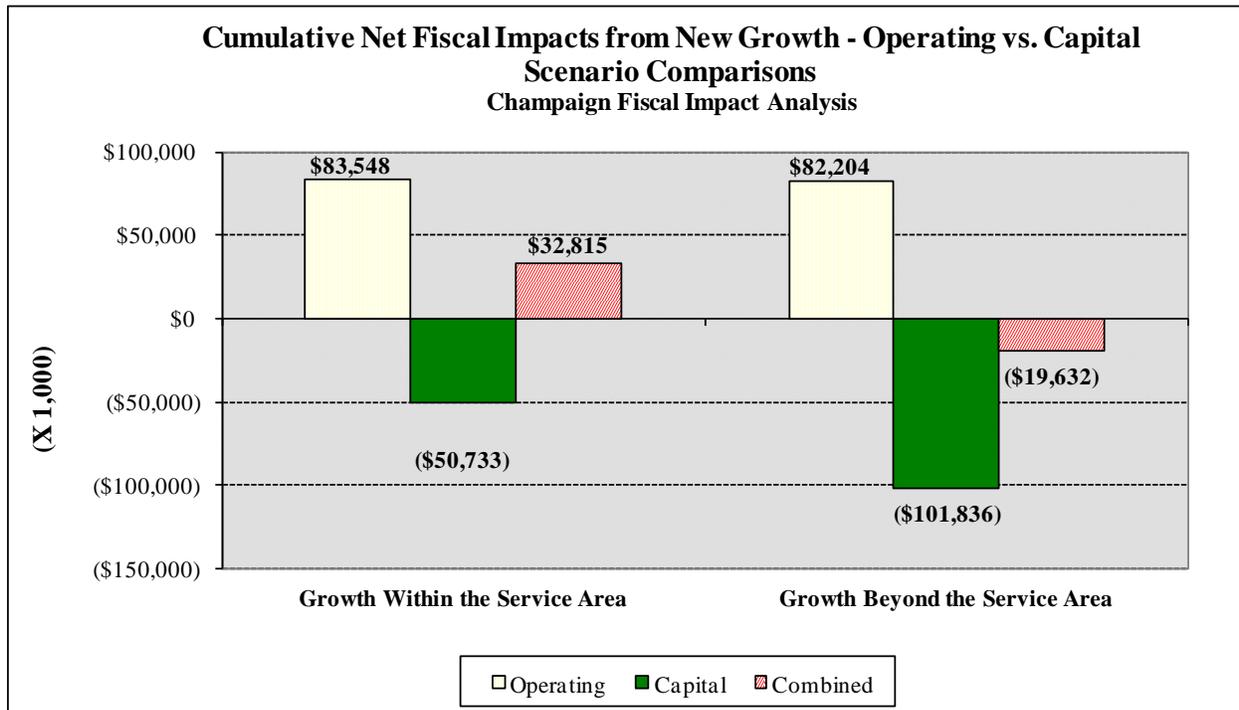
Average Annual Net Fiscal Impact	SCENARIO	
	Scenario One: Growth Within Service Area	Scenario Two: Growth Beyond Service Area
Years 1-10	\$490	(\$851)
Years 11-20	\$2,792	(\$1,112)
Years 1-20	\$1,641	(\$982)

As shown in Figure 12, the average annual net fiscal impacts of the Growth **Within** the Service Area Scenario are positive for all time periods while they are deficits for the Growth **Beyond** the Service Area scenario. For each scenario, the results are more favorable in the first ten years than in years 11-20.

C. CUMULATIVE NET RESULTS

Cumulative figures reflect total revenues generated minus operating and capital expenditures over the 20-year development timeframe. As mentioned above, there are positive net operating results and a net capital deficit in each of the scenarios. The relative size of each of these cumulative results as well as a comparison of the cumulative net fiscal impact can be seen in Figure 13 below.

Figure 13: Cumulative Net Results of Two Growth Scenarios



Although there is only a difference of \$1.3 million in the net cumulative operating results, the cumulative capital deficit for the Growth **Beyond** the Service Area is double that of the Growth **Within** the Service Area capital deficit making the combined results quite different for each scenario. The \$83.5 million positive operating result for Growth **Within** the Service Area offsets the \$50.7 million capital deficit for a total positive impact of \$32.8 million while the Growth **Beyond** the Service Area’s net fiscal impact is a deficit of \$19 million due to the \$101.8 million capital deficit and the \$82.2 million positive operating result.

Three additional factors must be considered when analyzing these fiscal results:

1. The fiscal impact analysis results for each scenario are a snapshot based on the FY2009 budget and levels of service. Thus, it is assumed that these *current levels of service* will continue through the 20-year analysis period. If any levels of service are insufficient or the City raises any levels of service, costs will increase reducing the net positive impact of the Growth **Within** the Service Area scenario and adding to the deficit of the Growth **Beyond** the Service Area scenario.
2. Road projects and fire station construction are assumed to be debt financed over a period of twenty-years. Thus, the debt payments extend beyond the time period of this analysis. *Remaining debt service* for the Growth **Within** the Service Area scenario totals \$52.5 million eliminating the positive result in this scenario while the remaining debt service for the Growth **Beyond** the Service Area totals \$96.4 million creating a more extreme deficit.

3. The Growth **Beyond** the Service Area also requires expanding the sanitary sewer service area with four projects including the extension of interceptor sewers and new lift stations. These sewer project costs have not been captured in this analysis because sanitary sewer service is not provided by the City but by the Urbana-Champaign Sanitary District. These costs and the difficulty of the projects should be considered in addition to the net fiscal impact.

D. DISCUSSION OF THE RESULTS

- Cumulative fiscal results for the City are \$52 million more favorable for the Growth **Within** the Service Area scenario than the Growth **Beyond** the Service Area scenario. The net fiscal impact of the Growth **Within** the Service Area scenario is a \$32.8 million positive impact while it is a \$19.6 million deficit for the Growth **Beyond** the Service Area scenario.
- The difference in fiscal impact results is driven mainly by much higher capital costs—\$52.3 million higher—for the Growth **Beyond** the Service Area scenario. The acreage available for development in this scenario is more than double that of the Growth **Within** the Service Area scenario; the larger area available leads to a more scattered and leapfrog approach to development which requires the expansion of fire service areas as well as the road network. Thus, one fire station must be moved, a new fire station must be built, and many more lane miles of roads must be improved or constructed.
- Including the debt service payments for fire station construction and road projects that are incurred beyond the twenty-year timeframe of this study would add \$52.5 million to the capital costs in the Growth **Within** the Service Area scenario and \$96.4 million to the Growth **Beyond** the Service Area scenario.
- The net capital deficits occurring in both scenarios further supports the fact that the current fiscal structure is inadequate for funding capital needs in Champaign. The City needs to identify alternative capital revenue sources such as impact fees to fund capital needs particularly for road projects.
- Easing the burden on the operating budget to offset capital expenditures will allow the City to devote more resources to road maintenance, which has not had adequate funding, as well as other services that have been reduced in the FY2010 budget including police, fire, and public works staffing.
- Within the operating budget, the Growth **Beyond** the Service Area scenario is \$1.3 million less favorable than the Growth **Within** the Service Area scenario. Both revenues and expenditures are higher for the Growth **Beyond** the Service Area scenario. The mix of development—including more single family detached housing units as well as more office space, more retail, and less industrial development—results

in 7% higher property tax revenues and 17% more sales tax revenue which nearly offset the higher expenditures.

- As discussed throughout this report and as detailed in the *LOS Document*, the costs assumed are based on *current levels of service* for services and infrastructure. For some services, City staff have indicated a need for an improved level of service. An improved level of service would increase cumulative deficits and reduce cumulative positive impacts.
 - It is important to acknowledge that fiscal issues are only one way to evaluate development and growth trends. Environmental, land use, and social issues should also be taken into consideration when determining what is best for the City.
-

V. FISCAL RESULTS: FISCAL ANALYSIS ZONES IN SCENARIO ONE

The following section provides further discussion on the fiscal impact analysis results and revenue and cost details for development in Scenario One: Growth Within the Service Area.

A. FISCAL IMPACT RESULTS

Fiscal impact results are shown in a number of different ways. First, *annual* net results are discussed and show the fiscal impacts from one year to the next. *Average annual* results are then shown over different time intervals to provide an easy way to compare multiple FAZs and summarize the general fiscal impacts over time. Finally, *cumulative* results are shown reflecting total revenues, expenditures, and net fiscal results over the 20-year development timeframe.

1. ANNUAL NET RESULTS

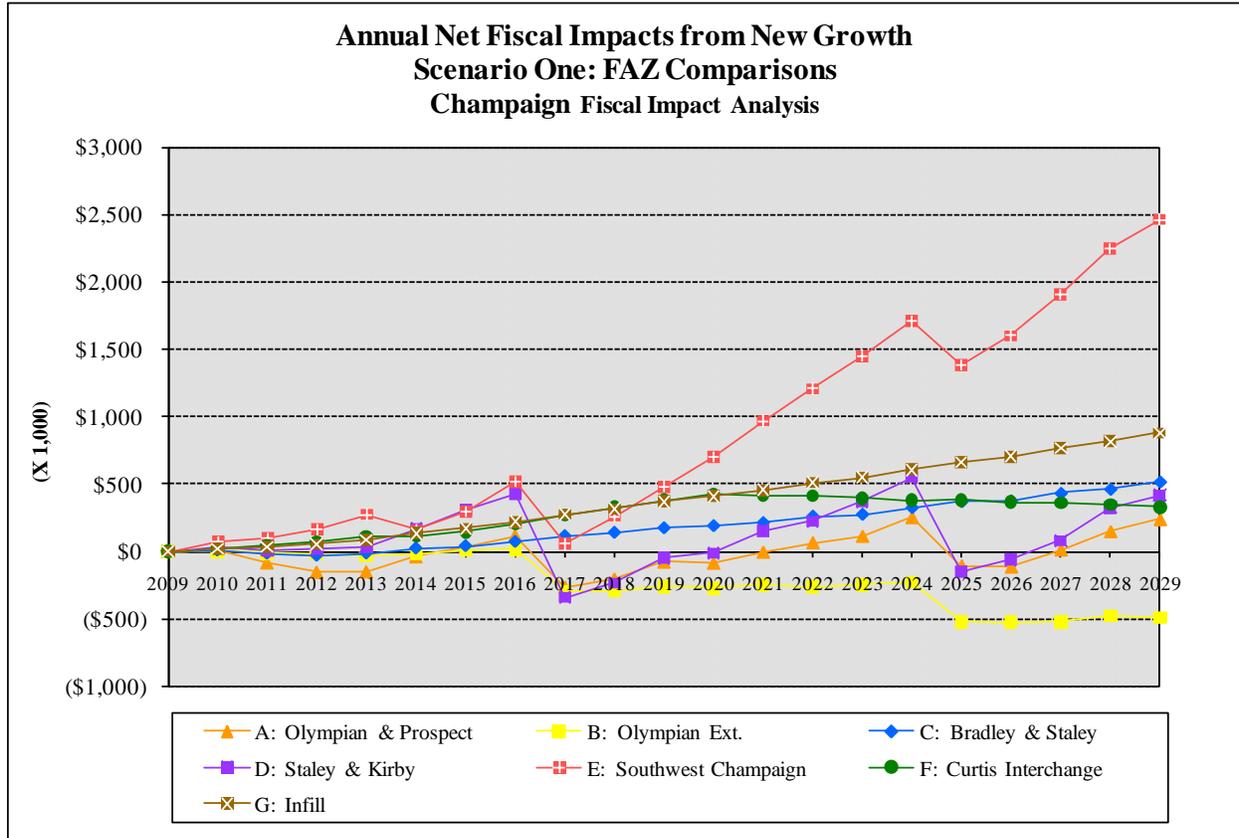
Figure 14 shows the *annual* (year to year) net results to the City for each of the seven FAZs over the study time horizon. Each year reflects total revenues generated minus total expenditures incurred in the same year. Both capital and operating costs are included. By showing the results annually, the magnitude, rate of change, and timeline of deficits and revenues can be observed over time. The “bumpy” nature of the annual results during particular years represents the opening of capital facilities and/or major operating costs being incurred. Data points above the \$0 line represent positive annual results; points below the \$0 line represent annual deficits. Each year’s result is *not* carried forward into the next year. This enables a comparison from year-to-year of the net results without distorting the revenue or cost side of the equation. In reality, those positive impacts would be carried forward or deficits would be funded through other means such as debt financing for capital improvements where there is a shortfall.

As shown in Figure 14, four of the FAZs have net positive impacts each year:

- C: Bradley and Staley;
- E: Southwest Champaign;
- F: Curtis Road Interchange;
- G: Infill.

Both the Olympian and Prospect and Staley and Kirby FAZs have net impacts which vacillate between net deficits and net positive impacts while the Olympian Extended FAZ net impact is generally negative.

Figure 14: Annual Net Fiscal Results



Net deficits and most downward movement in any of the FAZs' annual results can be attributed to capital costs, as each of the FAZs produces a positive net operating impact and all but the Curtis Interchange and Infill FAZs produce net capital deficits. The trends for each FAZ are:

- A: Olympian and Prospect—The capital net deficit outweighs the positive operating impact beginning in year two. As this area grows, it begins to make up some of this deficit until demand for road improvements and construction is triggered in FY2017 and FY2025. The positive operating impact does not outweigh the capital deficit in this area as well as in others because of the high cost of road projects and the mix of development. Most residential development is lower valued multi-family housing coupled with far more industrial and office development than retail. While the property tax generated can cover the operating expenditures, without the boost from retail-generated sales tax the capital costs cannot be offset.
- B: Olympian Extended—The net fiscal impact is neutral or a deficit each year. The net operating impact is the lowest in this FAZ because this FAZ has a low level of residential and retail development. Its nonresidential development is 88% office—bringing in lowest level of sales tax revenue of any of the FAZs. Thus, it is impossible

for the positive operating impact to make up for the significant capital deficit created primarily by capital costs for roads.

- C: Bradley and Staley—This area was not identified for arterial road improvements, and the net positive operating impact is large enough to make up for the capital deficit creating overall net positive or neutral results in all years.
- D: Staley and Kirby— The combination of the largest number of single family detached units of any FAZ and retail development results in high revenues. The operating revenues average 2.5 times the operating expenditures. Until the need for road improvements is triggered, the net positive operating impacts cover the capital deficits. Because this area’s road costs are the highest at a total of \$22.4 million, it is not surprising that there are net deficits in the years that roads are constructed and the immediate years after construction.
- E: Southwest Champaign—A net positive impact occurs each year in this area due to the large amount of development occurring and the mix of development. Residential development is a balance of all housing unit types while neighborhood retail makes up more than 50% of nonresidential development. This area has the most square footage of neighborhood retail development and thus the highest sales tax revenues. The positive operating revenues are even greater than in the Staley and Kirby FAZ averaging 2.6 times the operating expenditures. Like that FAZ, the downward spikes in the annual net fiscal impact are explained by the road projects triggered in FY2017 and FY2025, which total \$17.7 million. Note that the cost of road projects along the border of this FAZ and the Curtis Road Interchange FAZ have been included in the capital costs of the Southwest Champaign FAZ.
- F: Curtis Road Interchange—This FAZ produces increasing net positive impacts as long as development continues occurring in this area; once it reaches its full development potential in FY2020, the results remain at this level. Like the Bradley and Staley FAZ, arterial road improvements were not identified in this area, and the net positive operating impact is large enough to make up the capital deficit creating overall net positive impacts in all years. Please note that arterial improvements to Staley and Duncan Roads were listed in the Southwest Champaign FAZ.
- G: Infill—As development increases over the twenty-year period, the net positive impact increases. Infill development does not require capital infrastructure, and the balance of retail and higher value multi-family housing units creates a positive net impact.

2. AVERAGE ANNUAL NET RESULTS

Figure 15 below shows the *average annual* net fiscal results (average revenues minus average operating and capital expenditures) for all funds included in the analysis. The results shown are for three time periods—(1) Years 1-10; (2) Years 11-20; and (3) Years 1-20 (entire 20-year development timeline). The costs and revenues included are those that are defined and discussed throughout this report and the *LOS Document*. All operating and new capital costs are included in the net fiscal results and represent those accruing from growth in each of the three development scenarios.

As shown in Figure 15, average annual results only show net deficits in the Olympian and Prospect and Olympian Extended FAZs. Over the 20-year time frame, the Southwest Champaign FAZ produces the most favorable annual result. The average annual net fiscal impact is higher in all FAZs during the second ten years of development except for in the Olympian Extended FAZ, which requires more road improvements and construction. The higher net impacts in the other areas are due to operating and capital costs being incurred without a broader tax base to support those expenses. As more retail gets developed—and with it retail sales tax revenue—as well as additional property tax revenues from expanding tax rolls, the deficit for Olympian and Prospect turns to a neutral impact while in the other areas impacts become more favorable. Average annual net impacts over the 20-year period range from a low of \$235 million deficit in the Olympian Extended FAZ to a high of over \$902 million for the Southwest Champaign FAZ.

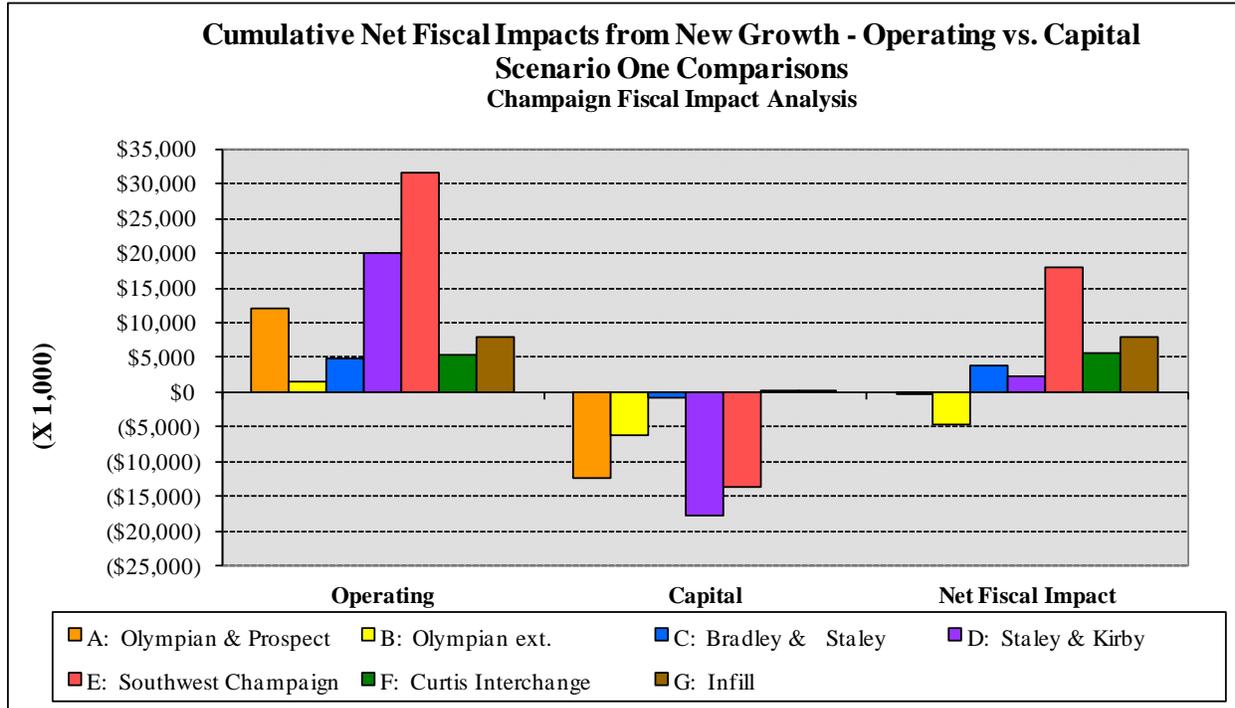
Figure 15: Average Annual Results

SCENARIO ONE: GROWTH WITHIN SERVICE AREA							
Average Annual Net Fiscal Impact	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Years 1-10	(\$81)	(\$90)	\$49	\$37	\$238	\$169	\$168
Years 11-20	\$52	(\$379)	\$343	\$190	\$1,565	\$383	\$637
Years 1-20	(\$14)	(\$235)	\$196	\$113	\$902	\$276	\$403

3. CUMULATIVE NET RESULTS

Cumulative figures reflect total revenues generated minus operating and capital expenditures over the 20-year development timeframe. As shown in Figure 16, all scenarios generate cumulative net positive fiscal operating impacts and capital deficits.

Figure 16: Cumulative Net Results



While most FAZs have a combined net positive impact, the combined net fiscal impact is relatively neutral for the Olympian and Prospect FAZ and a deficit in the Olympian Extended FAZ. These results indicate that to support new development at current levels of service, the City must identify additional capital revenues to offset the costs.

As noted above, these results are based on current levels of service; if the City wished to provide an increased level of service, the net fiscal deficits would be worsened and the positive impacts reduced or eliminated.

Debt service payments beyond the twenty-year timeframe of this study must also be considered. Both road projects and the new public works building are assumed to be debt financed over a period of twenty years. Because of this, additional debt service is owed on these improvements after the projection period, thereby increasing overall costs. Additional debt service beyond year 20 totals \$52.5 million; a breakdown by FAZ and the impact on the net fiscal impact is shown in Figure 17 below.

Figure 17: Additional Debt Service beyond Year 20 with Revised Net Fiscal Impact

Additional Debt Service	SCENARIO ONE: GROWTH WITHIN SERVICE AREA						
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Roads	\$10,406	\$6,842	\$0	\$18,942	\$14,960	\$0	\$0
Public Works	\$447	\$57	\$132	\$291	\$327	\$51	\$51
TOTAL	\$10,853	\$6,899	\$132	\$19,233	\$15,287	\$51	\$51
Net Fiscal Impact including Additional Debt Service	(\$11,141)	(\$11,590)	\$3,795	(\$16,966)	\$2,744	\$5,465	\$8,003

The addition of this debt service worsens the deficit in the Olympian Extended FAZ while eliminating the neutral or positive impact of the Olympian and Prospect, and the Staley and Kirby.

4. DISCUSSION OF THE RESULTS

- The cumulative net fiscal impact of all seven FAZs is a \$32.8 million favorable result. This result suggests that were the City to develop within the current service area, new development would contribute an additional \$1.6 million annually to the budget.
- However, the debt service for capital projects that go beyond the twenty-year timeframe of this study totals \$52.5 million, which creates an overall deficit of \$19.7 million for the scenario as a whole.
- The impact of the net capital deficits and remaining debt service combined with the net positive operating impacts emphasize that the City must identify alternative revenue sources such as impact fees to fund capital needs particularly for roads.
- The City may choose to encourage development in certain FAZs more than others. With no new capital revenue sources, infill development would provide the best fiscal impact for the City followed by the Curtis Road Interchange, Bradley and Staley, and Southwest Champaign FAZs.
- If new capital revenue sources are identified and can offset capital costs, all of the FAZs are attractive with net positive operating results. The most favorable operating impact is in Southwest Champaign FAZ followed by the Staley and Kirby, Olympian and Prospect, and Infill FAZs.
- The Infill FAZ is seven mixed use development projects each comprised of 4,000 square feet of first floor neighborhood retail and 60 upper story rental apartments located in the urban core area of the City. The findings specific to this FAZ are representative of this type and amount of development within any area of the current City which would not require any increase in the levels of service.
- Main revenue sources for the City are sales and property taxes. Together these two sources comprise over 43% of the revenues projected for each FAZ.

- As discussed throughout this report and in the *LOS Document*, the costs assumed are based on *current levels of service* for services and infrastructure. For some services, City staff have indicated a need for an improved level of service. Improved levels of service would increase cumulative deficits and reduce cumulative positive results.
- It is important to acknowledge that fiscal issues are only one way to evaluate development and growth trends. Environmental, land use, and social issues should also be taken into consideration when determining what is best for the City.

B. REVENUE AND COST DETAIL

Further details on revenue and cost projections for each FAZ within the Growth Within the Service Area scenario are presented and discussed in this section. Results are shown as cumulative as well as percentage of the total. For additional detail on projection methodologies and revenue and expenditure components, please see the *LOS Document* found in Appendix B.

1. OPERATING REVENUES AND EXPENDITURES

a. Revenues

Operating revenues are detailed below in Figure 18 for each FAZ showing cumulative and the share of total revenues generated as well as the average annual revenues. Operating revenues include those in the General Fund (broken out by type), Urban Renewal Fund, Library Funds, and Food and Beverage Tax Fund.

Figure 18: Cumulative Operating Revenues by FAZ

Cumulative Operating Revenue from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO ONE: GROWTH WITHIN SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%
General Fund Property Taxes	\$7,257	20%	\$1,498	34%	\$3,226	27%	\$8,434	24%	\$14,327	25%	\$1,731	16%	\$1,578	14%
General Fund Sales Taxes	\$13,135	37%	\$716	16%	\$3,394	29%	\$15,418	43%	\$25,922	46%	\$5,821	54%	\$7,448	66%
General Fund Income Taxes	\$6,147	17%	\$770	17%	\$1,822	16%	\$3,988	11%	\$4,514	8%	\$1,256	12%	\$728	6%
Other Taxes	\$1,786	5%	\$224	5%	\$529	5%	\$1,159	3%	\$1,312	2%	\$333	3%	\$212	2%
Fines	\$10	0%	\$1	0%	\$3	0%	\$6	0%	\$7	0%	\$2	0%	\$1	0%
Permits, Licenses, & Fees	\$501	1%	\$63	1%	\$148	1%	\$325	1%	\$368	1%	\$88	1%	\$59	1%
Other	\$434	1%	\$54	1%	\$129	1%	\$282	1%	\$319	1%	\$81	1%	\$51	0%
Urban Renewal Fund: Utility Tax	\$670	2%	\$84	2%	\$199	2%	\$435	1%	\$492	1%	\$125	1%	\$79	1%
Library Property Tax	\$4,257	12%	\$879	20%	\$1,892	16%	\$4,947	14%	\$8,405	15%	\$1,016	9%	\$926	8%
Library: Other	\$286	1%	\$36	1%	\$85	1%	\$186	1%	\$210	0%	\$58	1%	\$34	0%
Food & Beverage Tax	\$1,048	3%	\$131	3%	\$311	3%	\$680	2%	\$770	1%	\$214	2%	\$124	1%
TOTAL	\$35,532	100%	\$4,455	100%	\$11,738	100%	\$35,859	100%	\$56,646	100%	\$10,725	100%	\$11,241	100%

As shown in Figure 18, the largest revenue source is sales tax in all areas except the Olympian Extended FAZ. In this FAZ, there is very little retail development resulting in a greater reliance on property tax and income tax revenues. Similarly, although the Olympian and Prospect FAZ has the most development, it has more office and industrial development resulting in lower sales tax revenues than the other areas; its lower property tax revenues can be attributed to the fact that almost 75% of its residential development is multifamily.

The Curtis Road Interchange and Infill FAZs are much more reliant on sales tax revenues than other areas due to their lower population growth and lower value residential development.

Despite the fact that it has less development than the Olympian and Prospect Avenue FAZ and a similar level of development as the Staley and Kirby FAZ, the Southwest Champaign FAZ has revenues approximately 60% higher than in each of these two areas. This high level of general fund revenues is driven by higher sales tax revenues from retail development and higher property tax revenues from a greater number of single family detached and attached housing units. The high level of revenue for this FAZ is reflected in the net fiscal impacts, as this FAZ also has the largest operating and total net positive impact.

In sum, FAZs with significant retail development coupled with high value residential development generate the highest general fund revenues.

b. Expenditures

Operating expenditures are detailed below in Figure 19 for each FAZ showing cumulative expenditures over the 20-year development timeframe and share of total operating expenditures generated. Operating expenditures include those in the General Fund, Urban Renewal Fund, and Library Funds.

Figure 19: Cumulative Operating Expenditures by FAZ

Cumulative Operating Expenditures from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO ONE: GROWTH WITHIN SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%
Mayor, Council, & City Manager	\$847	4%	\$106	4%	\$251	4%	\$549	3%	\$622	2%	\$158	3%	\$100	3%
General Government	\$8,756	37%	\$1,077	37%	\$2,578	37%	\$5,842	37%	\$6,824	27%	\$1,745	33%	\$1,176	37%
Human Resources	\$249	1%	\$31	1%	\$74	1%	\$162	1%	\$183	1%	\$46	1%	\$30	1%
Public Works	\$4,474	19%	\$557	19%	\$1,297	19%	\$3,171	20%	\$3,855	15%	\$743	14%	\$686	22%
Police	\$3,584	15%	\$432	15%	\$1,047	15%	\$2,467	16%	\$7,440	30%	\$1,290	24%	\$532	17%
Fire	\$578	2%	\$71	2%	\$170	2%	\$389	2%	\$2,398	10%	\$470	9%	\$80	3%
Neighborhood Services	\$126	1%	\$16	1%	\$37	1%	\$82	1%	\$92	0%	\$18	0%	\$14	0%
IT	\$803	3%	\$101	3%	\$238	3%	\$521	3%	\$590	2%	\$150	3%	\$95	3%
Urban Renewal	\$477	2%	\$60	2%	\$142	2%	\$310	2%	\$351	1%	\$98	2%	\$57	2%
Library	\$3,616	15%	\$453	16%	\$1,072	16%	\$2,346	15%	\$2,655	11%	\$574	11%	\$418	13%
TOTAL	\$23,511	100%	\$2,902	100%	\$6,906	100%	\$15,838	100%	\$25,009	100%	\$5,292	100%	\$3,189	100%

The largest share of operating expenditures is for General Government; the General Government expenditures include the police and fire pension fund costs, which are included as a part of the finance transfers budget. These combined costs make up 50% of total General Government operating expenditures in this scenario. The other 50% of costs includes Legal, Finance, Workers' Comp, Human Resources, and Planning.

Other categories making up more than 10% of operating expenditures include Public Works, Police, and Library. While the percentage of costs remains generally the same across the FAZs, Police costs are higher in the Southwest Champaign and Curtis Road Interchange FAZs due to the addition of six police officers needed to serve this area. These officers are needed for two reasons: (1) the response time from other parts of the City is greater and (2) the high level of big box and retail development results in a higher demand for services in these areas.

Note that while normally Fire would be included as top expenditure category, the current fire service areas would not need to be expanded; only three additional firefighters would need to be added to the service area covering the Southwest Champaign and Curtis Road Interchange FAZs making fire costs slightly higher in these areas.

2. CAPITAL REVENUES AND EXPENDITURES

a. Revenues

Capital revenues are detailed below in Figure 20 for each FAZ showing cumulative and the share of total revenues generated as well as the average annual revenues. Capital revenues include those in the Motor Fuel Tax, Library Improvements, and Capital Improvements Funds.

Figure 20: Cumulative Capital Revenues by FAZ

Cumulative Capital Fund Revenue from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO ONE: GROWTH WITHIN SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%
Motor Fuel Tax Fund	\$1,584	28%	\$198	27%	\$469	27%	\$1,027	24%	\$1,163	19%	\$324	25%	\$188	18%
Library Improvements Fund	\$284	5%	\$59	8%	\$126	7%	\$330	8%	\$561	9%	\$68	5%	\$62	6%
Capital Improvements Fund	\$3,782	67%	\$469	65%	\$1,141	66%	\$3,007	69%	\$4,346	72%	\$882	69%	\$812	76%
TOTAL	\$5,650	100%	\$726	100%	\$1,737	100%	\$4,365	100%	\$6,071	100%	\$1,273	100%	\$1,061	100%

The Capital Improvements Fund generates most capital revenue with over 65% in all FAZs; included in it are property tax and intergovernmental revenue. Motor Fuel Tax Fund revenues are also significant. These revenues are generated by population growth in each FAZ, as the state distributes these funds to the City based on population. Finally, the only revenues impacted by growth in Library Improvements Fund revenues are property taxes.

b. Expenditures

Capital expenditures are detailed below in Figure 21 for each FAZ showing cumulative expenditures over the 20-year development timeframe and share of total capital expenditures generated.

Figure 21: Cumulative Capital Expenditures by FAZ

Cumulative Capital Expenditures from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO ONE: GROWTH WITHIN SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%
General Government	\$1,258	7%	\$158	2%	\$373	14%	\$816	4%	\$924	5%	\$146	12%	\$143	14%
Roads	\$8,517	47%	\$5,600	80%	\$0	0%	\$15,498	70%	\$12,247	62%	\$0	0%	\$0	0%
Public Works	\$6,674	37%	\$1,024	15%	\$1,823	69%	\$4,822	22%	\$5,144	26%	\$725	61%	\$736	70%
Fire	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Police	\$74	0%	\$9	0%	\$22	1%	\$51	0%	\$308	2%	\$50	4%	\$11	1%
Library	\$1,435	8%	\$180	3%	\$425	16%	\$931	4%	\$1,054	5%	\$270	23%	\$169	16%
TOTAL	\$17,959	100%	\$6,970	100%	\$2,643	100%	\$22,119	100%	\$19,677	100%	\$1,190	100%	\$1,059	100%

In this scenario, there are no capital costs for fire, as the existing fire stations have the capacity to provide service to new development. Cumulative capital costs for general government,

police, and library are each less than \$1.4 million for each FAZ; these capital costs include expansion of general government facilities, police vehicles, and library collections.

As shown in Figure 21, road improvements and construction represent the largest capital cost item in those FAZs that require road projects. The FAZs that require no road improvements or construction in this scenario—Bradley and Staley, Curtis Road Interchange, and the Infill FAZs—have significantly lower capital expenditures.

Public Works capital costs are the second-largest capital cost including the new public works building, expansion of the parking building, and new vehicles and equipment. Both road projects and the new public works building are assumed to be debt financed. Therefore, expenditures shown above represent debt service payments from year of “construction” to end of the 20-year projection period. Because of this, additional debt service is owed on these improvements after the projection period, thus increasing overall costs. Additional debt service beyond year 20 totals \$52.5 million; a breakdown by FAZ is shown in Figure 22 below.

Figure 22: Additional Debt Service beyond Year 20

Additional Debt Service	SCENARIO ONE: GROWTH WITHIN SERVICE AREA						
Category	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Roads	\$10,406	\$6,842	\$0	\$18,942	\$14,960	\$0	\$0
Public Works	\$447	\$57	\$132	\$291	\$327	\$51	\$51
TOTAL	\$10,853	\$6,899	\$132	\$19,233	\$15,287	\$51	\$51

VI. FISCAL RESULTS: FISCAL ANALYSIS ZONES IN SCENARIO TWO

The following section provides further discussion on the fiscal impact analysis results and revenue and cost details for development in Scenario Two: Growth **Beyond** the Service Area.

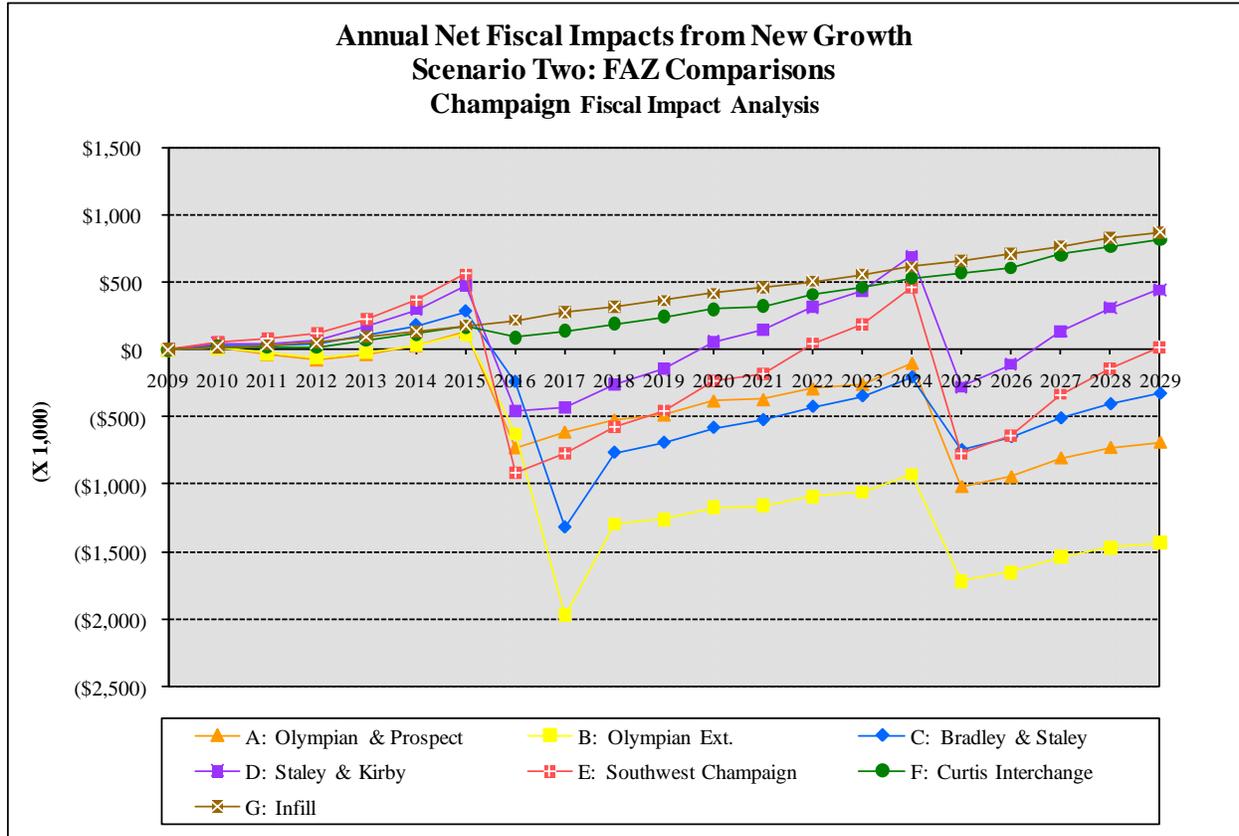
A. FISCAL IMPACT RESULTS

Fiscal impact results are shown in a number of different ways. First, *annual* net results are discussed and show the fiscal impacts from one year to the next. *Average annual* results are then shown over different time intervals to provide an easy way to compare multiple FAZs and summarize the general fiscal impacts over time. Finally, *cumulative* results are shown reflecting total revenues, expenditures, and net fiscal results over the 20-year development timeframe.

1. ANNUAL NET RESULTS

Figure 23 shows the *annual* (year to year) net results to the City for each of the seven FAZs over the study time horizon. Each year reflects total revenues generated minus total expenditures incurred in the same year. Both capital and operating costs are included. By showing the results annually, the magnitude, rate of change, and timeline of deficits and revenues can be observed over time. The “bumpy” nature of the annual results during particular years represents the opening of capital facilities and/or major operating costs being incurred. Data points above the \$0 line represent positive annual results; points below the \$0 line represent annual deficits. Each year’s impact is *not* carried forward into the next year. This enables a comparison from year-to-year of the net results without distorting the revenue or cost side of the equation. In reality, those positive impacts would be carried forward or deficits would be funded through other means such as debt financing for capital improvements where there is a shortfall.

Figure 23: Annual Net Fiscal Results



Only two FAZs have net positive impacts each year: Curtis Road Interchange and Infill. All other FAZs show both positive and negative net results; movement in the results can be attributed to capital costs. The trends for each FAZ are:

- A: Olympian and Prospect—The capital net deficit outweighs the positive operating impact beginning in year two. As this area grows, it begins to make up some of this deficit until demand for road improvements and construction is triggered in FY2016 and FY2025. The positive operating impact does not outweigh the capital deficit because of the high cost of road projects and the mix of development. 50% of the residential development is lower value multi-family housing coupled with far more industrial and office development than retail. While the revenues generated can cover the operating expenditures, significant capital costs outweigh these positive operating impacts in seventeen of the twenty years.
- B: Olympian Extended—This FAZ shows only modest positive in three of the twenty years. This FAZ’s nonresidential development is 79% office with only 299,000 square feet of neighborhood retail space leaving it very reliant on property and income tax revenues. These revenue factors make for a basically neutral net operating impact which provides virtually no offset of the net capital deficit. This is particularly striking in FY2016 and FY2025 when road projects are triggered and also in FY2017 when the

debt service for the new fire station and the addition of a fire company are added to the costs.

- C: Bradley and Staley—The net fiscal impact in this FAZ is positive in the first six years. However, once the need for road infrastructure is triggered in FY2016, each year's net fiscal impact is a deficit. In FY2017, the deficit deepens when capital costs begin for the debt service of both the new fire station and relocating station #4 as well as operating expenditures for the new fire company for the new station.
- D: Staley and Kirby—Scenario Two in this FAZ assumed a smaller area compared to the other FAZs. However, the net operating revenues average over 2.8 times the operating expenditures for this FAZ. These large revenues are the result of this FAZ projected to have retail development and single family residential development. Net deficits over \$10,000 only occur in FY2016-2019 and FY2025-2026. These are caused by road projects beginning in FY2016 and FY2025 as well as the move of fire station #4 in FY2017.
- E: Southwest Champaign—Although this FAZ has the highest road project costs of \$33.7 million, a net positive impact occurs in ten of the twenty years due to the large amount of development occurring and the mix of development. Residential development is a balance of all housing unit types while neighborhood retail makes up more than 50% of nonresidential development. This area has nearly the same amount of neighborhood retail development as Staley and Kirby and thus high sales tax revenues; the positive operating impacts are the same as in the Staley and Kirby FAZ with operating revenues averaging 2.8 times the operating expenditures. Like that FAZ, the downward spikes in the annual net fiscal impact are explained by the road projects triggered in FY2016 and FY2025 and the addition of fire and police staff in FY2016 and FY2017.
- F: Curtis Road Interchange—This FAZ produces increasing net positive impacts with increasing levels of development. Arterial road improvements were not identified in this area, and the positive net operating impact is large enough to make up for the capital deficit creating overall net positive results in all years. The only downturn in the net results is a result of the addition of fire and police staff in FY2017. Please note that arterial improvements to Staley and Duncan Roads were listed in the Southwest Champaign FAZ.
- G: Infill—As development increases over the twenty-year period, the net positive impact increases. Infill development does not require capital infrastructure, and the balance of retail and higher value multi-family housing units creates a net positive impact.

2. AVERAGE ANNUAL NET RESULTS

Figure 24 below shows the *average annual* net fiscal results (average revenues minus average operating and capital expenditures) for all funds included in the analysis. The results shown are for three time periods—(1) Years 1-10; (2) Years 11-20; and (3) Years 1-20 (entire 20-year development timeline). The costs and revenues included are those that are defined and discussed throughout this report and the *LOS Document*. All operating and new capital costs are included in the net fiscal results and represent those accruing from growth in each of the three development scenarios.

As shown in Figure 24, average annual results show net deficits in the Olympian and Prospect, Olympian Extended, Bradley and Staley, and Southwest Champaign FAZs. In those FAZs with net deficits, the deficits are more extreme during the second ten years of development because they require more road projects and the Bradley and Staley FAZ has debt payments for both the new fire station and moving fire station #4.

Over the 20-year time frame, the Infill FAZ produces the most favorable average annual net result. In each of the scenarios with positive average annual results, the impacts are more favorable in the second ten years because of the broader tax base supporting the expenses. As more retail gets developed—and with it retail sales tax revenue—as well as additional property tax revenues from expanding tax rolls, more revenues are generated to offset costs. Average annual net impacts over the 20-year period range from a low of \$917 million deficit in the Olympian Extended FAZ to a high of over \$404 million for the Infill FAZ.

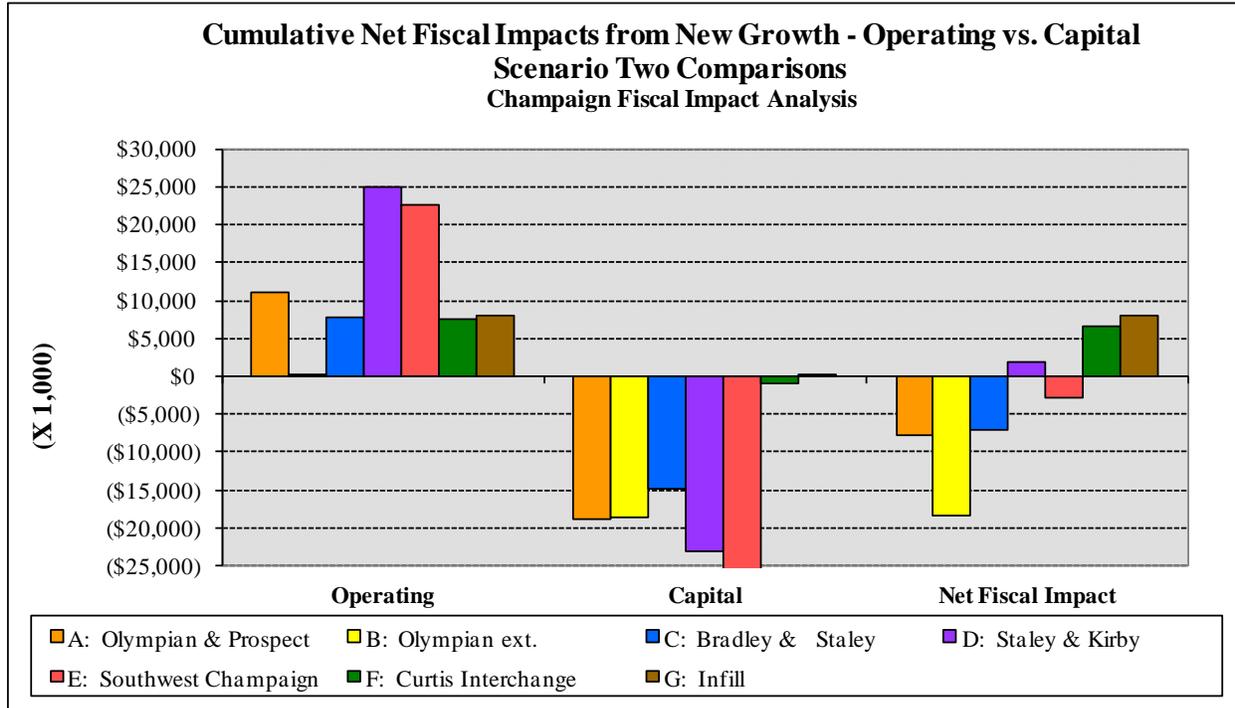
Figure 24: Average Annual Results

SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA							
Average Annual Net Fiscal Impact	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Years 1-10	(\$231)	(\$511)	(\$236)	(\$18)	(\$131)	\$108	\$168
Years 11-20	(\$558)	(\$1,324)	(\$473)	\$215	(\$159)	\$549	\$639
Years 1-20	(\$394)	(\$917)	(\$355)	\$98	(\$145)	\$328	\$404

3. CUMULATIVE NET RESULTS

Cumulative figures reflect total revenues generated minus operating and capital expenditures over the 20-year development timeframe. As shown in Figure 25, all scenarios generate cumulative positive net fiscal operating impacts and capital deficits.

Figure 25: Cumulative Net Results



The combined net fiscal impacts are mixed. Four FAZs have net deficits: Olympian and Prospect, Olympian Extended, Bradley and Staley, and Southwest Champaign. The remaining three FAZs have net positive impacts: Staley and Kirby, Curtis Road Interchange, and Infill. These results indicate that to support new development at current levels of service, the City must identify additional capital revenues to offset the costs.

For this Development **Beyond** the Service Area scenario, the City must also consider the cost and difficulty of the sanitary sewer extension projects needed to serve each of these FAZs together with their net fiscal impacts. Figure 26 below shows the net fiscal impacts together with descriptions of the sewer projects.

Figure 26: Net Fiscal Impacts and Sanitary Sewer Extension Projects

FAZ	Net Fiscal Impact	Sanitary Sewer Projects
A: Olympian & Prospect	(\$7,888)	North: Easy with developer costs
B: Olympian Extended	(\$18,344)	North: Easy with developer costs Northwest: difficult and very costly
C: Bradley & Staley	(\$7,094)	Northwest: difficult and very costly
D: Staley & Kirby	\$1,965	West: difficult and expensive
E: Southwest Champaign	(\$2,904)	West: difficult and expensive South: easy with moderate costs
F: Curtis Interchange	\$6,564	South: easy with moderate costs
G: Infill	\$8,070	None

Debt service payments beyond the twenty-year timeframe of this study must also be considered. Both road projects and the new public works building are assumed to be debt financed over a period of twenty years. Because of this, additional debt service is owed on these improvements after the projection period, thereby increasing overall costs. Additional debt service beyond year 20 totals \$96.4 million; a breakdown by FAZ and the impact on the net fiscal impact is shown in Figure 27 below.

Figure 27: Additional Debt Service beyond Year 20 with Revised Net Fiscal Impact

Additional Debt Service	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA						
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Roads	\$18,417	\$15,981	\$12,117	\$21,315	\$27,237	\$0	\$0
Public Works	\$288	\$240	\$165	\$276	\$219	\$120	\$48
TOTAL	\$18,705	\$16,221	\$12,282	\$21,591	\$27,456	\$120	\$48
Net Fiscal Impact including Additional Debt Service	(\$26,593)	(\$34,565)	(\$19,376)	(\$19,626)	(\$30,360)	\$6,444	\$8,022

The addition of this debt service worsens the deficit in the Olympian and Prospect, Olympian Extended, Bradley and Staley, and Southwest Champaign FAZs while eliminating the neutral impact of the Staley and Kirby FAZ. Only the Curtis Interchange and Infill FAZs maintain net positive results because these FAZs do not have road projects.

As noted above, the results are based on current levels of service; if the City wished to provide an increased level of service, the net fiscal deficits would be worsened and the positive impacts reduced or eliminated.

4. DISCUSSION OF THE RESULTS

- The cumulative net fiscal impact of all seven FAZs is \$19.6 million deficit. This result suggests that were the City to develop within the current service line boundaries, new development would, on average, cost the City \$982,000 annually.
- However, the debt service for public works and road improvements and construction that goes beyond the twenty-year timeframe of this study totals \$96.4 million, which creates an overall deficit of \$116.1 million for the scenario as a whole.
- This overall \$116.1 million deficit does not take into account the cost of sanitary sewer projects to extend the service areas to all areas of each FAZ. The City must also weigh the cost and difficulty of these projects. Given both of these considerations, the Infill and Curtis Interchange are the most fiscally appealing areas for development.
- The impact of the net capital deficits and remaining debt service emphasize that the City must identify alternative revenue sources such as impact fees to fund capital needs particularly for roads, public works, and fire.
- The City may choose to encourage development in certain FAZs more than others. With no new capital revenue sources, infill development would provide the best fiscal impact for the City followed by the Curtis Interchange and Staley and Kirby FAZs.
- If new capital revenue sources are identified and can absorb some or all of the capital costs, all of the FAZs are attractive with positive net operating impacts. Only the Olympian Extended FAZ's positive operating impact is small enough to be considered neutral. The most favorable result is in the Staley and Kirby FAZ followed by the Southwest Champaign and Olympian and Prospect FAZs.
- The Infill FAZ is seven mixed use development projects each comprised of 4,000 square feet of neighborhood retail and 60 rental apartments located in the urban core area. The findings specific to this FAZ are representative of this type and amount of development within any area of the current City which would not require any increase in the levels of service; the development does not require additional police officers, firefighters, road construction, or other capital projects.
- Main revenue sources for the City are sales and property taxes. Together these two sources comprise make up 48% to 73% of the revenues projected for each scenario.
- As discussed throughout this report and as detailed in the *LOS Document*, the costs assumed are based on *current levels of service* for services and infrastructure. For some services, City staff have indicated a need for an improved level of service. Improved levels of service would increase cumulative deficits and reduce cumulative positive impacts.

- It is important to acknowledge that fiscal issues are only one way to evaluate development and growth trends. Environmental, land use, and social issues should also be taken into consideration when determining what is best for the City.

B. COST AND REVENUE DETAIL

Further details on revenue and cost projections for each FAZ within the Growth **Beyond** the Service Area scenario are presented and discussed in this section. Results are shown as cumulative as well as percentage of the total. For additional detail on projection methodologies and revenue and expenditure components, please see the LOS Document found in Appendix B.

1. OPERATING REVENUES AND EXPENDITURES

a. Revenues

Operating revenues are detailed below in Figure 28 for each FAZ showing cumulative and the share of total revenues generated as well as the average annual revenues. Operating revenues include those in the General Fund (broken out by type), Urban Renewal Fund, Library Funds, and Food and Beverage Tax Fund.

Figure 28: Cumulative Operating Revenues by FAZ

Cumulative Operating Revenue from New Growth - Scenario Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%
General Fund Property Taxes	\$6,706	25%	\$6,751	29%	\$4,825	20%	\$8,516	20%	\$10,199	25%	\$2,312	14%	\$1,578	14%
General Fund Sales Taxes	\$9,052	33%	\$5,937	26%	\$12,627	51%	\$20,849	50%	\$18,538	46%	\$9,413	58%	\$7,448	66%
General Fund Income Taxes	\$4,238	16%	\$3,562	16%	\$2,429	10%	\$4,097	10%	\$3,228	8%	\$1,779	11%	\$728	6%
Other Taxes	\$1,232	5%	\$1,035	5%	\$706	3%	\$1,191	3%	\$938	2%	\$517	3%	\$212	2%
Fines	\$7	0%	\$6	0%	\$4	0%	\$6	0%	\$5	0%	\$3	0%	\$1	0%
Permits, Licenses, & Fees	\$344	1%	\$289	1%	\$197	1%	\$332	1%	\$262	1%	\$144	1%	\$59	1%
Other	\$299	1%	\$252	1%	\$172	1%	\$289	1%	\$228	1%	\$126	1%	\$51	0%
Urban Renewal Fund: Utility Tax	\$462	2%	\$388	2%	\$265	1%	\$446	1%	\$352	1%	\$194	1%	\$79	1%
Library Property Tax	\$3,934	14%	\$3,960	17%	\$2,830	12%	\$4,996	12%	\$5,983	15%	\$1,356	8%	\$926	8%
Library: Other	\$197	1%	\$166	1%	\$113	0%	\$191	0%	\$150	0%	\$83	1%	\$34	0%
Food & Beverage Tax	\$722	3%	\$607	3%	\$414	2%	\$698	2%	\$550	1%	\$303	2%	\$124	1%
TOTAL	\$27,193	100%	\$22,953	100%	\$24,581	100%	\$41,613	100%	\$40,433	100%	\$16,229	100%	\$11,241	100%

General Fund property taxes and sales taxes together make up more than 55% of operating revenues in each of the seven FAZs. Only in the Olympian Extended FAZ is more property tax generated than sales tax, which can be attributed to the mix of development, as this FAZ's nonresidential development is only 16% neighborhood retail.

The Southwest Champaign and Staley and Kirby FAZs have significantly higher revenues than the other areas. They each generate at least 26% more in property taxes and at least 47% more in sales taxes than the other areas. The mix of land uses in these areas contains more retail development generating more sales tax. The higher property taxes are generated by a mix of development with more neighborhood retail and office development as well as residential development that is more than 65% single family detached housing units, which have higher assessed values than attached or multi-family units.

The Curtis Road Interchange and the Infill FAZs generate the least amount of revenue. This is fitting as these areas also have less growth than the other areas.

b. Expenditures

Operating expenditures are detailed below in Figure 29 for each FAZ showing cumulative expenditures over the 20-year development timeframe and share of total operating expenditures generated. Operating expenditures include those in the General Fund, Urban Renewal Fund, and Library Funds.

Figure 29: Cumulative Operating Expenditures by FAZ

Cumulative Operating Expenditures from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%
Mayor, Council, & City Manager	\$584	4%	\$491	2%	\$335	2%	\$564	3%	\$445	3%	\$245	3%	\$100	3%
General Government	\$6,054	37%	\$5,060	22%	\$3,649	22%	\$6,144	37%	\$4,894	28%	\$2,538	29%	\$1,180	37%
Human Resources	\$182	1%	\$153	1%	\$104	1%	\$176	1%	\$139	1%	\$76	1%	\$31	1%
Public Works	\$3,135	19%	\$2,597	11%	\$2,030	12%	\$3,433	21%	\$2,816	16%	\$1,264	14%	\$695	22%
Police	\$2,393	15%	\$1,987	9%	\$1,524	9%	\$2,561	15%	\$5,175	29%	\$2,418	28%	\$526	16%
Fire	\$397	2%	\$9,565	42%	\$7,209	43%	\$409	2%	\$1,661	9%	\$820	9%	\$80	3%
Neighborhood Services	\$95	1%	\$80	0%	\$54	0%	\$92	1%	\$72	0%	\$39	0%	\$16	1%
IT	\$554	3%	\$465	2%	\$317	2%	\$535	3%	\$422	2%	\$232	3%	\$95	3%
Urban Renewal	\$329	2%	\$277	1%	\$189	1%	\$318	2%	\$251	1%	\$138	2%	\$57	2%
Library	\$2,447	15%	\$2,057	9%	\$1,402	8%	\$2,365	14%	\$1,864	11%	\$1,020	12%	\$418	13%
TOTAL	\$16,169	100%	\$22,732	100%	\$16,814	100%	\$16,598	100%	\$17,737	100%	\$8,792	100%	\$3,198	100%

The largest share of operating expenditures is dependent upon whether an FAZ has a need for additional fire or police staff. Overall, the largest expenditure categories are General Government, Public Works, Police, and Fire together making up more than 80% of operating costs.

In the Olympian Extended and Bradley and Staley FAZs, a new fire station with a new fire company is needed to serve development in these areas. Because of this additional staffing, the largest share of operating expenditures in these FAZs is Fire followed by General Government, Public Works, and Police.

In the Curtis Road Interchange and Southwest Champaign areas, the largest expenditure categories are General Government and Police. Police expenditures are higher in these areas because of the need for six additional officers to provide sufficient response time and due to the higher demand created by a concentration of big box and neighborhood retail development.

Four categories of expenditures make up over 87% of the expenditures in each of the remaining FAZs—Olympian and Prospect, Staley and Kirby, and Infill. The highest costs are General Government followed by Public Works, Police, and Library.

2. CAPITAL REVENUES AND EXPENDITURES

a. Revenues

Capital revenues are detailed below in Figure 30 for each FAZ showing cumulative and the share of total revenues generated as well as the average annual revenues. Capital revenues include those in the Motor Fuel Tax, Library Improvements, and Capital Improvements Funds.

Figure 30: Cumulative Capital Revenues by FAZ

Cumulative Capital Fund Revenue from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%	Cum. Rev.	%
Motor Fuel Tax Fund	\$1,092	27%	\$918	26%	\$626	22%	\$1,056	22%	\$832	19%	\$458	28%	\$188	18%
Library Improvements Fund	\$263	6%	\$265	8%	\$189	7%	\$334	7%	\$400	9%	\$91	6%	\$62	6%
Capital Improvements Fund	\$2,723	67%	\$2,290	66%	\$1,986	71%	\$3,353	71%	\$3,103	72%	\$1,079	66%	\$812	76%
TOTAL	\$4,078	100%	\$3,473	100%	\$2,801	100%	\$4,742	100%	\$4,335	100%	\$1,628	100%	\$1,061	100%

The Capital Improvements Fund generates most capital revenue with over 66% in all FAZs; included in it are property tax and intergovernmental revenue. Motor Fuel Tax Fund revenues are also significant. These revenues are generated by population growth in each FAZ, as the state distributes these funds to the City based on population. Finally, the only revenues impacted by growth in Library Improvements Fund revenues are property taxes.

b. Expenditures

Capital expenditures are detailed below in Figure 31 for each FAZ showing cumulative expenditures over the 20-year development timeframe and share of total capital expenditures generated.

Figure 31: Cumulative Capital Expenditures by FAZ

Cumulative Capital Expenditures from New Growth - FAZ Comparisons (x\$1,000)
Champaign Fiscal Impact Analysis

Category	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA													
	A: Olympian & Prospect		B: Olympian ext.		C: Bradley & Staley		D: Staley & Kirby		E: Southwest Champaign		F: Curtis Interchange		G: Infill	
	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%	Cum. Exp.	%
General Government	\$843	4%	\$708	3%	\$483	3%	\$815	3%	\$642	2%	\$350	14%	\$143	14%
Roads	\$16,656	72%	\$14,450	66%	\$10,955	62%	\$19,281	69%	\$24,634	82%	\$0	0%	\$0	0%
Public Works	\$4,458	19%	\$3,699	17%	\$2,545	14%	\$4,434	16%	\$3,720	12%	\$1,652	66%	\$711	69%
Fire	\$0	0%	\$2,313	10%	\$3,083	17%	\$2,259	8%	\$0	0%	\$0	0%	\$0	0%
Police	\$50	0%	\$41	0%	\$32	0%	\$53	0%	\$190	1%	\$88	4%	\$11	1%
Library	\$984	4%	\$827	4%	\$564	3%	\$951	3%	\$749	3%	\$412	16%	\$169	16%
TOTAL	\$22,990	100%	\$22,038	100%	\$17,662	100%	\$27,793	100%	\$29,936	100%	\$2,501	100%	\$1,034	100%

In each FAZ, Roads and Public Works comprise between 66% and 95% of all capital expenditures.

The Olympian Extended, Bradley and Staley, and Bradley and Kirby FAZs also have significant capital Fire expenditures. The cost of the new fire station is allocated between Olympian Extended and Bradley and Staley FAZs. Additionally, station #4 must be moved to serve the Bradley and Staley FAZ and the Staley and Kirby FAZ.

Public Works capital costs are the second-largest capital cost including the new public works building, expansion of the parking building, and new vehicles and equipment. Both road projects and the new public works building are assumed to be debt financed. Therefore, expenditures shown above represent debt service payments from year of “construction” to end of the 20-year projection period. Because of this, additional debt service is owed on these improvements after the projection period, thus increasing overall costs. Additional debt service beyond year 20 totals \$101 million; a breakdown by FAZ is shown in Figure 32 below.

Figure 32: Additional Debt Service beyond Year 20

Additional Debt Service Category	SCENARIO TWO: GROWTH BEYOND THE SERVICE AREA						
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill
Roads	\$18,417	\$15,981	\$12,117	\$21,315	\$27,237	\$0	\$0
Public Works	\$288	\$240	\$165	\$276	\$219	\$120	\$48
TOTAL	\$18,705	\$16,221	\$12,282	\$21,591	\$27,456	\$120	\$48



Appendices to the Fiscal Impact Analysis of Development Scenarios

Prepared for:
The City of Champaign, Illinois



February 5, 2010

Prepared by:



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APPENDIX A: LEVEL OF SERVICE, COST, AND REVENUE FACTORS

I. APPROACH AND MAJOR ASSUMPTIONS

This Level of Service (LOS), Cost, and Revenue Factor Memorandum discusses services and facilities provided by the City of Champaign that will be impacted by new development. The service level, cost, and revenue assumptions are based on TischlerBise’s on-site interviews with staff, a detailed analysis of the current fiscal year budget and other documents, and the Cost of Land Use Analysis conducted previously. The assumptions outlined below will be utilized along with growth scenario projections to calculate the fiscal impact on the City’s budget—including operating and capital expenditures—over a 20-year period. Calculations will be performed using a customized fiscal impact model designed specifically for this assignment.¹

A. The Fiscals Process and Data Input Categories

In order to provide an understanding of the overall methodology used in this fiscal impact analysis, a brief explanation of the FISCALS process follows. The FISCALS software utilizes two types of input data. The first category of demographic/economic projections is called demand base data inputs. These numerical projections include data such as population, housing units and employment. The FY2009 population, job, and dwelling unit estimates are used to calculate unit costs and service level thresholds. These estimates are based on data provided by the City of Champaign.

The second type of input data relates to the government service levels, costs, and revenues. This data is used by TischlerBise’s FISCALS system to calculate the annual costs, revenues, and capital facilities by department or function. These assumptions are outlined in this report.

B. Major Assumptions

The fiscal impact analysis can be regarded as a snapshot of the City’s current budget. For this analysis, the FY2009 budget has been used to represent a “snapshot” of current costs, revenues, and levels of service. The current level of spending as depicted in the budget is referred to as the current level of service in this type of analysis. In summary, the “snapshot” approach does not attempt to speculate about how services, costs, revenues and other factors will change over 20 years. Instead, it evaluates the fiscal impact to the City as it currently conducts business.

The following major assumptions regarding the fiscal methodology should be noted.

¹ Calculations throughout this report are based on an analysis conducted using Excel software. Results are discussed in the report using one-and two-digit places (in most cases), which represent rounded figures. However, in some cases the analysis itself uses figures carried to their ultimate decimal places; therefore the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to rounding).

1. Cost and Revenue Factors

All costs and revenues directly attributable to new development are included in this analysis. Some costs are not expected to be impacted by demographic changes and maybe be fixed (in constant dollars) in this analysis, such as some administrative functions. In other cases, the costs are variable based on certain factors. Personnel and other operating costs will be projected, as are capital expenditures. Projections of capital costs are based on discussions with personnel and Capital Improvement Plan. Revenues, operating costs, and capital costs will vary by development scenario.

2. Level-of-Service

Many revenue and cost projections are based on the assumption that the current level of spending, as provided in the budget, will continue into the future. This represents the best possible assumption to make at this time since the budget represents the City's commitment to provide certain services.

3. Cost and Revenue Structure

The analysis includes the City's General Fund, Special Revenue Funds that are supported by tax revenues, and Capital Revenues/Expenditures. Only those funds affected by new development are included in the analysis. Furthermore, only those revenues and costs *directly attributed* to the new development are assumed. Indirect, or spin-off, impacts are not included.

4. Inflation Rate

The rate of inflation is assumed to be zero throughout the projection period, and cost and revenue projections are in constant 2009 dollars. This assumption is in accord with current budget data and avoids the difficulty of forecasting as well as interpreting results expressed in inflated dollars. In general, including inflation is complicated and unpredictable. This is particularly the case given that some costs, such as salaries, increase at different rates than other operating and capital costs such as contractual and building construction costs. And these costs, in turn, almost always increase in variation to the appreciation of real estate, thus affecting the revenue side of the equation. Using constant 2009 dollars reinforces the snapshot approach and avoids these problems.

5. Non-Fiscal Evaluations

While a fiscal impact analysis is an important consideration in planning decisions, it is only one of several issues to be considered. Environmental and social issues, for example, should also be considered when making planning and policy decisions. The above notwithstanding, this analysis will enable interested parties to understand the fiscal implications of the proposed development.

C. General Methodology

Annual costs and revenues attributable to new development will be projected by applying the applicable cost and revenue factors, as outlined in this LOS document, to new development. In general, five different methodologies are used. In some cases, a unique methodology must be used. These methodologies, along with accompanying examples, are described below.

1. Per Capita

Many of the factors described in this LOS document use a per capita approach. This approach is used for expenditures and revenues that are influenced strictly by population. If a cost or revenue is projected on a per capita basis, the budget is divided by the current population estimate to arrive at the current level of service standard.

For example, the variable portion of the Neighborhood Services Administration budget totals \$27,647 in FY2009. This amount is divided by the current population estimate of 75,254, for a per capita cost of \$0.37.

2. Per Capita and Job

Some factors described in the LOS document use a per capita and job approach. This approach is used for expenditures and revenues that are influenced by population and employment. If a cost or revenue is projected on a per capita and job basis, it is divided by the current population and employment estimate to arrive at the current level of service standard.

For example, variable expenses for the City Manager's Office total \$107,244 in FY2009. These expenses are incurred as a result of the City Manager's duties, which benefit both residential and nonresidential activity. Therefore, a per capita projection methodology will understate revenues generated by new development. For example, if there are two scenarios that assume the same increase in population, but one assumes the development of an office building, a per capita approach will project the same amount of City Manager's Office expenditures under both scenarios. The per capita and job approach serves as a proxy for capturing the impact of expenditures generated by additional nonresidential activity. Therefore, the City Manager's Office expenditures (\$107,244) is divided by the current population and employment estimate of 115,160, for a per capita and job expenditure of \$0.93.

3. Per Trip

A per vehicle trip approach is used to project some Public Works expenditures. For example, the variable non-salary Streets operating expenses total \$124,568. These expenses are divided by the total current vehicle trips of 268,693 for a per vehicle trip expenditure of \$0.46.

Trip generation rates were obtained from the reference book, Trip Generation, published by the Institute of Transportation Engineers (8th Edition, 2008). To translate the trip generation factors into associated operating costs per 1,000 square feet of nonresidential space or per residential unit, the trip generation factors are multiplied by the cost per trip in the City of Champaign.

4. Per Lane Mile

For those Public Works functions that are driven by the length of road network, such as snow removal, a per lane mile approach is used. Variable expenses for Public Works Emergency Operations, which provides for snow removal, total \$317,725 in FY2009. The level of service is found by dividing this budgeted amount by the existing 683.5 lane miles for a per lane mile cost of \$464.85.

5. Marginal Calculations

An example of a variable marginal calculation is growth-related Property Tax revenues. In this case, the property tax levy is applied against the assessed values of new development to determine Property Tax generated by new growth.

Examples of direct entered marginal approach for costs are the \$1.8 million one-time expense and \$1.2 million recurring expense associated with adding a new fire company. These costs will be entered directly into the fiscal model.

D. Existing Conditions and Demand Factors

Current population, employment levels, and residential and nonresidential vehicle trips are used to calculate unit costs and service level thresholds. The following current demographic and data factors are used, as obtained by the sources indicated.

1. Population and Housing Units

The table below summarizes the current housing units and population in Champaign. These values are used to determine the residential cost and revenue factors summarized in the sections below. As shown in Figure A-1 below, the number of housing units in the City is estimated at 31,860. This estimate is based on the number of units contained in the 2000 U.S. Census and 2007 Special Census. The current population is taken from the draft Champaign Tomorrow: Existing Conditions Report received from the City Planning Department.

Figure A-1: FY2009 Population and Housing Units

Occupied Housing Units (1)	
Single Family Detached	15,491
Attached	1,425
Apartments	14,446
Mobile Homes	498
Total	31,860
Population (2)	75,254

(1) Based on 2007 Special Census and 2000 Census.

(2) Champaign Tomorrow: Existing Conditions Report

2. Persons per Household

Persons per household for single family detached prototypes is taken directly from 2007 Special Census data. In order to determine persons per household for all other residential prototypes, TischlerBise evaluated 2000 Census and 2007 American Community Survey data. Figure A-2 below summarizes household characteristic data.

Figure A-2: Persons Per Housing Units

Single Family Detached High Price Point	2.83
Single Family Detached Medium Price Point	3.35
Single Family Detached Low Price Point	2.25
Multi-family Units/Apartments	1.67
Attached Units	1.78

3. Employment and Nonresidential Building Area

Figure A-3 below summarizes the current estimate of employment and nonresidential building area for each major category of nonresidential development in Champaign. Employment in the City is estimated at 39,906 as of 2007, which is the most recent figure available. This total employment figure is taken from the Illinois Workforce Information Center.² The breakdown of employment by category is derived by applying the percentage of jobs in each category according to the draft Champaign Tomorrow: Existing Conditions report to the total number of jobs.

²

<http://wic.ilworkinfo.com/analyzer/labforcedata.asp?geo=1711012385&cat=LAB&session=LABFORCE&susession=99&areaname=Champaign+City&tableused=LABFORCE&defaultcode=&roll=&rollgeo=04&time=20070100&currsu bsessavail=&sgltime=0&siclevel=3&naicslvl=6>

The estimate of 15.3 million square feet of nonresidential building area is derived from the jobs numbers based on standards of square feet per job published in the reference book Trip Generation published by the Institute of Transportation Engineers (ITE).

Figure A-3: Employment and Nonresidential Building Area

<i>Jobs by Type</i>	
Commercial Jobs	10,370
Industrial Jobs	5,941
Office Jobs	23,377
Other Jobs	218
Total Jobs	39,906
<i>Non-Residential Floor Area</i>	
Commercial SF	2,503,505
Industrial SF	4,659,657
Office SF	8,181,960
Institutional SF	0
TOTAL NR KSF	15,345,122

II. GENERAL FUND REVENUES

A summary of the FY2009 budgeted General Fund revenues by type is shown in the table below. The major General Fund revenue source is sales tax; it comprises approximately 50% of total General Fund revenue. Property tax and income tax revenues are the next largest revenue sources comprising just over 30% of General Fund revenues. The remaining categories combined make up only 19% of revenues. This section describes each of the revenue sources in more detail as well as the methodology used to project future revenues in the fiscal impact analysis.

Figure A-4: General Fund Revenues by Type

**General Fund Revenues--FY09
City of Champaign Fiscal Impact Analysis**

Category	Amount	Percent
Property Tax	\$10,373,029	17%
Sales Tax	\$31,154,137	50%
Income Tax	\$8,390,133	14%
Other Taxes	\$6,645,760	11%
Fines	\$1,206,502	2%
Permits, Licenses, & Fees	\$2,106,850	3%
Other	\$2,008,312	3%
Total	\$61,884,723	100%

A. Property Tax

The General Fund’s property tax rate is 0.7197 per \$100 of equalized assessed value (EAV); this rate includes the taxes for corporate purposes, the Illinois Municipal Retirement Fund, the Police Pension Fund, and the Fire Pension Fund. The table below summarizes the EAV for each type of residential unit being considered in the fiscal impact analysis as well as the General Fund property tax revenue generated per unit annually. The EAV is 33% of the market value.

Figure A-5: Residential EAVs

EAVs by Housing Unit Type and Annual Property Tax Generated

Type of Unit	EAV per Unit	Property Tax Revenue (per unit)
Single Family Detached High PP	\$193,678	\$1,394
Single Family Detached Medium PP	\$73,748	\$531
Single Family Detached Low PP	\$49,153	\$354
Attached Housing	\$51,918	\$374
Multi-family Units/Apartments	\$11,373	\$82
Infill Multi-family Units/Apartments	\$44,780	\$322

The table below summarizes the EAVs per thousand square feet for nonresidential development as well as the property tax revenue generated per thousand square feet of space.

Figure A-6: Nonresidential EAVs

EAVs by Housing Unit Type and Annual Property Tax Generated

Land Use	EAV per KSF	Property Tax Revenue (per KSF)
Industrial	\$11,618	\$84
Office	\$33,416	\$241
Neighborhood Retail	\$36,168	\$260
Big Box Commercial	\$20,910	\$150

B. Sales Tax

Sales tax is calculated using a marginal approach based on sales per square foot figures; the sources of information on sales per thousand square feet are BizStats and the Urban Land Institute.

Figure A-7: General Fund Sales Tax Allocation

Prototype	Sales per 1,000 SF	Sales Tax Rate
Big Box Commercial	\$329,000	2.25%
Neighborhood Retail	\$272,980	2.25%

C. Income Tax and Other Taxes

Figure A-8 below summarizes the projection methodology and LOS standards for income tax and all other General Fund taxes. Note that Income Tax is projected using the per capita methodology, as it is distributed from the state to the City based on population.

Figure A-8: General Fund Income Tax and Other Taxes Allocation

Revenue	FY09 Budget	Projection Methodology	LOS Standard
Income Taxes	\$8,390,133	POPULATION	\$111.49
Other Taxes	\$22,600	FIXED	\$0.00
Hotel-Motel Tax	\$1,491,114	FIXED	\$0.00
Utility Taxes	\$2,438,033	POP AND JOBS	\$21.17
Telecommunications Tax	\$2,694,013	FIXED	\$0.00

D. Other General Fund Revenues

Most other sources of General Fund revenue are held constant, as they will not change with the addition of new development.

Revenue from fines includes Court & Municipal Fines, DUI Fines, Animal Control Fines, Liquor Violation Fines, and Excess False Alarm Fines. Only Animal Control Fine revenue has increased with past growth in the City; thus, only this fee is considered variable.

Permits, Licenses, and Fees associated with new development are variable based on population and jobs. Building permit revenues are one-time revenues; thus, the model only generates building permit revenue in the year that a new unit or new nonresidential development is built. The only "other" revenue that is variable is City Franchise Fees, which are also allocated on a per person and per job basis.

Figure A-9: Other General Fund Revenue Allocation

	Revenue	FY09 Budget	Projection Methodology	LOS Standard
Fines	Court & Municipal Fines	\$1,163,002	FIXED	\$0.00
	DUI Fines	\$7,500	FIXED	\$0.00
	Animal Control Fines	\$13,000	POPULATION	\$0.17
	Liquor Violation Fines	\$10,000	FIXED	\$0.00
	Excess False Alarm Fines	\$13,000	FIXED	\$0.00
Permits, Licenses, & Fees	Right of Way Occupancy Permits	\$12,000	POP AND JOBS	\$0.10
	Building Permits*	\$481,600	POP AND JOBS	\$4.18
	Electrical Permits*	\$122,300	POP AND JOBS	\$1.06
	Plumbing Permits*	\$121,000	POP AND JOBS	\$1.05
	Mechanical Permits*	\$140,000	POP AND JOBS	\$1.22
	Sign Permits	\$1,250	FIXED	\$0.00
	Demolition Permits	\$5,000	FIXED	\$0.00
	Excavation Permits	\$11,000	FIXED	\$0.00
	Sewer Connection Permits	\$22,000	POP AND JOBS	\$0.19
	Driveway & Sidewalk Permits	\$11,000	POP AND JOBS	\$0.10
	Sprinkler Permits	\$20,000	POP AND JOBS	\$0.17
	Restaurant Licenses	\$4,500	FIXED	\$0.00
	Alarm User Registrations	\$5,500	FIXED	\$0.00
	Misc Licenses	\$6,000	FIXED	\$0.00
	Vehicle Licenses	\$9,000	FIXED	\$0.00
	Occupational Licenses	\$4,500	TOTAL JOBS	\$0.11
	Liquor Licenses	\$360,000	FIXED	\$0.00
	Planning & Development Fees	\$7,000	POP AND JOBS	\$0.06
	Public Safety Service Fees	\$557,700	POP AND JOBS	\$4.84
	Other Service Fees	\$205,500	FIXED	\$0.00
Other	City Rental Income	\$2,800	FIXED	\$0.00
	City Franchise Fees	\$592,500	POP AND JOBS	\$5.14
	Sale of City Property	\$7,000	FIXED	\$0.00
	Salary & Training Reimbursement	\$20,000	FIXED	\$0.00
	City Expense Reimbursement	\$453,300	FIXED	\$0.00
	Library Debt Payment	\$278,615	FIXED	\$0.00
	Damaged Property Reimb.	\$50,000	FIXED	\$0.00
	Refunds	\$5,000	FIXED	\$0.00
	Interest & Investment Income	\$400,000	FIXED	\$0.00
	Intergovernmental Rev.--Fed.	\$22,600	FIXED	\$0.00
	Donations & Contributions	\$35,000	FIXED	\$0.00
	Code 4 Donations & Contr.	\$500	FIXED	\$0.00
	Tobacco Enforcement Grant	\$500	FIXED	\$0.00
	Citizen Corp Grant	\$5,000	FIXED	\$0.00
	Roadside Safety IDOT Grant	\$4,000	FIXED	\$0.00
	Illinois Tomorrow Grant/IDOT	\$36,670	FIXED	\$0.00
	Drug Enf. Agency Overtime Ribe	\$15,854	FIXED	\$0.00
	MLK Program Reimb.	\$7,000	FIXED	\$0.00
	CUIHA Program Reimb.	\$6,000	FIXED	\$0.00
	IDOT--Speed Enf. Grant	\$33,973	FIXED	\$0.00
	Byrne Mem. Justice Asst Grant	\$32,000	FIXED	\$0.00

*One-time revenue source.

III. SPECIAL FUNDS REVENUES

Several special funds provide revenues to the City; those impacted by new development have been included in the fiscal impact study including the Motor Fuel Tax Fund, Urban Renewal Fund, and Library Funds.

A. Motor Fuel Tax Fund Revenues

The only significant revenue source is the motor fuel tax, which is allocated based on population just as the state allocates it to the City.

Figure A-10: Motor Fuel Tax Fund Revenue Allocation

Revenue	FY09 Budget	Projection Methodology	LOS Standard
Motor Fuel Tax (state transfer)	\$2,161,508	POPULATION	\$28.72
Interest & Investment Income	(\$39,014)	FIXED	\$0.00
Intergovernmental Revenues--State	\$328,000	FIXED	\$0.00

B. Urban Renewal Fund Revenues

The only revenue source in the Urban Renewal Fund is a share of utility taxes, which is allocated based on population and jobs.

Figure A-11: Urban Renewal Fund Revenue Allocation

Revenue	FY09 Budget	Projection Methodology	LOS Standard
Utility Taxes (3/11 of utility taxes)	\$914,263	POP AND JOBS	\$7.94
Interest & Investment Income	\$20,744	FIXED	\$0.00

C. Library Funds Revenues

Figure A-12 below summarizes the revenue sources, the allocation methodology, and the revenue factors for the Library Improvement, Tax, Operating, and Other Funds. Library revenues are only allocated to residential land uses.

Figure A-12: Library Funds Revenue Allocation

	Revenue	FY09 Budget	Projection Methodology	LOS Standard
Library Improvement Fund	Property Taxes	\$421,385	CUM EAV	\$0.03
	Interest & Investment Income	(\$6,399)	FIXED	\$0.00
	Donations & Contributions	\$250,000	FIXED	\$0.00
Library Tax Account Fund	Property Taxes	\$5,887,770	CUM EAV	\$0.39
	Income Taxes	\$97,339	POPULATION	\$1.29
	Interest & Investment Income	\$50,000	FIXED	\$0.00
Library Operating Fund	Property Tax--transfer from library tax account	\$5,887,770	FIXED	\$0.00
	Pers. Prop. Repl. Tax Transfer from Libr. Tax Acct	\$97,339	FIXED	\$0.00
	General Fines and Fees	\$172,200	POPULATION	\$2.29
	Materials Rental Income	\$27,000	POPULATION	\$0.36
	A/R Income	\$12,000	FIXED	\$0.00
	Photocopy Income	\$9,000	FIXED	\$0.00
	Interest Income	\$50,000	FIXED	\$0.00
	Misc. Income	\$500	FIXED	\$0.00
	Library Other Funds	Operating Fund Transfer (from Libr. Op.)	\$233,174	FIXED
	Gift Fund Transfer	\$55,532	FIXED	\$0.00
	State Per Capita Grant	\$94,068	POPULATION	\$1.25
	Interest Income	\$10,670	FIXED	\$0.00
	LSTA Grant	\$1,240	FIXED	\$0.00
	IL Arts Council Grant	\$2,000	FIXED	\$0.00
	IL State Library Grant	\$10,000	FIXED	\$0.00

The largest revenue source for the library is property taxes. As Figure A-12 indicates, property taxes were allocated using a custom methodology. The Library Improvement and Library Tax Account Funds each have their own property tax rate. The Improvement property tax revenue is dedicated to paying the bonds issued for the new library while the Tax Account property tax revenue is used for general operations. The property tax shown in the Library Operating Fund consists of revenue that has been transferred from the Library Tax Account; it is held fixed since this revenue is allocated while in the Library Tax Account. Property tax generated by each type of residential unit is shown below in Figure A-13.

Figure A-13: Library Property Tax Revenues

Land Use Type	EAV per Unit/KSF	Library Tax	
		Library Impr. Fund 0.0282	Account/Operations 0.394
Single Family Detached High PP	\$193,678	\$55	\$763
Single Family Detached Medium PP	\$73,748	\$21	\$291
Single Family Detached Low PP	\$49,153	\$14	\$194
Attached Housing	\$51,918	\$15	\$205
Multi-family Units/Apartments	\$11,373	\$3	\$45
Infill Multi-family Units/Apartments	\$44,780	\$13	\$176
Industrial	\$11,618	\$3	\$46
Office	\$33,416	\$9	\$132
Neighborhood Retail	\$36,168	\$10	\$143
Big Box Commercial	\$20,910	\$6	\$82

All other variable library revenues are allocated based on population.

D. Food and Beverage Tax Revenues

Food and Beverage Tax revenues are considered variable with increases in the population as shown in Figure A-14 below.

Figure A-14: Food and Beverage Tax Revenues

Revenue	FY09 Budget	Projection	
		Methodology	LOS Standard
Food & Beverage Tax	\$1,430,186	POPULATION	\$19.00

IV. CAPITAL FUND REVENUES

Figure A-15 below summarizes the revenue sources, the allocation methodology, and the revenue factors for the Capital Fund Revenues.

Figure A-15: Capital Fund Revenue Allocation

Revenue	FY09 Budget	Projection Methodology	LOS Standard
Property Taxes	\$1,391,779	CUSTOM	\$0.07
Interest & Investment Income	\$49,703	FIXED	\$0.00
First & Windsor Intersection Exp RIBE	\$512,110	FIXED	\$0.00
City Expense Reimb	\$150,000	FIXED	\$0.00
Intergovernmental Revenue--Other	\$1,048,879	VEHICLE TRIPS	\$3.90
Intergovernmental Revenue--State	\$2,900,000	VEHICLE TRIPS	\$10.79
Tranfer from GO Fund--recurring	\$4,245,315	FIXED	\$0.00
Tranfer from GO Fund--one time	\$916,400	FIXED	\$0.00
Transfer from 2007 A bonds (Olympian)	\$1,512,898	FIXED	\$0.00

The major source of growth-related revenue in the Capital Improvements Fund is property tax, so the taxable value determines the amount of revenue per prototype. The property taxes generated per land use type are shown below in Figure A-16. Note that the total Capital Fund property tax rate is 0.1939; however, 0.123 of this is dedicated to Stormwater projects and goes directly into that fund, which is not included in this fiscal study. The remaining Capital Fund property tax of 0.071 is primarily used to fund street and road projects. Note that the bond proceeds have been kept fixed so that revenues for this fiscal year are not overstated.

Figure A-16: Capital Fund Property Tax Revenues

Land Use Type	EAV per Unit/KSF	Capital Fund Property Tax 0.071
Single Family Detached High PP	\$193,678	\$138
Single Family Detached Medium PP	\$73,748	\$52
Single Family Detached Low PP	\$49,153	\$35
Attached Housing	\$51,918	\$37
Multi-family Units/Apartments	\$11,373	\$8
Infill Multi-family Units/Apartments	\$44,780	\$32
Industrial	\$11,618	\$8
Office	\$33,416	\$24
Neighborhood Retail	\$36,168	\$26
Big Box Commercial	\$20,910	\$15

V. GENERAL GOVERNMENT EXPENDITURES

This section provides an overview and examples of the allocation methodologies used for general government expenditures. More detail is provided for those departments that are most affected by growth in the City.

A. General Government

Included in this section are the Mayor and Council, City Manager's Office, Legal Department, Finance Department, Human Resources Services, Planning Department, and Information Technology.

For the vast majority of these departments, staffing costs are considered fixed while the levels of service for commodities and contractual expenses are found using population and jobs as shown in the example of the Mayor and Council in Figure A-17 below. For example, the FY2009 amount budgeted for commodities of \$1,415 is divided by the total of population (75,254) and jobs (39,906) to determine the level of service of \$0.01 per person or job ($\$1,415 / 115,160 = \0.01). This level of service will be multiplied by persons per household to determine the forecasted expenses per housing unit. For an attached unit, the level of service of \$0.01 is multiplied by the 1.67 persons per household to determine that every new attached housing unit generates \$0.0167 in new Mayor and Council Commodities expenditures. For nonresidential development, the level of service is multiplied by the jobs factor per thousand square feet and by the size of the development in square feet. A 50,000 square foot office building would be: $\$0.01 \times 4.14 \text{ jobs per thousand square feet} \times 50,000 \text{ square feet} / 1,000 \text{ square feet} = \2.07 new commodities expenditures.

Figure A-17: Mayor and Council Operating Expenses Allocation

MAYOR & COUNCIL			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$145,164	SEE BELOW	\$0.00
Commodities	\$1,415	POP AND JOBS	\$0.01
Contractual Services	\$48,462	POP AND JOBS	\$0.42
TOTAL	\$195,041		

MAYOR & COUNCIL STAFFING INPUT

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Secretary II	1.0	FIXED

For both the Finance Department and Human Resources Department, not all staffing costs are held constant, as interviews with the City indicated that in these departments staffing is nearing

its capacity. Thus, with new development in the City, positions will need to be added; the figures below show the positions that are variable and the LOS standards. Within the Finance Department, the Accountant, Financial Analyst, Customer Service Representative, and Finance Technician are considered variable costs. For example, when capacity is reached for the existing Accountant, the model will trigger the need for an additional Accountant.

Figure A-18: Finance Staffing

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Finance Director	1.0	FIXED
Financial Services Manager/Budget Officer	0.9	FIXED
Financial Services Manager/City Accountant	1.0	FIXED
Accountant/Financial Analyst	2.0	POP AND JOBS
Records Manager/City Clerk	1.0	FIXED
Customer Service Representative	1.0	POP AND JOBS
Secretary II	1.0	FIXED
Finance Technician	0.9	POP AND JOBS
Account Clerk II/III	5.5	FIXED
Secretary I	1.0	FIXED
Temporary Research Intern	0.4	FIXED

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Finance Director	\$120,158	28%	\$154,126
Financial Services Manager/Budget Officer	\$77,473	28%	\$99,375
Financial Services Manager/City Accountant	\$77,473	28%	\$99,375
Accountant/Financial Analyst	\$57,759	28%	\$74,087
Records Manager/City Clerk	\$55,039	28%	\$70,598
Customer Service Representative	\$38,709	28%	\$49,652
Secretary II	\$43,115	28%	\$55,304
Finance Technician	\$49,881	37%	\$68,341
Account Clerk II/III	\$40,461	28%	\$51,900
Secretary I	\$39,086	37%	\$53,552
Temporary Research Intern	\$25,709	37%	\$35,224

Within Human Resources, the Human Resources Specialist and Human Resources Technician are considered variable costs. With additional development, staff would be added to the Human Resources after these positions reached capacity.

Figure A-19: Allocation of Human Resources Staffing

Category	FY 2009	Project Using	
	FTE Positions	Which Demand Base?	
Human Resources Director	1.0	FIXED	
Assistant Human Resources Director	1.0	FIXED	
Human Resources Specialist/Technician	2.0	POP AND JOBS	
Clerk Typist II	1.0	FIXED	
Temporary Project Administrator	0.5	FIXED	
Temporary HR Assistant	0.8	FIXED	

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Human Resources Director	\$107,727	37%	\$147,597
Assistant Human Resources Director	\$70,220	37%	\$96,208
Human Resources Specialist/Technician	\$48,044	37%	\$65,825
Clerk Typist II	\$37,251	37%	\$51,038
Temporary Project Administrator	\$29,568	37%	\$40,511
Temporary HR Assistant	\$43,181	37%	\$59,162

An additional exception is the allocation of transfers to the Police and Fire Pension Funds within the Finance Department budget, which are allocated based on the increase in calls for service.

Figure A-20: Police and Fire Pension Funds

FINANCE: TRANSFERS			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Police Pension Fund	\$3,431,243	TOTAL POLICE CALLS	\$54.41
Fire Pension Fund	\$2,960,445	TOTAL FIRE CALLS	\$422.92

B. Public Works

Operating expenses within the Department of Public Works includes Administration, Traffic and Lighting, Building Services, Environmental Services, Streets, Concrete, Engineering Services, Asphalt, Forestry, and Emergency Operations. Costs within each of these areas are allocated based on its function.

Because Administration manages the centralized functions of the department, its operating costs will increase with an increase in population and jobs as will variable staffing.

Figure A-21: Public Works Administration

ADMINISTRATION			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$663,484	SEE BELOW	\$0.00
Commodities	\$133,512	POP AND JOBS	\$1.16
Contractual Services	\$123,256	POP AND JOBS	\$1.07
Capital Outlays	\$92,532	POP AND JOBS	\$0.80
TOTAL	\$1,012,784		

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Public Works Director	1.0	FIXED
Administrative Services Manager	1.0	FIXED
Secretary I/II	2.0	FIXED
Account Clerk II	1.0	FIXED
Purchasing Technician	0.8	POP AND JOBS
Office Worker II	1.0	FIXED
Clerk Typist II	1.0	FIXED
Management Analyst	0.5	POP AND JOBS
Administrative Services Supervisor	0.3	POP AND JOBS

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Public Works Director	\$120,158	28%	\$153,802
Administrative Services Manager	\$77,473	28%	\$99,165
Secretary I/II	\$41,101	37%	\$56,308
Account Clerk II	\$38,709	37%	\$53,031
Purchasing Technician	\$43,115	37%	\$59,068
Office Worker II	\$35,838	28%	\$45,873
Clerk Typist II	\$37,251	37%	\$51,034
Management Analyst	\$55,039	37%	\$75,403
Administrative Services Supervisor	\$57,759	28%	\$73,931

Traffic and Lighting’s operating expenses and staffing, except for the Supervisor, will increase with an increase in the number of vehicle trips on the City’s transportation network. As trips are added to the transportation network, Traffic and Lighting will be required to provide a greater capacity of maintenance to the City’s signs, signals, and lighting.

Figure A-22: Public Works Traffic and Lighting

TRAFFIC & LIGHTING			
Expenditure	FY 2009	Project Using	LOS Std
Name	Budget Amount	Which Demand Base?	\$ per Demand Unit
Personnel Services	\$729,339	SEE BELOW	\$0.00
Commodities	\$129,930	VEHICLE TRIPS	\$0.48
Contractual Services	\$464,040	VEHICLE TRIPS	\$1.73
Capital Outlays	\$88,000	VEHICLE TRIPS	\$0.33
TOTAL	\$1,411,309		

Category	FY 2009	Project Using		
	FTE Positions	Which Demand Base?	Avg Salary / Staff Member	Benefits Multiplier
Traffic & Lighting Supervisor	1.0	FIXED	\$73,725	37%
Electrical Technician	4.0	VEHICLE TRIPS	\$49,889	37%
Traffic and Lighting Technician	1.0	VEHICLE TRIPS	\$53,955	37%
Sign Maintenance Worker II	3.0	VEHICLE TRIPS	\$46,717	37%

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Traffic & Lighting Supervisor	\$73,725	37%	\$101,003
Electrical Technician	\$49,889	37%	\$68,348
Traffic and Lighting Technician	\$53,955	37%	\$73,919
Sign Maintenance Worker II	\$46,717	37%	\$64,002

Figures A-23, A-24, and A-25 show the LOS standards for Building Services, Environmental Services, and Operations Administration. Both Building Services and Operations Administration provide services within the City and Department including facility maintenance and responding to citizen requests. Environmental Services primarily manages the City’s recycling program and yard waste collection. Thus, the levels of service for these operating funds are found using population and jobs.

Figure A-23: Public Works Building Services

BUILDING SERVICES			
Expenditure	FY 2009	Project Using	LOS Std
Name	Budget Amount	Which Demand Base?	\$ per Demand Unit
Personnel Services	\$268,569	SEE BELOW	\$0.00
Commodities	\$21,355	POP AND JOBS	\$0.19
Contractual Services	\$663,841	POP AND JOBS	\$5.76
TOTAL	\$953,765		

Category	FY 2009	Project Using
	FTE Positions	Which Demand Base?
Building and Grounds Supervisor	1.0	FIXED
Special Services Maintenance Worker I	1.0	FIXED
Special Services Worker	1.0	POP AND JOBS
Facility Specialist	1.0	POP AND JOBS

Category	Avg Salary /	Benefits	LOS Std
	Staff Member	Multiplier	Total Cost
Building and Grounds Supervisor	\$57,759	37%	\$79,129
Special Services Maintenance Worker I	\$42,214	37%	\$57,833
Special Services Worker	\$33,218	37%	\$45,508
Facility Specialist	\$53,955	37%	\$73,919

Figure A-24: Public Works Environmental Services

ENVIRONMENTAL SERVICES			
Expenditure	FY 2009	Project Using	LOS Std
Name	Budget Amount	Which Demand Base?	\$ per Demand Unit
Contractual Services	\$366,874	POP AND JOBS	\$3.19

Figure A-25: Public Works Operations Administration

OPERATIONS ADMINISTRATION			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$219,955	SEE BELOW	\$0.00
Commodities	\$7,400	POP AND JOBS	\$0.06
Contractual Services	\$22,540	POP AND JOBS	\$0.20
TOTAL	\$249,895		

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Operations Manager	1.0	FIXED
Secretary I	1.0	FIXED

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Operations Manager	\$77,473	28%	\$99,165
Secretary I	\$39,086	37%	\$53,548

The level of service for street maintenance expenses that must be done by the Streets division of Public Works is found using vehicle trips, as the addition of trips to the network will increase the needed maintenance.

Figure A-26: Public Works Streets

STREETS				LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit	
Personnel Services	\$614,607	SEE BELOW	\$0.00	
Commodities	\$49,083	VEHICLE TRIPS	\$0.18	
Contractual Services	\$75,485	VEHICLE TRIPS	\$0.28	
TOTAL	\$739,175			

Category	FY 2009		Project Using Which Demand Base?
	FTE Positions		
Street Supervisor	1.0		FIXED
Street Maintenance Workers	7.0		FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Street Supervisor	\$66,866	37%
Street Maintenance Workers	\$42,214	37%	\$57,833

The Concrete operating expenses will increase with an increase in lane miles because as lane miles increase, the length of sidewalks to be maintained will also.

Figure A-27: Public Works Concrete

CONCRETE			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$655,769	SEE BELOW	\$0.00
Commodities	\$131,139	LANE MILES	\$191.86
Contractual Services	\$2,140	LANE MILES	\$3.13
TOTAL	\$789,048		

Category	FY 2009 FTE Positions	Project Using Which Demand Base?
Concrete Supervisor	1.0	FIXED
Concrete Maintenance Workers	8.0	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Concrete Supervisor	\$66,866	37%	\$91,606
Concrete Maintenance Workers	\$42,214	37%	\$57,833

The level of service for Engineering operating expenses is found using population and jobs.

Figure A-28: Public Works Engineering Services

ENGINEERING SERVICES			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$2,073,698	SEE BELOW	\$0.00
Commodities	\$19,092	POP AND JOBS	\$0.17
Contractual Services	\$75,552	POP AND JOBS	\$0.66
TOTAL	\$2,168,342		

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
City Engineer	1.0	FIXED
Assistant City Engineer	3.0	FIXED
Engineers I, II, III	5.0	POP AND JOBS
Engineering Technicians II, III	9.0	POP AND JOBS
Secretary I	1.0	FIXED
Temp. Engineering Intern	1.5	FIXED
Temp. Clerical	0.5	FIXED
Temp. Engineering Technician Co-op Intern	2.6	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	City Engineer	\$94,127	28%
Assistant City Engineer	\$77,473	28%	\$99,165
Engineers I, II, III	\$70,715	28%	\$90,515
Engineering Technicians II, III	\$49,943	28%	\$63,926
Secretary I	\$39,086	37%	\$53,548
Temp. Engineering Intern	\$25,709	0%	\$25,709
Temp. Clerical	\$24,190	0%	\$24,190
Temp. Engineering Technician Co-op Intern	\$30,613	0%	\$30,613

Asphalt operating expenses are allocated using vehicle trips because needed repairs to the road network will be needed with additional trips.

Figure A-29: Public Works Asphalt

ASPHALT			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$413,658	SEE BELOW	\$0.00
Commodities	\$71,769	VEHICLE TRIPS	\$0.27
Contractual Services	\$52,738	VEHICLE TRIPS	\$0.20
TOTAL	\$538,165		

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Asphalt Supervisor	1.0	FIXED
Asphalt Maintenance Worker	5.0	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Asphalt Supervisor	\$66,686	37%
Asphalt Maintenance Worker	\$44,200	37%	\$60,554

The level of service for Forestry operating expenses is found using population and jobs.

Figure A-30: Public Works Forestry

FORESTRY			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$463,796	SEE BELOW	\$0.00
Commodities	\$54,756	POP AND JOBS	\$0.48
Contractual Services	\$9,488	POP AND JOBS	\$0.08
TOTAL	\$528,040		

Category	FY 2009	Project Using		
	FTE Positions	Which Demand Base?		
Forestry Supervisor	1.0	FIXED		
Arborist	5.0	POP AND JOBS		

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Forestry Supervisor	\$66,686	37%
Arborist	\$47,913	37%	\$65,641

Emergency Operations expenses will increase with an increase of lane miles because as new lane miles are added to the network, they will require snow removal. Personnel services within this function pay for the overtime for staff involved in snow removal.

Figure A-31: Public Works Emergency Operations

EMERGENCY OPERATIONS			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$85,637	LANE MILES	\$125.29
Commodities	\$200,554	LANE MILES	\$293.42
Contractual Services	\$31,534	LANE MILES	\$46.14
TOTAL	\$317,725		

Additionally, a custom entry has been made for Public Works maintenance workers. In the above sections, all maintenance works were held fixed because the need for additional Public Works maintenance works is driven by snow removal (except those in Traffic and Lighting, which do not participate in snow removal). In interviews with the Public Works Department, it

was estimated that one additional maintenance worker will be needed for every 21 additional lane miles added to the road network in the City. Thus, a custom direct entry line has been added to reflect the current 32 workers used for snow removal and the fact that each worker can remove snow from 21 lane miles. Thus, with the addition of 21 more lane miles to the network, the need for an additional maintenance worker will be triggered in the model. Note that this direct entry for maintenance works is for the department as a whole.

C. Police

Police Department operating expenditures include Administration, Investigations, Operations, Training, Records, Contingency Staffing, DUI Funds, Animal Control, and grant programs. The growth of many police operating expenditures are projected using a level of service determined by dividing FY2009 budget amounts by total calls; the total calls for service from 2008 of 63,066 is used for these calculations. For example, the FY2009 budget amount for Police Administration Commodities is \$44,483; the level of service is \$0.71 ($\$44,483 / 63,066 = \0.71). This number represents the amount that Police Administration Commodities will increase with each additional call for service. Each level of service number is used to determine the additional cost of providing that service to an additional housing unit or nonresidential development.

First, the total number of calls for service from 2008 must be broken down by residential and nonresidential calls for service as shown in Figure A-32 below. This breakdown is based on a sample of calls taken from September 1-8, 2008. This sample indicates that 69.2% of all calls for service originate at residential land uses while 30.8% originate at nonresidential land uses. Thus, 43,628 of the 2008 calls for service can be attributed to residential units ($63,066 \times 69.2\% = 43,628$). These residential calls are then divided by the total population of 75,254 to get a calls per person factor of 0.58.

This 0.58 calls per person will be used together with the levels of service to determine the cost of providing police services to each type of housing unit being considered in the fiscal study. For example, the \$0.71 level of service for Police Administration Commodities can be multiplied by the 0.58 calls per person and 1.78 persons per attached housing unit to determine that each additional attached housing unit developed in the City will result in an additional \$0.73 in Police Administration Commodities expenditures.

The same calculation is repeated for nonresidential calls using nonresidential vehicle trips to generate a calls per nonresidential trip factor of 0.07. This can be multiplied by the 18.35 trip generation rate and 50% trip adjustment factor for a thousand square feet of office space as well as the \$0.71 level of service for Police Administration Commodities to determine that one thousand additional square feet of office space will generate \$0.456. Thus, a 10,000 square foot office space will generate \$4.56 in Police Administration Commodities expenditures.

Figure A-32: Police Calls for Service

Police Calls for Service Data (1)		
Land Use	2008	Percent
Residential	43,628	69.2%
Nonresidential	19,438	30.8%
TOTAL CALLS FOR SERVICE	63,066	100.0%
Calls for Service Projection Factors		
Current Population		75,254
Current Nonresidential Vehicle Trips		268,693
Calls per Capita		0.58
Calls per Nonres. Trip		0.07

(1) Based on information provided by the Police Department. Includes only calls that can be classified by land use.

The table below shows that non-salary Police Administration expenditures are expected to increase with additional calls for service. For example, contractual service expenditures will increase by \$3.01 with each new call for service. Staffing other than the Chief and Deputy Chief is expected to increase when police officers are added to the force.

Figure A-33: Police Administration

ADMINISTRATION			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$982,050	SEE BELOW	\$0.00
Commodities	\$44,483	TOTAL POLICE CALLS	\$0.71
Contractual Services	\$189,823	TOTAL POLICE CALLS	\$3.01
Capital Outlays	\$400,022	TOTAL POLICE CALLS	\$6.34
TOTAL	\$1,616,378		

Category	FY 2009	Project Using
	FTE Positions	Which Demand Base?
Chief of Police	1.0	FIXED
Deputy Police Chief	3.0	FIXED
Police Account Clerk II	2.0	TOTAL POLICE OFFICERS
Assistant for Community Services	1.0	TOTAL POLICE OFFICERS
Secretary II	1.0	TOTAL POLICE OFFICERS
Police Investigations Sergeant	1.0	TOTAL POLICE OFFICERS
Office Worker II	1.0	TOTAL POLICE OFFICERS

Category	Avg Salary /	Benefits	LOS Std
	Staff Member	Multiplier	Total Cost
Chief of Police	\$120,158	70%	\$204,424
Deputy Police Chief	\$94,127	70%	\$160,138
Police Account Clerk II	\$40,258	70%	\$68,492
Assistant for Community Services	\$58,738	70%	\$99,931
Secretary II	\$43,115	70%	\$73,352
Police Investigations Sergeant	\$71,903	70%	\$122,329
Office Worker II	\$38,709	70%	\$65,855

Similar to Police Administration expenditure allocation, Investigations' commodities and contractual services expenditures are projected to increase with additional residential and nonresidential calls for service. Commodities expenditures will increase \$0.77 and contractual service \$0.39 with each additional call for service.

Within investigations, Lieutenant and Sergeant positions are expected to increase with additional police officers while the staffing positions are expected to increase marginally with additional calls for service.

Figure A-34: Police Investigations

INVESTIGATIONS			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$2,043,112	SEE BELOW	\$0.00
Commodities	\$48,775	TOTAL POLICE CALLS	\$0.77
Contractual Services	\$24,736	TOTAL POLICE CALLS	\$0.39
TOTAL	\$2,116,623		

Category	FY 2009	Project Using Which Demand Base?
	FTE Positions	
Police Lieutenant	1.0	TOTAL POLICE OFFICERS
Police Investigations Sergeant	2.0	TOTAL POLICE OFFICERS
Assigned Police Officer	17.0	CITYWIDE POLICE CALLS
Crime Analyst	1.0	CITYWIDE POLICE CALLS
Office Worker II	3.0	CITYWIDE POLICE CALLS

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Police Lieutenant	\$81,311	70%
Police Investigations Sergeant	\$76,042	70%	\$129,369
Assigned Police Officer	\$58,625	70%	\$99,739
Crime Analyst	\$52,379	70%	\$89,112
Office Worker II	\$38,709	70%	\$65,855

Commodities and Contractual Service expenditures within Police Operations are also projected to increase with additional residential and nonresidential police calls for service. Like the expected staffing increases within Investigations, additional staffing for the Lieutenant and Sergeant positions are expected to increase with additional police officers while Assigned Officer and K-9 Officer positions are tied to the increase in calls for service.

The need for new Officer positions are forecasted with a custom methodology. In interviews with the Police Department, it was evident that when development, particularly retail development, occurs in the southwestern part of the City (areas E: Southwest Champaign and F: Curtis Road Interchange), there will be an almost immediate need for a new police beat in this area. Thus, when the model considers the Southwest Champaign and Curtis Road Interchange areas, a new beat (6 new officers) is created when 25% of this area is developed. The added capacity of this new beat is taken into consideration when calculating the need for new Officers based on increased calls for service. Thus, these new Officers must reach capacity before any additional new officers are triggered by the model in this area. For all other

development areas (A: Olympian and Prospect, B: Olympian Extended, C: Bradley and Staley, D: Staley and Kirby, and G: Infill), new Officer positions are created when the areas generate enough new calls for service that the existing officers and the new beat officers in Southwest Champaign and Curtis Road Interchange areas are at capacity.

Figure A-35: Police Operations

OPERATIONS			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$7,790,415	SEE BELOW	\$0.00
Commodities	\$134,077	TOTAL POLICE CALLS	\$2.13
Contractual Services	\$107,883	TOTAL POLICE CALLS	\$1.71
TOTAL	\$8,032,375		

Category	FY 2009	Project Using
	FTE Positions	Which Demand Base?
Lieutenant	4.0	TOTAL POLICE OFFICERS
Sergeant	15.0	TOTAL POLICE OFFICERS
Officer/Assigned Officer	72.0	CITYWIDE POLICE CALLS
K-9 Officer	2.0	CITYWIDE POLICE CALLS
Area E/F Additional Officers	6.0	DIRECT ENTRY

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Lieutenant	\$81,311	70%
Sergeant	\$74,187	70%	\$126,214
Officer/Assigned Officer	\$54,713	70%	\$93,083
K-9 Officer	\$58,625	70%	\$99,739
Area E/F Additional Officers	\$54,713	70%	\$93,083

Police Training and Police Records expenditures are also forecast based on the increase in total police calls as shown in Figures A-36 and A-37 below. With each additional call for service, training expenditures will increase \$1.51 while non-staff records expenditures will increase \$0.38. Records staffing will also increase with additional calls for service while Training staffing will increase with the addition of police officers.

Figure A-36: Police Training

TRAINING			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$254,047	SEE BELOW	\$0.00
Commodities	\$24,700	TOTAL POLICE CALLS	\$0.39
Contractual Services	\$70,777	TOTAL POLICE CALLS	\$1.12
TOTAL	\$349,524		

Category	FY 2009 FTE Positions	Project Using Which Demand Base?
Sergeant	1.0	TOTAL POLICE OFFICERS
Network Administrator	1.0	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Sergeant	\$74,187	70%	\$126,214
Network Administrator	\$55,039	70%	\$93,637

Figure A-37: Police Records

RECORDS			LOS Std
Expenditure	FY 2009	Project Using	\$ per
Name	Budget Amount	Which Demand Base?	Demand Unit
Personnel Services	\$1,535,152	SEE BELOW	\$0.00
Commodities	\$13,442	TOTAL POLICE CALLS	\$0.21
Contractual Services	\$10,595	TOTAL POLICE CALLS	\$0.17
TOTAL	\$1,559,189		

	FY 2009	
Category	FTE Positions	Project Using Which Demand Base?
Records Manager	1.0	FIXED
Records Supervisor	2.0	CITYWIDE POLICE CALLS
Property Evidence Technician	1.5	CITYWIDE POLICE CALLS
Information Resource Specialists	7.0	CITYWIDE POLICE CALLS
Services Representatives	10.0	CITYWIDE POLICE CALLS
Traffic Services Officer	1.0	CITYWIDE POLICE CALLS
Temporary Crossing Guard	4.1	FIXED

	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Records Manager	\$55,039	70%	\$93,637
Records Supervisor	\$52,379	70%	\$89,051
Property Evidence Technician	\$43,115	70%	\$73,352
Information Resource Specialists	\$38,709	70%	\$65,855
Services Representatives	\$37,242	70%	\$63,360
Traffic Services Officer	\$35,838	70%	\$60,972
Temporary Crossing Guard	\$24,024	70%	\$40,872

Contingency staffing is also expected to increase with additional calls for service. DUI Funds expenditures are variable based on the increase in vehicle trips driven on the City's road network. Animal Control expenses are expected to increase with new residential development by \$2.11 per person. All expected grant funding (FEMA, IDOT, Byrne, etc.) is held fixed.

D. Fire

Fire Department operating expenditures include Administration, Building Safety, Training, Suppression, Prevention, Emergency Management, and the Safer Act Grant.

The levels of service for Fire Administration commodities, contractual services, and capital outlays are found by dividing the FY2009 budget amounts by Fire Chief's estimate of 7,000 calls for service annually. Staffing is held fixed. The total LOS for Fire Administration is \$40.20 per call as shown in Figure A-38 below.

Figure A-38: Fire Administration

ADMINISTRATION			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$272,625	FIXED	\$0.00
Commodities	\$12,920	TOTAL FIRE CALLS	\$1.85
Contractual Services	\$51,826	TOTAL FIRE CALLS	\$7.40
Capital Outlays	\$216,626	TOTAL FIRE CALLS	\$30.95
TOTAL	\$553,997		

ADMINISTRATION STAFFING INPUT

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Fire Chief	1.0	FIXED
Secretary	2.0	FIXED

Because a breakdown of residential versus nonresidential fire calls is not available, the calls are broken down using the proportionate share as shown in Figure A-39 below. The 0.08 calls per person are found by multiplying the 84.1% residential share by the 7,000 total calls and dividing by the population ($7,000 \times 84.1\% / 75,254 = 0.08$). The calculation is repeated using nonresidential vehicle trips for the nonresidential factor: $7,000 \text{ calls} \times 15.9\% / 140,612 \text{ trips} = 0.01$ calls per nonresidential trips.

Figure A-39: Fire Call Factors

Fire/Rescue Calls for Service Data (1)		
Land Use	FY2009	Percent
Residential Land Uses	5,886	84.1% ▲
Nonresidential Land Uses	1,114	15.9%
TOTAL CALLS FOR SERVICE	7,000	100.0%

Calls for Service Projection Factors		
Current Population		75,254
Current Nonresidential Vehicle Trips		140,612
Calls per Capita		0.08
Calls per Nonres. Trip		0.01

(1) Total calls from Fire Department. Allocated between Residential and Nonresidential using proportionate share.

Using the same methodology as police, these factors together with the levels of service are used to determine the Fire Administration expenses generated by housing unit and nonresidential developments. For example, an attached housing unit averages 1.78 persons per household in Champaign. Thus, one attached housing unit generates \$0.72 in additional Fire Administration operating expenditures (\$40.20 in expenditures per call x 0.08 calls per person x 1.78 persons per household = \$0.72). The same methodology is followed for nonresidential development. A 50,000 square foot office building generates \$184.42 in additional Fire Administration operating expenditures: \$40.20 in expenditures per call x 0.01 calls per nonresidential trip x 9.175 trips per thousand square feet of office space x 50 thousand square feet of office space = \$184.42.

The levels of service for Building Safety operating expenditures are found by dividing the FY2009 budget amounts by the population and jobs as shown in Figure A-40. Building safety operating expenses are one-time expenses that are incurred at the time of safety inspection; thus, the fiscal model treats them as one-time rather than cumulative. Building Safety staffing is likewise treated as a one-time expense rather than marginally adding new positions; using this methodology, the staff portion of the cost of providing building safety inspections is captured with the development of each new housing unit and nonresidential development.

Figure A-40: Building Safety

BUILDING SAFETY			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$1,051,932	POP AND JOBS	\$9.13
Commodities	\$13,442	POP AND JOBS	\$0.12
Contractual Services	\$13,321	POP AND JOBS	\$0.12
TOTAL	\$1,078,695		

BUILDING SAFETY STAFFING INPUT

Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Building Safety Supervisor	1.0	FIXED
Plan Reviewer	2.0	FIXED
Plumbing and Mechanical Systems Inspecto	3.0	FIXED
Electrical Inspector	1.0	FIXED
Building Safety Inspector	3.0	FIXED
Secretary I	1.0	FIXED
Clerk Typist	1.0	FIXED

Fire Training operating expenses are expected to increase with fire calls for service. Thus, the level of service is found using this factor. Staffing is held constant.

Figure A-41: Fire Training

TRAINING	Expenditure	FY 2009	Project Using	LOS Std
Name	Budget Amount	Which Demand Base?	Demand Unit	\$ per
Personnel Services	\$108,460	SEE BELOW		\$0.00
Commodities	\$3,400	TOTAL FIRE CALLS		\$0.49
Contractual Services	\$24,072	TOTAL FIRE CALLS		\$3.44
TOTAL	\$135,932			

TRAINING STAFFING INPUT

Category	FY 2009 FTE Positions	Project Using Which Demand Base?
Deputy Fire Chief	1.0	FIXED

Fire Suppression commodities and contractual services' LOS are found by dividing the FY2009 budgeted amounts by total fire calls. There are also several direct entry line items for Fire Suppression as well.

A new fire company is needed when the new fire station in the northwest area of the City is triggered by new development in Scenario Two (Growth **Beyond** the Service Area). This occurs when 30% of new development within the two areas serviced by the new station (areas B: Olympian Extended and C: Bradley and Staley) is reached in FY2017. The costs are split between the Olympian and Prospect (B) and Bradley and Staley (C) areas with 57% of the costs allocated to Olympian and Prospect (B) and 43% to Bradley and Staley (C) based on the amount of development expected in each area.

With development in Areas E: Southwest Champaign and F: Curtis Road Interchange, the Chief anticipates the need for one additional fire fighter per shift. This additional staffing is triggered when 30% of the expected development in these areas occurs in FY2015 in Scenario One (Growth **Within** the Service Area) and in FY2017 Scenario Two (Growth **Beyond** the Service Area). The costs are split in Scenario One with 85% allocated to Southwest Champaign (E) and 67% to Southwest Champaign (E) in Scenario Two based on the amount of development expected in each area.

Figure A-42: Fire Suppression

SUPPRESSION		FY 2009	Project Using	LOS Std
Expenditure		Budget Amount	Which Demand Base?	\$ per
Name				Demand Unit
Personnel Services		\$8,428,332	SEE BELOW	\$0.00
Commodities		\$171,971	TOTAL FIRE CALLS	\$24.57
Contractual Services		\$72,257	TOTAL FIRE CALLS	\$10.32
New Company Sc 2, New Station--One Time		\$0	DIRECT ENTRY	\$1,800,000
New Company Sc 2, New Station--Recurring		\$0	DIRECT ENTRY	\$1,200,000
TOTAL		\$8,672,560		

Category	FY 2009	Project Using
	FTE Positions	Which Demand Base?
Deputy Fire Chief	1.0	FIXED
Captain	6.0	FIXED
Lieutenant	24.0	FIXED
Engineer	27.0	FIXED
Fighter	45.0	FIXED
New Fighter per shift in E/F	3.0	DIRECT ENTRY

	Avg Salary /	Benefits	LOS Std
	Staff Member	Multiplier	Total Cost
Deputy Fire Chief	\$94,127	78%	\$167,301
Captain	\$72,746	78%	\$129,299
Lieutenant	\$61,677	78%	\$109,625
Engineer	\$54,828	78%	\$97,451
Fighter	\$51,590	78%	\$91,696
New Fighter per shift in E/F	\$51,590	78%	\$91,696

Fire prevention operating expenses are expected to increase with an increase in population.

Figure A-43: Fire Prevention

PREVENTION			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$413,206	SEE BELOW	\$0.00
Commodities	\$72,677	POPULATION	\$0.97
Contractual Services	\$4,921	POPULATION	\$0.07
TOTAL	\$490,804		

Category	FY 2009 FTE Positions	Project Using Which Demand Base?
Deputy Fire Chief	1.0	FIXED
Deputy Fire Marshall	2.0	FIXED
Education/Information Specialist	1.0	POPULATION

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
Deputy Fire Chief	\$94,127	78%	\$167,546
Deputy Fire Marshall	\$56,309	78%	\$100,230
Education/Information Specialist	\$57,759	78%	\$102,810

Emergency Management operating expenditures are expected to increase with an increase in population and jobs; staffing is held constant.

Figure A-44: Emergency Management

EMERGENCY MANAGEMENT			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$2,689	SEE BELOW	\$0.00
Commodities	\$13,717	POP AND JOBS	\$0.12
Contractual Services	\$23,909	POP AND JOBS	\$0.21
TOTAL	\$40,315		

EMERGENCY MANAGEMENT STAFFING INPUT

Category	FY 2009	Project Using Which Demand Base?
	FTE Positions	
Research Intern	0.1	FIXED

The Safer Act grant operating expenses are held constant.

E. Neighborhood Services

Variable costs within Neighborhood Services are allocated by population, as all of this department's programs work with the residential community. The levels of service can be seen in Figure A-45 below.

Figure A-45: Neighborhood Services

NEIGHBORHOOD SERVICES: ADMINISTRATION			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$339,250	SEE BELOW	\$0.00
Commodities	\$6,622	POPULATION	\$0.09
Contractual Services	\$21,025	POPULATION	\$0.28
TOTAL	\$366,897		

Category	FY 2009	Project Using Which Demand Base?
	FTE Positions	
Neighborhood Services Director	1.0	FIXED
Neighborhood Services Coordinator	1.0	POPULATION
Clerk Typist II/Secretary I	2.0	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Neighborhood Services Director	\$107,727	37%
Neighborhood Services Coordinator	\$70,220	37%	\$96,201
Clerk Typist II/Secretary I	\$38,169	37%	\$52,291

NEIGHBORHOOD SERVICES: PROPERTY MAINTENANCE

Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$541,908	SEE BELOW	\$0.00
Commodities	\$3,272	POPULATION	\$0.04
Contractual Services	\$8,413	POPULATION	\$0.11
TOTAL	\$553,593		

Category	FY 2009	Project Using Which Demand Base?
	FTE Positions	
Supervisor	1.0	FIXED
Inspector	4.0	POPULATION
Temporary Research Intern	1.0	FIXED

Category	Avg Salary / Staff Member	Benefits Multiplier	LOS Std Total Cost
	Supervisor	\$70,220	37%
Inspector	\$59,738	37%	\$81,840
Temporary Research Intern	\$25,709	37%	\$35,221

VI. SPECIAL FUNDS EXPENDITURES

Special Funds that have operating expenditures include the Urban Renewal Fund and Library Funds. Note that expenses within the Motor Fuel Tax Fund are all capital expenditures.

A. Urban Renewal Fund Operating Expenditures

Because the Urban Renewal Fund's operating expenses fund neighborhood programs, these expenses are expected to grow with an increase in population.

Figure A-46: Urban Renewal Fund Operating Expenses

URBAN RENEWAL FUND			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Operating Budget	\$651,648	POPULATION	\$8.66

B. Library Operating Expenditures

Both the Library Operating Fund and Other Library Funds contain operating expenditures. The levels of service for library operating expenditures are based on population. The Library Improvements Fund has no operating expenditures while the Library Tax Account has only the transfer of property tax revenues from this account to the operating fund; this transfer is held constant, as the revenue level of service has already been calculated in the revenue section and expenditure levels of service are calculated within the Library Operating Fund.

Note that staffing expenses for the Librarians, Library Associates, Library Assistants, Technical Assistants, and Library Pages are considered variable because it is estimated that these positions are nearing capacity and more will be required as the City grows.

Figure A-47: Library Operations

LIBRARY OPERATIONS			LOS Std
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	\$ per Demand Unit
Personnel Services	\$4,710,607	SEE BELOW	\$0.00
Commodities	\$908,512	POPULATION	\$12.07
Contractual Services	\$693,447	POPULATION	\$9.21
Debt Service	\$278,615	POPULATION	\$3.70
Interfund Transfers (to Other Funds)	\$233,174	FIXED	\$0.00
TOTAL	\$6,824,355		

*Appendices to the
Fiscal Impact Analysis of Development Scenarios
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Category	FY 2009	
	FTE Positions	Project Using Which Demand Base?
Service Manager	1.9	FIXED
Librarian	15.4	POPULATION
Library Assistant	19.4	POPULATION
Library Director	1.0	FIXED
Assistant Library Director	1.0	FIXED
Accounting Manager	0.8	FIXED
Automation Manager	1.0	FIXED
Promotional Services Coordinator	1.0	FIXED
Page Supervisor	1.0	FIXED
Administrative Secretary	1.9	FIXED
Library Associate	9.9	POPULATION
Maintenance Supervisor	1.0	FIXED
Security Supervisor	1.0	FIXED
Technical Assistant	5.4	POPULATION
Bookmobile Driver/Clerk	2.0	FIXED
Maintenance Worker	1.0	FIXED
Library Pages	9.6	POPULATION
Janitor	6.3	FIXED
Security Officer	2.5	FIXED

Category	Avg Salary /	Benefits	LOS Std
	Staff Member	Multiplier	Total Cost
Service Manager	\$60,489	37%	\$82,870
Librarian	\$52,287	37%	\$71,633
Library Assistant	\$32,069	37%	\$43,935
Library Director	\$114,150	37%	\$156,386
Assistant Library Director	\$81,107	37%	\$111,117
Accounting Manager	\$54,871	37%	\$75,173
Automation Manager	\$0	37%	\$0
Promotional Services Coordinator	\$52,287	37%	\$71,633
Page Supervisor	\$47,387	37%	\$64,920
Administrative Secretary	\$45,128	37%	\$61,825
Library Associate	\$42,843	37%	\$58,695
Maintenance Supervisor	\$42,843	37%	\$58,695
Security Supervisor	\$42,843	37%	\$58,695
Technical Assistant	\$40,960	37%	\$56,115
Bookmobile Driver/Clerk	\$40,960	37%	\$56,115
Maintenance Worker	\$35,389	37%	\$48,483
Library Pages	\$18,335	37%	\$25,119
Janitor	\$30,572	37%	\$41,884
Security Officer	\$30,572	37%	\$41,884

Operating expenses within other Library Funds are also expected to increase with an increase in population.

Figure A-48: Library Other Funds

LIBRARY OTHER FUNDS			
Expenditure Name	FY 2009 Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
Personnel Services	\$8,620	FIXED	\$0.00
Commodities	\$150,127	POPULATION	\$1.99
Contractual Services	\$103,917	POPULATION	\$1.38
Capital Outlays	\$222,575	POPULATION	\$2.96
TOTAL	\$485,239		

VII. CAPITAL EXPENDITURES

This section discusses growth-related capital facility needs by governmental function. Growth-related facilities are those projects that are necessitated purely by new development occurring within the City. This analysis does not include replacement facilities, renovation projects, or projects that will be constructed regardless of whether the City experiences an increase in residential and nonresidential development.

A. General Government

At the time of this analysis, there are no definitive plans for additional General Government facilities. However, unless additional facility space is provided over the twenty-year analysis period, the level of service will decrease. Therefore, TischlerBise has calculated the additional square footage that would be required to maintain the current level of service.

The City of Champaign’s General Government offices are located in the City Building’s 52,815 square feet of space. Because General Government functions benefit both residential and nonresidential development, the level of service for general government facilities is found by dividing this total square footage by the total population and jobs of 115,160; thus, the current level of service is 0.46 square feet per person/job in the City. As shown in Figure A-49, to maintain this level of service, the City would need to add 13,076 square feet of space under the conditions of Scenario One (Growth **Within** the Service Area) over the twenty-year timeframe and 13,917 square feet of space under the conditions of Scenario Two (Growth **Beyond** the Service Area).

Figure A-49: General Government Facility Space Needs

Fiscal Area Zone	Scenarios	
	Scenario One: Development <u>Within</u> Service Area	Scenario Two: Development <u>Beyond</u> Service Area
	Square feet needed	
Area A: Olympian Drive & Prospect	4,310	2,886
Area B: Olympian Drive Ext.	540	2,552
Area C: Bradley Ave. & Staley Rd.	1,277	1,619
Area D: Staley Rd. & Kirby Ave.	2,796	2,731
Area E: Southwest Champaign	3,165	2,442
Area F: Curtis Rd. Interchange	498	1,197
Area G: Infill development	490	490
TOTAL SQUARE FEET	13,076	13,917

The construction cost per square foot is assumed to be the same as the planned new Public Works building at \$292 per square foot. For the Growth **Within** the Service Area scenario, the total cost of needed space is \$3.8 million while it is \$4.1 million for the Growth **Beyond** the Service Area Scenario.

B. Public Works

The Public Works department is planning a new facility although it is not yet funded in the City's Capital Improvement Plan. The planned building will have 57,500 square feet and will cost \$292 per square foot. The department estimates that 30% of this space is needed to serve existing development while 70% will meet the demands of future development. Thus, only 70% of the space, or 40,250 square feet, is used in the fiscal study. Because there is a need for the space now, the timing of building is estimated to be FY2011-FY2012; it is assumed that this capital project will be bond-financed.

The Public Works department currently occupies the space in the Parking Building. At the time of this analysis, there are no definitive plans for adding space to this facility. However, unless additional facility space is provided over the twenty-year analysis period, the level of service will decrease. Therefore, TischlerBise has calculated the additional square footage that would be required to maintain the current level of service. Because Public Works functions benefit both residential and nonresidential development, the level of service for general government facilities is found by dividing the 8,550 total square footage by the total population and jobs of 115,160; thus, the current level of service is 0.07 square feet per person/job in the City. The City would need to add 2,117 square feet of space under the conditions of Scenario One (Growth **Within** the Service Area) over the twenty-year timeframe and 2,209 square feet of space under the conditions of Scenario Two (Growth **Beyond** the Service Area).

The need for new snow removal vehicles is based on the addition of lane miles to the City's road network. Like the demand for additional maintenance workers, one additional snow removal truck is triggered each time 21 new lane miles are added to the City's road network. Based on this level of service, 3 snow removal trucks are added to the inventory under each scenario; each has a replication cost of \$137,500.

The need for other additional Public Works vehicles is calculated by assuming that the department will maintain the current level of service; thus, as there is an increase in residential and nonresidential development, additional vehicles will be added. The current levels of service for Public Works Vehicles are shown below in Figure A-50. Note that the need for additional Concrete vehicles is expected to occur when lane miles are added to the City's transportation network while Asphalt, Streets, Traffic and Lighting vehicles will increase with vehicle trips and all other Public Works vehicles will increase with additional population and jobs. The average replication cost per vehicle is also shown in Figure A-50.

Figure A-50: Public Works Vehicles Level of Service

Divisions	Current Vehicles	LOS Factors	LOS	Replication cost per unit
Concrete	12	684 lane miles	0.0176	\$55,393
Asphalt, Streets, Traffic & Lighting	41	268,693 vehicle trips	0.0002	\$75,356
Administration, Building Services, Engineering Services, Fleet Services, Forestry, Operations	36	115,160 population and jobs	0.0003	\$31,605

Twenty-one additional vehicles are generated with these levels of service in Scenario One (Growth **Within** the Service Area) and twenty-two in Scenario Two (Growth **Beyond** the Service Area). Note that one new vehicle is generated by the Concrete division. In Scenario One (Growth **Within** the Service Area), twelve new vehicles are for Asphalts, Streets, and Traffic and Lighting while the remaining 8 are for Administration, Building Services, Engineering Services, Fleet Services, Forestry, and Operations. In Scenario Two (Growth **Beyond** the Service Area), there are 12 additional vehicles for Asphalts, Streets, and Traffic and Lighting while the remaining 9 are for Administration, Building Services, Engineering Services, Fleet Services, Forestry, and Operations.

The cost of capital road improvements and new road construction within each fiscal analysis zone and scenario is captured in the model. The road projects that are necessary to serve new development in each area under the conditions of Scenario One (Growth **Within** the Service Area), development within the existing service network, are shown in Figure A-51. Note that there are no projects for the Bradley and Staley, Curtis Road Interchange, and Infill areas in Scenario One.

Figure A-51: Capital Road Improvements and New Road Construction for Scenario One

Street to be Improved	From	To	Lane Miles	Estimated Construction Cost for City of Champaign
Area A: Olympian Drive & Prospect Avenue				
Prospect Ave.	Interstate Dr.	Olympian Dr.	0.91	\$2,600,000
Neil St.	Interstate Dr.	Olympian Dr.	1.00	\$135,000
Olympian Dr.	Apollo Dr.	Lincoln Ave. (Urbana)	2.31	\$375,000
Interstate Dr.	Current Terminus	Market St.	0.75	\$2,000,000
Market St.	Marketview	Olympian Dr.	2.50	\$7,200,000
TOTAL FOR AREA A			7.47	\$12,310,000
Area B: Olympian Drive Extended/Clearview				
Mattis Ave.	Anthony Dr.	Olympian Dr.	2.00	\$5,700,000
Cardinal Rd	Route 150	Staley Rd.	0.48	\$1,000,000
Olympian Dr.	Western Terminus	Route 150	1.43	\$1,400,000
TOTAL FOR AREA B			3.91	\$8,100,000
Area D: Staley Rd. & Kirby Ave.				
Duncan Rd.	Springfield Ave.	Kirby Ave.	3.00	\$4,400,000
Kirby Ave.	Duncan Rd.	Staley Rd.	2.00	\$4,000,000
Kirby Ave.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Windsor Rd.	I-57	Staley Rd.	1.00	\$2,000,000
Windsor Rd.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Rising Rd.	Windsor Rd.	Kirby Ave.	2.00	\$4,000,000
TOTAL FOR AREA D			12.00	\$22,400,000
Area E: Southwest Champaign				
Windsor Rd.	Duncan Rd.	Mattis Ave.	2.00	\$5,700,000
Mattis Ave.	Windsor Rd.	Curtis Rd.	2.00	\$4,000,000
Duncan Rd.	Curtis Rd.	Meadows West	0.97	\$2,000,000
Duncan Rd.	Curtis Rd.	Savoy Limit	1.00	\$2,000,000
Rising Rd.	Windsor Rd.	Curtis Rd.	2.00	\$4,000,000
TOTAL FOR AREA E			7.97	\$17,700,000

Because development occurs over a larger land area in Scenario Two (Growth **Beyond** the Service Area), there are additional roads projects that are undertaken within each area. The road projects that are necessary to serve new development in each area under the conditions of Scenario Two, development within and beyond the existing service network, are shown in Figure A-52. The projects unique to this scenario are highlighted.

Figure A-52: Capital Road Improvements and New Road Construction for Scenario Two

Street to be Improved	From	To	Lane Miles	Estimated Construction Cost for City of Champaign
Area A: Olympian Drive & Prospect Avenue				
Prospect Ave.	Interstate Dr.	Olympian Dr.	0.91	\$2,600,000
Neil St.	Interstate Dr.	Olympian Dr.	1.00	\$135,000
Olympian Dr.	Apollo Dr.	Lincoln Ave. (Urbana)	2.31	\$375,000
Interstate Dr.	Current Terminus	Market St.	0.75	\$2,000,000
Market St.	Marketview	Olympian Dr.	2.50	\$7,200,000
Prospect Ave.	Olympian Dr.	Waxwing Rd	1.21	\$2,400,000
Neil St.	Olympian Dr.	Ford Harris Rd.	2.00	\$4,100,000
Market St.	Olympian Dr.	Ford Harris Rd.	2.00	\$4,000,000
TOTAL FOR AREA A			12.68	\$22,810,000
Area B: Olympian Drive Extended/Clearview				
Mattis Ave.	Anthony Dr.	Olympian Dr.	2.00	\$5,700,000
Cardinal Rd	Route 150	Staley Rd.	0.48	\$1,000,000
Olympian Dr.	Western Terminus	Route 150	1.43	\$1,400,000
Mattis Ave.	Olympian Dr.	Ford Harris Rd.	2.00	\$4,200,000
Cardinal Rd	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Duncan Rd.	I-57	Route 150	1.78	\$3,500,000
TOTAL FOR AREA B			9.70	\$19,800,000
Area C: Bradley Ave. & Staley Rd.				
Bradley Ave.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Rising Rd.	Springfield Ave.	Cardinal Rd.	4.00	\$8,000,000
Staley Rd.	Springfield Ave.	US Route 150	Improvements	\$3,000,000
TOTAL FOR AREA C			6.00	\$15,000,000
Area D: Staley Rd. & Kirby Ave.				
Duncan Rd.	Springfield Ave.	Kirby Ave.	3.00	\$4,400,000
Kirby Ave.	Duncan Rd.	Staley Rd.	2.00	\$4,000,000
Kirby Ave.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Windsor Rd.	I-57	Staley Rd.	1.00	\$2,000,000
Windsor Rd.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Rising Rd.	Windsor Rd.	Kirby Ave.	2.00	\$4,000,000
Rising Rd.	Kirby Ave.	Springfield Ave.	2.00	\$4,000,000
TOTAL FOR AREA D			12.00	\$22,400,000
Area E: Southwest Champaign				
Windsor Rd.	Duncan Rd.	Mattis Ave.	2.00	\$5,700,000
Mattis Ave.	Windsor Rd.	Curtis Rd.	2.00	\$4,000,000
Duncan Rd.	Curtis Rd.	Meadows West	0.97	\$2,000,000
Duncan Rd.	Curtis Rd.	Savoy Limit	1.00	\$2,000,000
Rising Rd.	Windsor Rd.	Curtis Rd.	2.00	\$4,000,000
Rising Rd.	Curtis Rd.	Old Church Rd.	2.00	\$4,000,000
Curtis Rd.	Staley Rd.	Rising Rd.	2.00	\$4,000,000
Old Church Rd	I-57	Rising Rd.	2.79	\$5,500,000
Staley Rd.	Curtis Rd.	Old Church Rd.	2.02	\$2,520,000
TOTAL FOR AREA E			16.77	\$33,720,000

Within the fiscal model, the timing of these projects is dependent on the completion of development within each area for both Scenarios One and Two. When development within each area reaches 25%, it is assumed that half of the roads projects are begun. When development within each area reaches 70%, it is assumed that the rest of the projects are undertaken. For each of these periods when the projects are initiated, the completion of the projects is spread over three years.

While the City could use a number of different options to finance roads including an increase in the motor fuel tax or another fee or tax, for the purposes of this study, it is assumed that all road projects will be financed with bonds.

C. Police

The City's Police operate out of a central police station with small police substations located within fire departments, which are used for police report writing when needed. Thus, Police facility space will increase with the addition of a new fire station under Scenario Two (Growth **Beyond** the Service Area). No other Police facility space expansion is anticipated at this time.

An increase in the number of patrol vehicles is anticipated with the increase in police patrol officers as described in the operating expenses section. The current level of service of two patrol vehicles to every one patrol officer is maintained by linking the Police capital portion of the fiscal model to the hiring. Thus, for every two new patrol officers, the need for one additional patrol vehicle is triggered in the model. The estimated cost of a patrol vehicle is \$23,820 based on the City's inventory of current vehicles.

D. Fire

The Fire Department anticipates moving two of its current stations. Station #3 will be moved northeast near the intersection of Market Street and Interstate Road to serve development in this area; because this move is needed now, it is considered a move that is attributable to the needs of existing development. Thus, the cost of moving this station is not included in the fiscal analysis.

Station #4 will need to be moved west towards I-57 when the City annexes additional land in this area. Because moving this station is based on the needs of future development, the \$3.6 million new station is included in the fiscal study in Scenario Two (Growth **Beyond** the Service Area). The timing of this move is estimated to be by FY2017, as this is when 33% of the anticipated development in fiscal zones C: Bradley and Staley and D: Staley and Kirby will be achieved. The cost of moving this station is allocated between the two areas with 37% of the costs allocated to the Bradley and Staley area and 63% to the Staley and Kirby area based on the amount of development in these areas.

In addition to moving these two stations, the Fire Chief anticipates the need for an additional fire station when development occurs in areas B: Olympian Extended and C: Bradley and Staley under Scenario Two (Growth **Beyond** the Service Area). This new station would serve the northern part of the Bradley and Staley area not covered by stations #4 in its new location or

#5; it would also serve most of the Olympian Extended area. The cost of a new fire station is estimated to be \$3.6 million plus the cost of a new engine for this station of \$460,000. This new fire station would also need an engine; the cost is estimated to be \$460,000. These costs are allocated 57% to Olympian Extended and 43% to Bradley and Staley based on the expected development in these areas. The timing of this new station and engine is estimated to be FY2018, as this is when 33% of the anticipated development in these fiscal zones will be achieved.

E. Library

The new main library has 122,600 square feet of space currently being utilized while the Douglas Branch Library has 6,000 square feet. Thus, the current level of service for library facilities is 1.71 square feet per person (128,600 square feet / 75,254 persons = 1.71 square feet per person). The main library currently has 40,000 square feet of space in the basement that is not being used; this facility space is enough to serve an additional 23,400 people based on the current level of service. Because neither scenario being considered in the fiscal study has population growth this large, it is not necessary to include a library facility capital expansion in the study.

The library system’s current collection has 362,642 items with a total replication value of \$7.9 million. This is a level of service of 4.82 units per person with a replication cost of \$21.89 per item. The fiscal study maintains this level of service by increasing the number of items in the library collection with the increasing population. Figure A-53 below shows the increase in the number of units in the collection by fiscal analysis zone and scenario.

Figure A-53: Library Collections

Fiscal Area Zone	Scenarios			
	Scenario One: Development Within the Service Area		Scenario Two: Development Beyond the Service Area	
	Library Collection & Cost			
Area A: Olympian Drive & Prospect Avenue	29,591	\$647,747	19,818	\$433,816
Area B: Olympian Extended/Clearview	3,704	\$81,081	16,658	\$364,644
Area C: Bradley Ave. & Staley Rd.	8,770	\$191,975	11,358	\$248,627
Area D: Staley Rd. & Kirby Ave.	19,197	\$420,222	19,159	\$419,391
Area E: Southwest Champaign	21,730	\$475,670	15,096	\$330,451
Area F: Curtis Rd. Interchange	3,748	\$82,044	8,220	\$179,936
Area G: Infill development	3,367	\$73,704	3,367	\$73,704
TOTAL VEHICLES	90,107	\$1,972,442	93,676	\$2,050,568

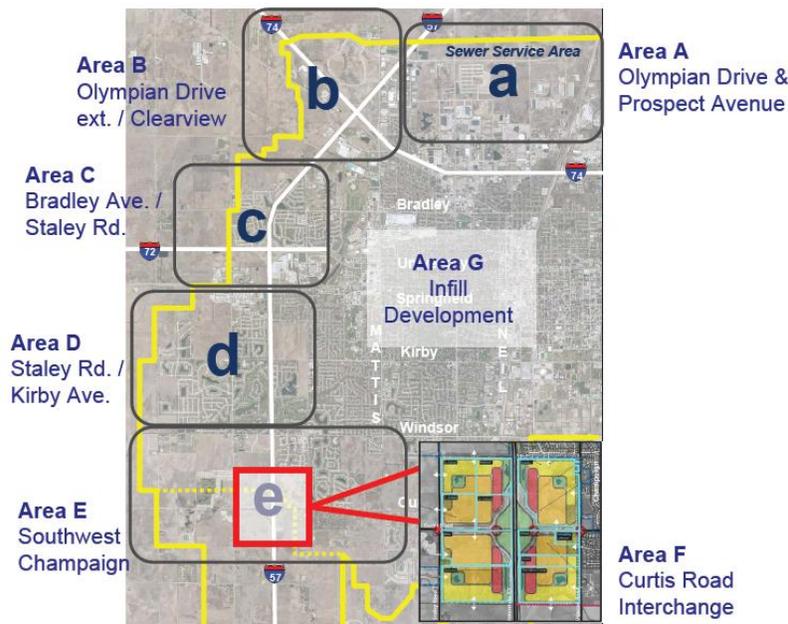
APPENDIX B: DEMOGRAPHIC FORECASTS AND SCENARIOS

I. DEMOGRAPHIC FORECASTS AND SCENARIOS

The fiscal impact analysis study for the City of Champaign, Illinois, examines the fiscal impact of two growth alternatives in seven areas of the City. The fiscal impact analysis study will compare the net fiscal impact in seven areas of the City with two growth alternative scenarios. Revenues, operating costs, and capital costs associated with each growth area and scenario are captured and summed to determine the fiscal impact of growth on the City. In the study, Scenario One assumes growth **within** existing service areas while Scenario Two assumes growth **beyond** the existing service areas.

The seven areas of the City examined in the study are defined by central transportation nodes:

- Area A: Olympian Drive at Prospect Avenue;
- Area B: Olympian Drive Extended (future interchange with I-74);
- Area C: Bradley Avenue at Staley Road;
- Area D: Staley Road at Kirby Avenue;
- Area E: Southwest Champaign (area surrounding the I-57 and Curtis Road interchange);
- Area F: Curtis Road Interchange with I-57; and
- Area G: Infill development in the Campustown area.



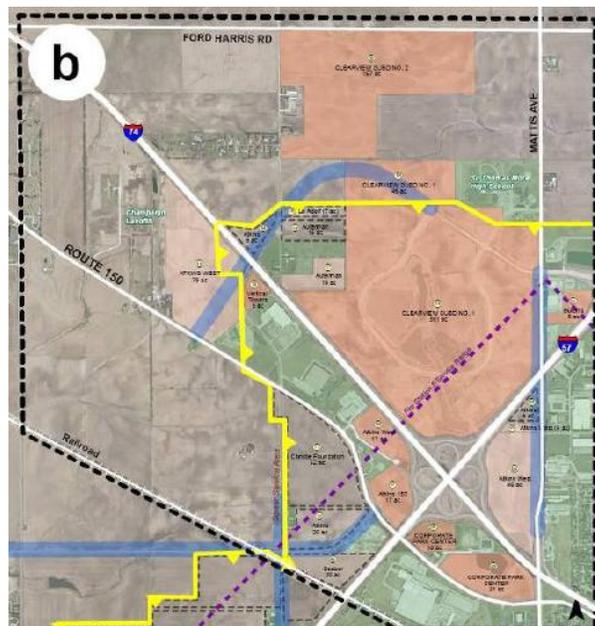
Area A: Olympian and Prospect Avenue

A detailed map of Area A is shown in below. In Area A, the land to the south of the yellow line (the direction the arrows are pointing) is within the existing sanitary sewer service area (Scenario One). The black dotted line marks the border of Area A.



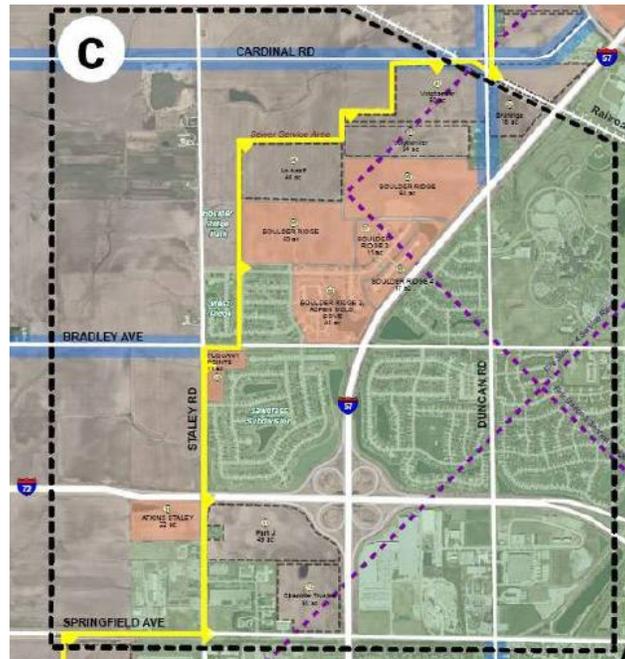
Area B: Olympian Drive Extended

A detailed map of Area B is shown below. In Area B, the land to the south of the yellow line is within the existing sanitary sewer service area. The border of Area B extends west of the black dotted line.



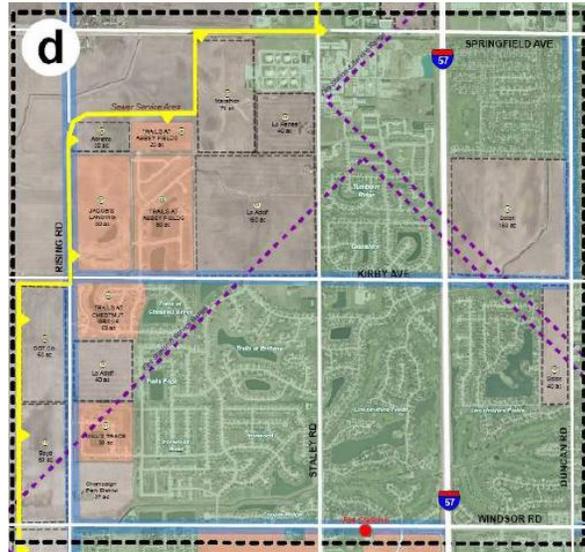
Area C: Bradley Avenue and Staley Road

A detailed map of Area C is shown below. In Area C, the land to the east of the yellow line is within the existing sanitary sewer service area. The border of Area C is shown by the black dotted line.



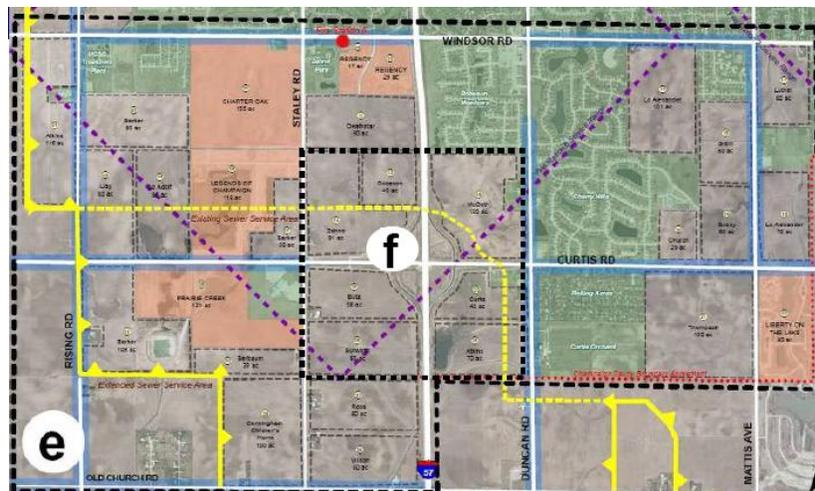
Area D: Staley Road and Kirby Avenue

A detailed map of Area D is shown below. In Area D, the land to the south of the yellow line is within the existing sanitary sewer service area. The border of Area D extends to the west and northwest of the black dotted line incorporating approximately one thousand acres that are not shown on the map below.



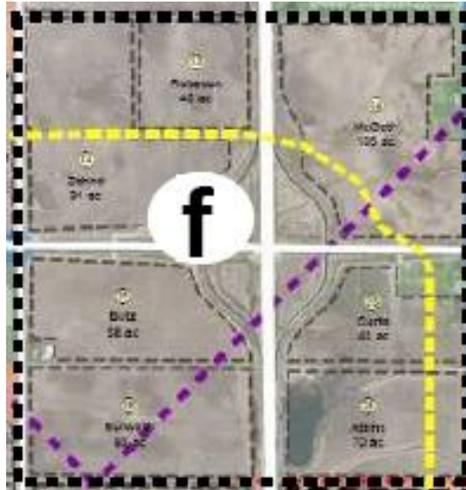
Area E: Southwest Champaign

A detailed map of Area E is shown below. Note that Area F is located within Area E as marked. In Area E, the land to the north of the yellow dotted line is within the existing sanitary sewer service area. The black dotted lines mark the borders of Area E and Area F.



Area F: Curtis Road Interchange

A more detailed map of Area F is shown below. In Area F, the land to the north and east of the dotted yellow line is within the existing sanitary sewer service area. The border of Area F is shown with the black dotted line.



Area G: Infill Development

Area G consists of approximately seven mixed use infill development projects with neighborhood retail and rental apartments. It is expected that these developments will be similar to and located near other mixed use buildings in the Campus Town area.

II. CAPACITY OF FISCAL ANALYSIS ZONES

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of the FAZs within the existing sanitary sewer service area (Scenario One) and the build-out potential of the FAZs within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in the figure below. Build-out potential is defined as having 100% of all approved developments built and 70% of uncommitted land developed. Uncommitted land includes all parcels upon which there has been no building to date.

The build-out figures shown include all the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty-year period being considered in the fiscal study. In fact, given the level of growth seen in the past several years in Champaign, the residential build-out of Scenario One (Growth **Within** the Service Area) will likely take more than twenty-five years while Scenario Two (Growth **Beyond** the Service Area) will take fifty years or more. Nonresidential build-out will take significantly more time.

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop. /Jobs	Percent	Acres	Units/SF	Percent	Pop. /Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	322	506	5%	1,433	7%	1,203	1,849	7%	5,233	9%
Single Family Detached Medium Price Point	1,108	2,258	23%	7,563	35%	3,051	7,038	28%	23,577	40%
Single Family Detached Low Price Point	333	1,377	14%	3,099	14%	1,214	4,902	19%	11,029	19%
Attached Housing	312	1,300	13%	2,317	11%	805	4,208	17%	7,502	13%
Multi-family Units	414	4,264	44%	7,113	33%	722	7,240	29%	12,076	20%
TOTAL	2,489	9,705	100%	21,525	100%	6,994	25,237	100%	59,417	100%
NONRESIDENTIAL										
Industrial	562	4,895,027	35%	6,241	15%	635	5,246,033	27%	6,689	11%
Office	565	6,147,509	44%	25,464	63%	749	8,152,871	42%	33,771	57%
Neighborhood Commercial	219	2,413,263	17%	6,895	17%	446	4,879,456	25%	13,941	24%
Big Box Commercial	34	441,189	3%	1,961	5%	78	1,021,384	5%	4,539	8%
TOTAL	1,379	13,896,986	100%	40,562	100%	1,907	19,299,744	100%	58,941	100%

III. SCENARIO ONE: DEVELOPMENT WITHIN THE EXISTING SERVICE AREA

In Scenario One, all growth occurs within the boundary of the current sanitary sewer service area. Because the pace of total growth in Scenarios One and Two is the same, development in Scenario One is denser than in Scenario Two (Growth **Beyond** the Service Area).

The growth rate assumed in this study reflects the recent trends in building permits issued for residential units in the City. The average number of building permits over the past ten years is 543 although permits in 2008 and to date in 2009 have been lower than that. It is expected that the total building permits issued in 2009 will be approximately 160; thus, growth projections for this study begin at that level with an increasing number of permits each year after that.

Over the twenty-year projection period, there are a total of 8,453 new housing units. Growth averages 423 new housing units per year beginning with a slower growth rate of 162 new units in FY2010. The growth rate increases each year to a high of 531 new units in FY2029. In keeping with the housing unit growth, population growth intensifies over time. Total population growth in Scenario One is 18,700 new residents by the end of FY2029.

Growth occurs in each Fiscal Analysis Zone based on the amount of land the zone has available for development. The only exceptions to this are that infill development (Area G) is expected to build-out and that growth is expected to be more intense at the Curtis Road Interchange (Area F). Population growth is actually lowest in these two zones though due to their smaller land area.

Population and Economy. Population growth is greatest in Areas A and E with 6,141 new residents in Area A and 4,509 new residents in Area E. Area D also has significant growth with 3,984 additional persons. Growth is slower in Area B (769) and Area C (1,820). As mentioned previously, Areas F and G also see less population growth with only 778 and 699 new persons.

*Appendices to the
Fiscal Impact Analysis of Development Scenarios
City of Champaign, Illinois*

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext./ Clearview	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Population	6,141	769	1,820	3,984	4,509	778	699	18,700
<i>Housing Units</i>								
Single Family Detached High PP	41	25	26	174	170	0	0	435
Single Family Detached Medium PP	356	116	210	646	565	55	0	1,948
Single Family Detached Low PP	329	66	68	269	452	0	0	1,183
Attached Housing	86	51	272	243	352	130	0	1,134
Multi-family Units	2,361	43	244	174	294	217	419	3,752
Total Housing Units	3,173	300	819	1,506	1,833	402	419	8,453
Nonresidential Building Area	1,476,958	109,855	605,853	970,993	722,696	94,770	129,718	4,110,843
<i>Employment</i>								
Industrial	1,138	14	652	690	0	0	0	2,494
Office	1,438	357	137	624	1,048	122	0	3,725
Neighborhood Retail	680	37	176	799	1,343	187	371	3,593
Big Box Commercial	0	0	0	0	0	0	0	0
Total Employment	3,256	408	965	2,113	2,391	309	371	9,812

The employment projection assumes that the current population to jobs ratio of 1.89 will remain constant. Thus, those areas with the greatest population growth also have the greatest job growth.

Residential Land Uses. The mix of land uses within each area is based on both approved developments and expected land use of uncommitted land.

For example, in Area A, the City has approved several large multi-family developments; thus, this area has much greater growth of multi-family units than the other areas. In contrast, Area B has relatively few multifamily units with only 14% of new development being multi-family.

Area C has a more balanced mix of housing units while Area D has a significant number of approved Single Family Detached Medium Price Point units, which affects the distribution of housing units by type in this area.

Area E has many approved developments, which are a mix of all types of housing units. Area F is expected to develop with Single Family Detached Medium Price Point, Attached, and Multi-family units due to the greater density in this area while Area G will be the most intense land use with only multi-family units.

Nonresidential Land Uses. Like residential land uses, the division of land use by type of nonresidential development is based on both approved developments and expected land use of uncommitted land.

Area A has existing industrial development, and the City has approved additional industrial land use. Thus, just under 50% of the industrial development in this scenario is expected in Area A. Area A also has a significant amount of office development, which creates more office jobs than industrial in this area.

On the other hand, Area B's approved developments consist primarily of office and neighborhood commercial space. A majority of new jobs in this area are office.

Both Area C and Area D are expected to have significant industrial development of more than 600 jobs created. Some office and neighborhood commercial development is expected in Area C although it is anticipated that there will be significantly more of this type of development in Area D.

Nonresidential development in Area E is projected to be only office and neighborhood commercial. Because Area F is defined by the interstate interchange, nonresidential development in this area is expected to consist of both office and big box commercial. The infill development of Area G will likely be mixed use apartment and neighborhood commercial buildings similar to those that have recently been built in the Campus Town area; thus, neighborhood commercial is the only type of nonresidential development seen in this area.

Transportation. Growth in Areas A, B, C, D, and E will require upgrading existing roadways in each area and new road construction in Areas A and B. These road project costs are captured in the capital expenses section of the fiscal analysis.

Sanitary Sewer Service. Scenario One assumes no expansion of the sanitary sewer service area.

IV. SCENARIO TWO: DEVELOPMENT BEYOND THE EXISTING SERVICE AREA

Although the pace of total growth in Scenario Two is the same as Scenario One, new developments are more scattered throughout each FAZ. This is due to the fact that each FAZ (except Area G, which is infill development) is larger in area as a result of the assumed expansion of the sanitary sewer service area.

As in Scenario One, growth averages 423 new housing units per year beginning with a slower growth rate of 162 new units in FY2010. The growth rate increases each year to a high of 531 new units in FY2029. Over the twenty-year projection period, 8,453 housing units are added; the population increases by 19,440. In keeping with the housing unit growth, population growth intensifies over time. The population growth is higher than in Scenario Two due to the different mix of housing units.

Growth occurs in each Fiscal Analysis Zone based on the amount of land the zone has available. More development occurs in those areas where the land area increases the most from Scenario One to Scenario Two. For example, the acreage of Area B in Scenario Two is 3.4 times the area of Area B in Scenario One while the acreage of Scenario A in Scenario Two is only 1.7 times larger than in Scenario One. Thus, development shifts from Area A to other areas because there is relatively less land available while Area B attracts more development because more land is available.

As in Scenario One, the infill development in Area G is expected to build-out and that growth is expected to be more intense at the Curtis Road Interchange (Area F). Population growth is actually lowest in these two zones though due to their smaller land area.

Population and Economy. Population growth is greatest in Areas A and D with 4,113 new residents in Area A and 3,976 new residents in Area D. Areas B and E also have significant

growth with 3,457 and 3,133 additional persons respectively. Growth is slightly slower in Area C (2,357). As mentioned previously, Areas F and G see less population growth with only 1,706 and 699 new persons.

	Fiscal Analysis Zone (FAZ)							
	A: Olympian & Prospect	B: Olympian ext./ Clearview	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	TOTAL
Population	4,113	3,457	2,357	3,976	3,133	1,706	699	19,440
<i>Housing Units</i>								
Single Family Detached High PP	89	109	74	158	123	0	0	553
Single Family Detached Medium PP	372	467	289	549	390	119	0	2,187
Single Family Detached Low PP	312	291	197	353	312	0	0	1,466
Attached Housing	184	227	229	287	243	286	0	1,457
Multi-family Units	950	314	197	229	203	478	419	2,790
Total Housing Units	1,907	1,408	986	1,577	1,273	883	419	8,453
Nonresidential Building Area	1,004,037	517,252	434,806	752,812	502,060	208,338	129,718	3,549,023
<i>Employment</i>								
Industrial	790	79	118	240	0	0	0	1,227
Office	936	1,455	496	819	728	300	0	4,735
Neighborhood Retail	456	299	635	1,049	933	0	371	3,743
Big Box Commercial	0	0	0	0	0	604	0	604
Total Employment	2,181	1,833	1,250	2,108	1,661	905	371	10,309

The employment projection assumes that the current population to jobs ratio of 1.89 will remain constant. Thus, those areas with the greatest population growth also have the greatest job growth.

Residential Land Uses. As in Scenario One, the mix of land uses within each area is based on both approved developments and expected land use of uncommitted land. Land use in each area differs from Scenario One due to the greater amount of acreage available for development.

In Area A, multi-family units still make up a majority of the units developed but the amount has decreased from 74% of total units in the area to 50% of total units in the area. There are more single family detached units of all price points in Scenario Two. Area B also has a mix of units when compared to Scenario One; it also has a much greater amount of development in Scenario Two—more than 4.5 times the number of units than are developed in Scenario One.

Areas C and D have slightly more development in Scenario Two while Area D has slightly less; all maintain a mix of land uses. Development of Area F in Scenario Two is more than double what it is in Scenario One with population growth of 1,706. Area G is the same in Scenario One and Scenario Two as all infill development occurs within the current sanitary sewer service area.

Nonresidential Land Uses. The division of land use by type of nonresidential development is based on both approved developments and expected land use of uncommitted land.

Area A still has more industrial and office development than neighborhood retail; in Scenario Two, 64% of industrial development is in Area A. In Scenario Two, Area B has significantly more nonresidential development; job creation is more than quadrupled. Land use is still primarily office development.

In Area C, total land use decreases only slightly; however, the mix of land uses within the area is significantly different from Scenario One where most development was industrial. In Scenario Two, approximately half of the jobs created are neighborhood retail jobs. This shift occurs because in Scenario One Area C the only approved nonresidential land use is industrial, and 74% of the uncommitted land is expected to develop as industrial. In Scenario Two, there is three times as much uncommitted land available for nonresidential development, and two-thirds of it is expected to develop with a mix of office and neighborhood retail.

Area D sees a similar shift of development from industrial to neighborhood retail development also due to the availability of more land for this type of development.

Areas E, F, and G maintain approximately the same division of land use by type. Areas E and G also have the same amount of development while Area E has more than twice as much development in Scenario Two.

Transportation. Because development in Scenario Two is built over a larger area than development in Scenario One, more road construction and reconstruction are required to serve the same total amount of development. The length of roads requiring improvement or new construction is 92% higher in Scenario Two. These costs are reflected in the capital portion of the fiscal analysis.

Sanitary Sewer Service. Scenario Two requires the expansion of the sanitary sewer service area in all FAZs except Area G (infill development). The cost of the expansion of sanitary sewer service in these areas is not included in the fiscal analysis because the expansion would be funded through the Sewer Fund, which is not a tax-supported fund. However, the ease of development in each area is impacted by the degree of difficulty and cost of expanding sanitary sewer service in that FAZ.

The expansion of sanitary sewer service could be achieved with four separate projects:

1. Expansion from the current boundary north to Ford Harris Road, west to approximately Duncan Road, and east to the City boundary with Urbana. This project would expand sanitary sewer service for Area A and the northeast part of Area B. The project should be relatively easy with the extension of interceptor sewers, which is a cost typically covered by developers.
2. Expansion of service in the area bound by Ford Harris Road, slightly west of Duncan Road (to meet the area covered by project one), I-72, Lindsey Road, and the current service area. This project would expand sanitary sewer service both north and west of Area B as well as west of Area C. It is the only project needed to extend the service area for Area C. This project would be very difficult and costly due to the topography and distance from treatment plants.
3. Expansion of service south of I-72 to Curtis Road and west of the current service area boundary to Barker Road. This expansion would provide additional land for development in Area D as well as a small amount of additional land for Area E. Because

this project will require both more interceptors and lift stations to connect into the current system, it would be difficult.

4. Expansion of service south of the current service area to approximately Old Church Road between Rising Road and I-57. This project would expand sanitary sewer service for both Areas E and F. This would be a relatively easy project with upfront costs.
-

APPENDIX C: SCENARIO METHODOLOGY

I. METHODOLOGY AND ASSUMPTIONS

The fiscal impact analysis study will compare the net fiscal impact in seven areas of the City with two growth alternative scenarios. Revenues, operating costs, and capital costs associated with each growth area and scenario are captured and summed to determine the fiscal impact of growth on the City.

In the study, Scenario One assumes growth within existing service areas while Scenario Two assumes growth both within and beyond the existing service areas.

The seven areas of the City examined in the study are defined by central transportation nodes:

- Area A: Olympian Drive & Prospect Avenue;
- Area B: Future Olympian Drive & I-74 interchange;
- Area C: Bradley Avenue & Staley Road;
- Area D: Staley Road & Kirby Avenue;
- Area E: Area surrounding I-57 & Curtis Road Interchange;
- Area F: Immediate area around I-57 & Curtis Road Interchange; and
- Area G: Infill development within the area of existing Development.

In each of these areas, the amount and type of development projected is based on approved developments and projected land use. An assumption has been made that 100% of approved developments are completed consistent with the approved plan; all approved single family detached units are assumed to be medium price point single family detached units. It is also assumed that 70% of uncommitted land in each area is developed in the following way:

- 19.25% single family detached high price point;
- 38.5% single family detached medium price point;
- 19.25% single family detached low price point;
- 10% attached units;
- 5% multifamily units;
- 5.2% commercial/retail; and
- 2.8% office.

Land use assumptions including persons per household, employment density, and assessed values are consistent with the recently completed cost of land uses study. Residential density and nonresidential floor to area ratios (in Figure C-1) are consistent with recent developments in the City.

Figure C-1: Density Factors

Residential		Nonresidential	
Land Use Type	Density (DU/acre)	Land Use Type	Floor to Area Ratio
SFD High PP	1.5	Industrial	0.2
SFD Medium PP	2.5	Neighborhood Commercial	0.4
SFD Low PP	4.0	Regional Commercial	0.3
Attached Units	6.0	Office	1.5
Multifamily	10.0		

These factors have been used to convert the acres of uncommitted land to residential units and nonresidential square footage, which are shown in the following sections.

II. BUILD-OUT POTENTIAL IN DEVELOPMENT ZONES

As mentioned previously, most of the seven areas of the City examined in the study are defined by central transportation nodes around the edge of the existing City—the exception being infill development, which is expected to occur in the Campus Town area.

Area A: Olympian and Prospect Avenue

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of area A within the existing sanitary sewer service area (Scenario One) and the build-out potential of area A within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in Figure C-2. Build-out potential is defined as having 100% of all approved developments built and 70% of uncommitted land developed. Uncommitted land includes all parcels upon which there has been no building to date.

The build-out figures shown in Figure C-2 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-2: Build-out Potential of Area A

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	32	48	1%	136	2%	198	297	5%	839	6%
Single Family Detached Medium Price Point	137	415	11%	1,389	19%	468	1,243	19%	4,163	30%
Single Family Detached Low Price Point	96	382	10%	861	12%	261	1,045	16%	2,351	17%
Attached Housing	17	100	3%	178	2%	103	616	10%	1,099	8%
Multi-family Units	255	2,748	74%	4,584	64%	298	3,178	50%	5,302	39%
TOTAL	536	3,693	100%	7,148	100%	1327	6,379	100%	13,754	100%
NONRESIDENTIAL										
Industrial	395	3,437,509	60%	4,383	35%	428	3,727,183	62%	4,752	36%
Office	123	1,336,654	23%	5,537	44%	125	1,359,469	22%	5,631	43%
Neighborhood Commercial	84	917,200	16%	2,621	21%	88	959,570	16%	2,742	21%
TOTAL	602	5,691,363	100%	12,540	100%	641	6,046,222	100%	13,125	100%

Area B: Olympian Drive Extended

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of Area B within the existing sanitary sewer service area (Scenario One) and the build-out potential of Area B within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in Figure C-3.

The build-out figures shown in Figure C-3 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-3: Build-out Potential of Area B

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	19	29	8%	81	9%	243	365	8%	1,033	9%
Single Family Detached Medium Price Point	58	135	39%	452	50%	660	1,563	33%	5,237	45%
Single Family Detached Low Price Point	19	77	22%	172	19%	243	974	21%	2,190	19%
Attached Housing	10	60	17%	106	12%	126	759	16%	1,352	12%
Multi-family Units	5	50	14%	83	9%	105	1,049	22%	1,749	15%
TOTAL	111	350	100%	895	100%	1378	4,709	100%	11,561	100%
NONRESIDENTIAL										
Industrial	61	527,686	10%	673	3%	100	871,810	12%	1,112	4%
Office	382	4,160,250	78%	17,233	87%	454	4,945,561	68%	20,486	79%
Neighborhood Commercial	58	627,454	12%	1,793	9%	135	1,471,950	20%	4,206	16%
TOTAL	500	5,315,389	100%	19,698	100%	689	7,289,320	100%	25,803	100%

Area C: Bradley Avenue and Staley Road

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of Area C within the existing sanitary sewer service area (Scenario One) and the build-out potential of Area C within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in Figure C-4.

The build-out figures shown in Figure C-4 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-4: Build-out Potential of Area C

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	20	30	3%	84	4%	164	247	7%	698	9%
Single Family Detached Medium Price Point	112	244	26%	818	39%	401	967	29%	3,239	41%
Single Family Detached Low Price Point	20	79	8%	178	8%	164	657	20%	1,479	19%
Attached Housing	74	316	33%	564	27%	149	767	23%	1,367	17%
Multi-family Units	23	284	30%	475	22%	60	660	20%	1,101	14%
TOTAL	248	954	100%	2,119	100%	939	3297	100%	7,883	100%
NONRESIDENTIAL										
Industrial	56	484,649	84%	618	68%	56	201,857	21%	257	9%
Office	3	31,404	5%	130	14%	24	260,346	28%	1,078	40%
Neighborhood Commercial	5	58,322	10%	167	18%	44	483,500	51%	1,381	51%
TOTAL	64	574,374	100%	915	100%	124	945,703	100%	2,717	100%

Area D: Staley Road and Kirby Avenue

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of Area D within the existing sanitary sewer service area (Scenario One) and the build-out potential of Area D within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in Figure C-5.

The build-out figures shown in Figure C-5 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-5: Build-out Potential of Area D

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	131	202	12%	572	12%	348	528	10%	1,494	11%
Single Family Detached Medium Price Point	341	752	43%	2,518	54%	776	1,837	35%	6,155	46%
Single Family Detached Low Price Point	78	313	18%	703	15%	295	1,181	22%	2,658	20%
Attached Housing	61	283	16%	505	11%	173	960	18%	1,711	13%
Multi-family Units	20	203	12%	339	7%	77	767	15%	1,279	10%
TOTAL	632	1753	100%	4,637	100%	1669	5273	100%	13,297	100%
NONRESIDENTIAL										
Industrial	51	445,183	56%	568	33%	51	445,183	25%	568	11%
Office	11	123,798	15%	513	30%	43	467,721	26%	1,937	39%
Neighborhood Commercial	21	229,910	29%	657	38%	80	868,624	49%	2,482	50%
TOTAL	84	798,890	100%	1,737	100%	174	1,781,528	100%	4,987	100%

Area E: Southwest Champaign

Given the approved development plans and assumptions made about uncommitted land, the build-out potential of Area E within the existing sanitary sewer service area (Scenario One) and the build-out potential of Area E within the existing sanitary sewer service area and beyond it (Scenario Two) have been calculated and are shown in Figure C-6.

The build-out figures shown in Figure C-6 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-6: Build-out Potential of Area E

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	120	197	9%	559	11%	250	413	10%	1,169	11%
Single Family Detached Medium Price Point	438	658	31%	2,205	42%	697	1,306	31%	4,375	42%
Single Family Detached Low Price Point	120	526	25%	1,185	23%	250	1,045	25%	2,351	22%
Attached Housing	129	410	19%	731	14%	205	814	19%	1,451	14%
Multi-family Units	87	342	16%	570	11%	131	678	16%	1,132	11%
TOTAL	894	2,134	100%	5,249	100%	1,531	4,256	100%	10,477	100%
NONRESIDENTIAL										
Office	27	297,434	35%	1,232	44%	53	574,975	35%	2,382	44%
Neighborhood Commercial	51	552,378	65%	1,578	56%	98	1,067,812	65%	3,051	56%
TOTAL	78	849,812	100%	2,810	100%	151	1,642,787	100%	5,433	100%

Area F: Curtis Road Interchange

Given the approved development plans and assumptions made about uncommitted land for Area F, the build-out potential within the existing sanitary sewer service area (Scenario One) and the build-out potential within the existing sanitary sewer service area and beyond it (Scenario Two) has been calculated and is shown in Figure C-7.

The build-out figures shown in Figure C-7 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-7: Build-out Potential of Area F

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Single Family Detached Medium Price Point	22	54	14%	182	23%	49	122	14%	408	23%
Attached Housing	22	130	32%	232	30%	49	293	32%	522	30%
Multi-family Units	22	217	54%	362	47%	49	488	54%	813	47%
TOTAL	65	402	100%	777	100%	146	902	100%	1,743	100%
NONRESIDENTIAL										
Office	18	197,969	31%	820	29%	50	544,799	35%	2,257	33%
Big Box Commercial	34	441,189	69%	1,961	71%	78	1,021,384	65%	4,539	67%
TOTAL	52	639,158	100%	2,781	100%	128	1,566,184	100%	6,796	100%

Area G: Infill Development

Area G consists of approximately seven mixed use infill development projects with neighborhood retail and rental apartments. It is expected that these developments will be similar to and located near other mixed use buildings in the Campus Town area. The build-out potential of this area is summarized in Figure C-8.

The build-out figures shown in Figure C-8 show the development that could be built within the area of this FAZ; this level of development will not be achieved during the twenty year period being considered in the fiscal study.

Figure C-8: Build-out Potential of Area G

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop./Jobs	Percent	Acres	Units/SF	Percent	Pop./Jobs	Percent
RESIDENTIAL										
Multi-family Units	2.9	420	100%	701	100%	2.9	420	100%	701	100%
TOTAL	2.9	420	100%	701	100%	2.9	420	100%	701	100%
NONRESIDENTIAL										
Neighborhood Commercial	0.2	28,000	100%	80	100%	0.2	28,000	100%	80	100%
TOTAL	0.2	28,000	100%	80	100%	0.2	28,000	100%	80	100%

Total Build-out Potential

The total development expected in the seven development areas is shown in Figure C-9 below. This total growth will not occur within the twenty-year timeframe of the fiscal analysis study.

Figure C-9: Total Build-out Potential

Land Use Type	Scenario 1: Within existing service area					Scenario 2: Within & outside existing service area				
	Acres	Units/SF	Percent	Pop. /Jobs	Percent	Acres	Units/SF	Percent	Pop. /Jobs	Percent
RESIDENTIAL										
Single Family Detached High Price Point	322	506	5%	1,433	7%	1,203	1,849	7%	5,233	9%
Single Family Detached Medium Price Point	1,108	2,258	23%	7,563	35%	3,051	7,038	28%	23,577	40%
Single Family Detached Low Price Point	333	1,377	14%	3,099	14%	1,214	4,902	19%	11,029	19%
Attached Housing	312	1,300	13%	2,317	11%	805	4,208	17%	7,502	13%
Multi-family Units	414	4,264	44%	7,113	33%	722	7,240	29%	12,076	20%
TOTAL	2,489	9,705	100%	21,525	100%	6,994	25,237	100%	59,417	100%
NONRESIDENTIAL										
Industrial	562	4,895,027	35%	6,241	15%	635	5,246,033	27%	6,689	11%
Office	565	6,147,509	44%	25,464	63%	749	8,152,871	42%	33,771	57%
Neighborhood Commercial	219	2,413,263	17%	6,895	17%	446	4,879,456	25%	13,941	24%
Big Box Commercial	34	441,189	3%	1,961	5%	78	1,021,384	5%	4,539	8%
TOTAL	1,379	13,896,986	100%	40,562	100%	1,907	19,299,744	100%	58,941	100%

III. ABSORPTION OF DEVELOPMENT

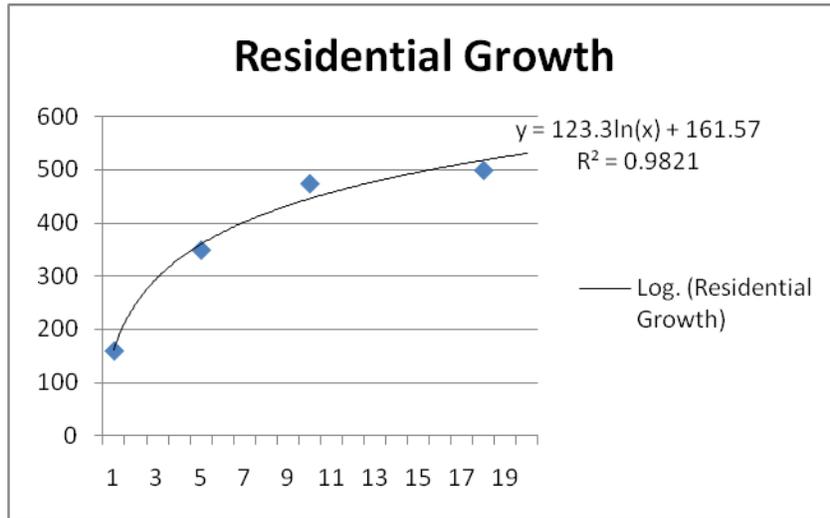
Pace of Growth

The pace of residential and nonresidential development is the same in both scenarios. This allows for a comparison of the fiscal impact of developing the same total number of residential units and nonresidential square footage per year in each scenario. With this approach, the focus remains on the fiscal impact of development within the current service area versus the fiscal impact of development that occurs within and beyond of the current service area.

A twenty-year timeframe is being used in the study to be consistent with the City's master plan timeframe.

Average residential growth is kept consistent with past growth in Champaign as well as the current slowdown in residential permits. It is anticipated that the City will issue approximately 156 permits in calendar year 2010; the average number of permits annually since 1996 is 473. Given the current economic climate, total residential units are projected logarithmically beginning with approximately 160 units per year, quickly ramping up to about 350 units per year in year 5 (FY2014), 475 in year 10 (FY2019), and reaching 500 units annually by year 16 (FY2027). Figure C-10 below shows the logarithmic curve of residential growth (log curve has an R-square of 0.98).

Figure C-10: Logarithmic Growth of Residential Development



In both scenarios, the total annual residential growth in Areas A, B, C, D, and E is derived from this logarithmic projection while areas F and G are projected logarithmically so that both are built out within the twenty-year timeframe. The total units projected annually in areas F and G are subtracted from the total number of units per year to determine annual growth in Areas A, B, C, D, and E. The total growth in these five areas is then allocated to each area based on the percentage of total units in each area. The result is that build-out occurs in Scenario One in FY2020 (year 11) in Area F and in FY2029 (year 20) in Area G; it is not reached for areas A-E. Build-out for residential development in Scenario Two only occurs in area G.

The nonresidential growth is determined by maintaining the City’s current population to jobs ratio of 1.89; this is used to convert the population growth to jobs in each scenario. The total jobs are allocated by type by using the percentage of total jobs in that area. For example, in Area A at build-out of Scenario One, the distribution of jobs is 60% industrial, 23% office, and 16% neighborhood retail. These percentages are multiplied by the total jobs added each year in Scenario One. These jobs numbers are then converted to square footage using job density factors taken from the Institute of Transportation Engineers’ Trip Generation Manual as shown below in Figure C-11.

Figure C-11: Employment Density Factors

Land Use	Wkdy Trip Ends Per 1,000 Sq Ft (1)	Wkdy Trip Ends Per Employee (1)	Emp Per 1,000 Sq Ft	Sq Ft Per Emp (2)
Commercial / Shopping Ctr (820)				
25K gross leasable area	110.32	n/a	3.33	300
50K gross leasable area	86.56	n/a	2.86	350
100K gross leasable area	67.91	n/a	2.50	400
200K gross leasable area	53.28	n/a	2.22	450
400K gross leasable area	41.80	n/a	2.00	500
Free-Standing Discount Store (815)	56.02	n/a	4.44	225
General Office (710)				
10K gross floor area	22.66	5.06	4.48	223
25K gross floor area	18.35	4.43	4.14	241
50K gross floor area	15.65	4.00	3.91	256
100K gross floor area	13.34	3.61	3.70	271
Research and Development Center (760)	8.11	2.77	2.93	342
Medical Clinic (630)	5.18	0.90	5.76	174
Industrial				
Business Park (770)***	12.76	4.04	3.16	317
Mini-Warehouse (151)	2.50	56.28	0.04	22,512
Light Industrial (110)	6.97	3.02	2.31	433
Warehousing (150)	4.96	3.89	1.28	784
Manufacturing (140)	3.82	2.13	1.79	558

1) *Trip Generation*, Institute of Transportation Engineers, 2003.

2) Square feet per employee calculated from trip rates except for Shopping Center data, which are derived from the Urban Land Institute's *Development Handbook* and *Dollars and Cents of Shopping Centers*.

How Absorption Impacts the Fiscal Results

The absorption methodology presented above maintains the same pace of growth (same total number of residential units and square feet of nonresidential development annually) allowing for comparison of the net fiscal impact of development within the current service area versus the fiscal impact of development that occurs within and beyond the current service area. Because growth occurs throughout the twenty-year timeframe in both scenarios, it is possible to compare the net fiscal impact of the full twenty year period.

Each of the two Scenarios will be different as growth within each area is different in Scenario One versus Scenario Two due to the amount of land available for development. For example, the amount of land available for development in Area A increases by 73% in Scenario Two while Area B increases by 238% so growth shifts from Area A to Area B in Scenario Two. This is shown in the following sections, which show the detail of development absorption by area.

Additionally, with growth occurring over a wider area in Scenario Two, there will be additional operating and capital costs triggered.

Residential Absorption by Area

As noted previously, the total annual residential growth in Areas A, B, C, D, and E is derived from the logarithmic projection of total growth while areas F and G are projected logarithmically so that both are built out within the twenty-year timeframe. The total units projected annually in areas F and G are subtracted from the total number of units per year to determine annual growth in Areas A, B, C, D, and E. The total growth in these five areas is then allocated to each area based on the percentage of total units in each area.

Similarly, for areas A, B, C, D, and E, the total number of units are allocated by type of unit based on the percentage of total units. For example, 6% of all units in these areas in Scenario One are Single Family Detached High Price Point units, so 6% of the total units are allocated to this type of unit as shown in Figure C-12 below. In year one, 6% of the 134 units are 8 Single Family Detached High Price Point units.

Figure C-12: Allocation of Units by Type in Scenario One

SCENARIO ONE: WITHIN EXISTING SERVICE AREA		<i>five year-intervals</i>							
	<i>Percent of Total</i>	2010	2011	2012	2013	2014	2019	2024	2029
SFD High PP	6%	8	12	14	16	17	22	27	29
SFD Med PP	25%	33	51	62	70	75	94	117	125
SFD Low PP	16%	21	32	39	44	47	59	73	78
Attached	13%	18	27	33	37	40	50	62	66
Multi-family	41%	55	85	102	115	124	154	193	206
SUM		134	207	250	281	304	378	472	505
Units Added Per Year in Scenario One--									
Areas A, B, C, D, & E		134	207	250	281	304	378	472	505

The same methodology is used to allocate units by type in Scenario Two. As shown in Figure C-13, 8% of total units are Single Family Detached High Price Point units, so 10 of the 134 units in FY2010 are Single Family Detached High Price Point.

Figure C-13: Allocation of Units by Type in Scenario Two

SCENARIO TWO: WITHIN EXISTING SERVICE AREA										
	<i>Percent of Total Units</i>	<i>five year-intervals</i>								
		2010	2011	2012	2013	2014	2019	2024	2029	
SFD High PP	8%	10	16	19	22	24	29	33	35	
SFD Med PP	29%	39	60	72	81	88	109	122	130	
SFD Low PP	20%	27	42	51	58	62	77	86	92	
Attached	16%	22	34	41	46	50	62	69	74	
Multi-family	26%	35	55	66	74	81	100	111	119	
SUM		134	207	250	281	304	378	421	450	

Units Added Per Year in Scenario One--

Areas A, B, C, D, & E	134	207	250	281	304	378	421	450
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Units are allocated by area with a similar methodology. For example, 10% of the total Single Family Detached High Price Point units in Scenario One are located in Area A (32 Single Family Detached High Price Point units in Area A / 506 Single Family Detached High Price Point units in Areas A-E = 10%). Thus, for FY2010, 10% of 8 units (shown in Figure C-12 above), or one unit, are allocated to Area A in Scenario One.

Figure C-14: Allocation of Units in Area A, Scenario One

SCENARIO ONE: AREA A										
	<i>Percent of Units in Area A</i>	<i>five year-intervals</i>								
		2010	2011	2012	2013	2014	2019	2024	2029	
SFD High PP	10%	1	1	1	2	2	2	3	3	
SFD Med PP	19%	6	10	12	13	14	18	22	24	
SFD Low PP	28%	6	9	11	12	13	16	20	22	
Attached	9%	2	2	3	3	3	4	5	6	
Multi-family	76%	41	64	77	87	94	117	146	156	
Total Units Added Per Year in Area A		56	86	104	117	126	157	196	210	

On the other hand, in Scenario Two, Area A has 16% of the Single Family Detached High Price Point units (297 units in Area A / 1,849 units in Areas A-E = 8%). In FY2010 then, Area A has 2 Single Family Detached High Price Point units (16% x 10 = 2).

Figure C-15: Allocation of Units in Area A, Scenario Two

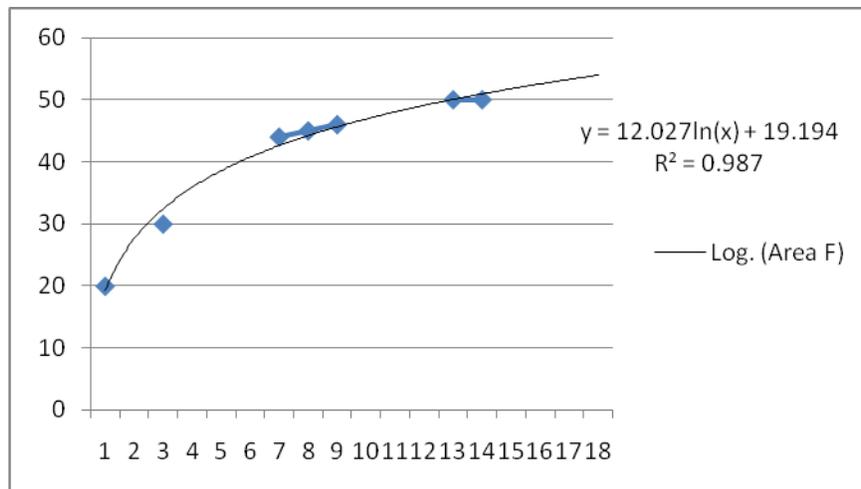
SCENARIO TWO: AREA A		<i>five year-intervals</i>							
<i>Percent of Units in Area A</i>		2010	2011	2012	2013	2014	2019	2024	2029
SFD High PP	16%	2	3	3	3	4	5	5	5
SFD Med PP	18%	7	11	13	14	15	19	21	23
SFD Low PP	21%	6	9	11	12	13	16	18	19
Attached	16%	3	5	6	7	8	10	11	11
Multi-family	46%	17	27	33	36	40	49	55	59
Total Units Added Per Year in Area A		35	54	65	73	79	99	110	117

The allocation of residential units in Areas B, C, D, and E is calculated using the same methodology; please see the Appendix for the results.

Area F uses a different methodology for calculating the total number of units absorbed annually because it is anticipated that build-out will occur in this area in both scenarios due to its location around an interstate interchange.

The logarithmic projection of total units Area F, shown in Figure C-16 below, assumes average growth of 45 units per year with a minimum of 19 units in FY2010 and a maximum of 55 units in FY2029.

Figure C-16: Logarithmic Projection of Units in Area F



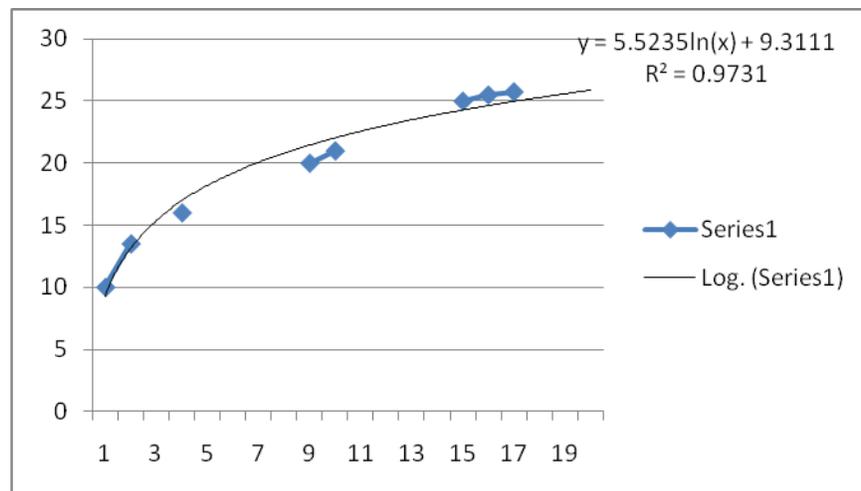
In Area F, units are allocated by type based on their percentage of total units in the area. For example, 32% of the units in Area F in Scenario One are attached housing. Thus, in FY2010, of the 19 units absorbed, 32%, or 6 units, are attached ($19 \times 32\% = 6$).

Figure C-17: Residential Absorption in Area F

SCENARIO TWO: AREA F			<i>five year-intervals</i>							
<i>Allocation of Units in Area F by Type</i>			2010	2011	2012	2013	2014	2019	2024	2029
SFD Med PP	14%		3	4	4	5	5	6	7	7
Attached	32%		6	9	10	11	12	15	16	18
Multi-family	54%		10	15	17	19	21	25	28	30
Total Units Added Per Year in Area F			19	27	32	35	38	46	51	55

Area G also uses a logarithmic projection to forecast the annual absorption because it is infill development that is likely to build out within the twenty-year timeframe. In Area G, an average of 21 units is absorbed annually with a minimum of 9 units in FY2010 and a maximum of 26 units in FY2029.

Figure C-18: Logarithmic Projection of Units in Area G



Scenarios One and Two are the same for Area G because it is infill development that is all within the bounds of the existing sanitary sewer service area. All units in Area G are multi-family so there is no allocation by type of unit.

Figure C-19: Residential Absorption in Area G

AREA G	2010	2011	2012	2013	2014	<i>five year-intervals</i>		
						2019	2024	2029
Multi-family	9	13	15	17	18	22	24	26
Total Units Added Per Year in Area G	9	13	15	17	18	22	24	26

In Scenario One, total single family detached units average 169 units annually ranging from 61 to 220 units while attached units average 54 units per year and multi-family averages 200 units annually. This is consistent with past experience in Champaign. The absorption in Scenario Two is also consistent with past experience averaging 206 single family detached units per year; attached housing averages 72 units per year and multi-family 145 units annually.

Total Residential Absorption

Over the twenty-year period, the total residential absorption is 8,453 units in both Scenario One and Scenario Two. Figure C-20 shows the breakdown of units by type and area for Scenario One while Figure C-21 shows the total absorption by type and area for Scenario Two.

Figure C-20: Scenario One Total Residential Absorption

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Population	6,141	769	1,820	3,984	4,509	778	699	18,700
<i>Housing Units</i>								
Single Family Detached High PP	41	25	26	174	170	0	0	435
Single Family Detached Medium PP	356	116	210	646	565	55	0	1,948
Single Family Detached Low PP	329	66	68	269	452	0	0	1,183
Attached Housing	86	51	272	243	352	130	0	1,134
Multi-family Units	2,361	43	244	174	294	217	419	3,752
Total Housing Units	3,173	300	819	1,506	1,833	402	419	8,453

Figure C-21: Scenario Two Total Residential Absorption

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Population	4,113	3,457	2,357	3,976	3,133	1,706	699	19,440
<i>Housing Units</i>								
Single Family Detached High PP	89	109	74	158	123	0	0	553
Single Family Detached Medium PP	372	467	289	549	390	119	0	2,187
Single Family Detached Low PP	312	291	197	353	312	0	0	1,466
Attached Housing	184	227	229	287	243	286	0	1,457
Multi-family Units	950	314	197	229	203	478	419	2,790
Total Housing Units	1,907	1,408	986	1,577	1,273	883	419	8,453

Nonresidential Absorption by Area

Nonresidential development is projected using the current population to jobs ratio of 1.89. Thus, nonresidential growth follows the logarithmic projection of residential growth.

The total jobs are allocated by type by using the percentage of total jobs in that area. For example, as shown in Figure C-22, in Area A at build-out of Scenario One, the distribution of jobs is 35% industrial, 44% office, and 21% neighborhood retail. These percentages are multiplied by the total jobs added in Scenario One. For example, by FY2029, 3,256 jobs have been added in Scenario One. 35% of those jobs are industrial ($3,256 \times 35\% = 1,138$ jobs). These

1,138 jobs are converted to square footage by multiplying 1,138 x 784 square feet per job, which equals 892,302 square feet of industrial space added in Area A by FY2029.

These jobs numbers are then converted to square footage using job density factors taken from the Institute of Transportation Engineers' Trip Generation Manual.

Figure C-22: Scenario One Nonresidential

Area A

Scenario One	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population	55,137	107	274	475	701	946	2,362	4,160	6,141
Pop to Jobs	1.89								
Jobs	29,239	57	145	252	372	501	1,253	2,206	3,256
Industrial	35%	20	51	88	130	175	438	771	1,138
Office	44%	25	64	111	164	221	553	974	1,438
Neighborhood Commercial	21%	12	30	53	78	105	262	461	680
Square Footage									
Industrial	784	15,617	39,826	69,064	101,865	137,417	343,225	604,526	892,302
Office	241	6,064	15,465	26,818	39,555	53,360	133,277	234,742	346,488
Neighborhood Commercial	350	4,168	10,630	18,434	27,189	36,678	91,612	161,357	238,168

Area B

Scenario One	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		13	34	60	88	118	296	521	769
Pop to Jobs	1.89								
Jobs		7	18	32	47	63	157	276	408
Industrial	3%	0	1	1	2	2	5	9	14
Office	87%	6	16	28	41	55	137	242	357
Neighborhood Commercial	9%	1	2	3	4	6	14	25	37
Square Footage									
Industrial	784	191	487	845	1,246	1,681	4,199	7,396	10,917
Office	241	1,504	3,836	6,653	9,812	13,237	33,062	58,232	85,952
Neighborhood Commercial	350	227	580	1,005	1,482	2,000	4,995	8,798	12,986

Area C

Scenario One	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		32	81	141	208	280	700	1,233	1,820
Pop to Jobs	1.89								
Jobs		17	43	75	110	149	371	654	965
Industrial	68%	11	29	50	74	100	251	442	652
Office	14%	2	6	11	16	21	53	93	137
Neighborhood Commercial	18%	3	8	14	20	27	68	119	176
Square Footage									
Industrial	784	8,948	22,818	39,569	58,362	78,731	196,646	346,354	511,230
Office	241	579	1,477	2,560	3,777	5,095	12,725	22,412	33,081
Neighborhood Commercial	350	1,077	2,747	4,763	7,026	9,478	23,672	41,694	61,542

Absorption

*Appendices to the
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Area D

<u>Scenario One</u>	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		70	178	308	455	614	1,532	2,699	3,984
Pop to Jobs	1.89								
Jobs		37	94	164	241	325	813	1,431	2,113
Industrial	33%	12	31	53	79	106	266	468	690
Office	30%	11	28	48	71	96	240	422	624
Neighborhood Commercial	38%	14	36	62	91	123	307	541	799
Square Footage									
Industrial	784	9,471	24,153	41,885	61,778	83,338	208,154	366,623	541,149
Office	241	2,630	6,707	11,631	17,156	23,143	57,804	101,811	150,276
Neighborhood Commercial	350	4,893	12,478	21,638	31,915	43,054	107,536	189,404	279,568

Area E

<u>Scenario One</u>	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		79	201	349	515	694	1,735	3,055	4,509
Pop to Jobs	1.89								
Jobs		42	107	185	273	368	920	1,620	2,391
Industrial	0%	0	0	0	0	0	0	0	0
Office	44%	18	47	81	120	161	403	710	1,048
Neighborhood Commercial	56%	24	60	104	153	207	517	910	1,343
Square Footage									
Industrial	784	-	-	-	-	-	-	-	-
Office	241	4,422	11,277	19,556	28,844	38,910	97,186	171,174	252,660
Neighborhood Commercial	350	8,227	20,979	36,381	53,659	72,387	180,800	318,445	470,037

Area F

<u>Scenario One</u>	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		37	92	151	220	293	712	778	778
Pop to Jobs	1.89								
Jobs		20	49	80	116	155	377	413	413
Industrial	0%	0	0	0	0	0	0	0	0
Office	29%	6	14	24	34	46	111	122	122
Big Box Commercial	71%	14	34	57	82	109	266	291	291
Square Footage									
Industrial	784	-	-	-	-	-	-	-	-
Office	241	1,410	3,463	5,709	8,273	11,031	26,817	29,319	29,319
Big Box Commercial	225	3,149	7,731	12,744	18,469	24,625	59,867	65,452	65,452

Area G

Scenario One

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		15	37	62	90	120	292	487	699
Pop to Jobs	1.89								
Jobs		8	19	33	48	64	155	258	371
Neighborhood Commercial	100%	8	19	33	48	64	155	258	371
Square Footage									
Neighborhood Commercial	350	2,786	6,811	11,455	16,718	22,290	54,178	90,400	129,718

The same methodology is used to convert population to jobs and jobs to square footage in Scenario Two. The results are shown below in Figure C-23.

Figure C-23: Scenario Two Nonresidential Absorption

Area A

Scenario Two

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		77	196	340	501	676	1,688	2,851	4,113
Pop to Jobs	1.89								
Jobs		41	104	180	266	358	895	1512	2181
Industrial	36%	15	38	65	96	130	324	547	790
Office	43%	17	45	77	114	154	384	649	936
Neighborhood Commercial	21%	9	22	38	56	75	187	316	456
Square Footage									
Industrial	784	11,564	29,491	51,141	75,430	101,755	254,154	429,116	619,094
Office	241	4,212	10,742	18,628	27,475	37,064	92,574	156,302	225,500
Neighborhood Commercial	350	2,978	7,595	13,171	19,426	26,206	65,455	110,515	159,443

Area B

Scenario Two

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		65	165	286	421	568	1,419	2,396	3,457
Pop to Jobs	1.89								
Jobs		34	87	151	223	301	753	1271	1833
Industrial	4%	1	4	7	10	13	32	55	79
Office	79%	27	69	120	177	239	597	1009	1455
Neighborhood Commercial	16%	6	14	25	36	49	123	207	299
Square Footage									
Industrial	784	1,157	2,949	5,115	7,544	10,177	25,419	42,917	61,917
Office	241	6,552	16,709	28,975	42,736	57,651	143,995	243,123	350,758
Neighborhood Commercial	350	1,953	4,982	8,639	12,742	17,188	42,932	72,486	104,577

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Area C

Scenario Two

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		44	112	195	287	387	968	1,634	2,357
Pop to Jobs	1.89								
Jobs		23	60	103	152	205	513	866	1250
Industrial	9%	2	6	10	14	19	49	82	118
Office	40%	9	24	41	60	82	204	344	496
Neighborhood Commercial	51%	12	30	52	77	104	261	440	635
Square Footage									
Industrial	784	1,734	4,422	7,668	11,310	15,257	38,108	64,341	92,826
Office	241	2,233	5,695	9,876	14,567	19,651	49,082	82,870	119,558
Neighborhood Commercial	350	4,155	10,595	18,373	27,100	36,557	91,310	154,168	222,421

Area D

Scenario Two

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		74	189	328	484	653	1,632	2,756	3,976
Pop to Jobs	1.89								
Jobs		39	100	174	257	347	866	1461	2108
Industrial	11%	4	11	20	29	39	99	166	240
Office	39%	15	39	68	100	135	336	568	819
Neighborhood Commercial	50%	20	50	87	128	172	431	727	1049
Square Footage									
Industrial	784	3,515	8,963	15,543	22,925	30,925	77,242	130,417	188,155
Office	241	3,687	9,404	16,307	24,052	32,446	81,041	136,830	197,408
Neighborhood Commercial	350	6,860	17,494	30,337	44,745	60,362	150,765	254,553	367,249

Area E

Scenario Two

	<i>fiscal year--></i>	2010	2011	2012	2013	<i>five-year increments</i>			
						2014	2019	2024	2029
Population		59	149	259	382	515	1,286	2,171	3,133
Pop to Jobs	1.89								
Jobs		31	79	137	202	273	682	1151	1661
Industrial	0%	0	0	0	0	0	0	0	0
Office	44%	14	35	60	89	120	299	505	728
Neighborhood Commercial	56%	17	44	77	114	153	383	647	933
Square Footage									
Industrial	784	0	0	0	0	0	0	0	0
Office	241	3,279	8,361	14,499	21,386	28,849	72,057	121,662	175,524
Neighborhood Commercial	350	6,100	15,555	26,974	39,785	53,670	134,052	226,334	326,536

Area F

Scenario Two

	fiscal year-->	2010	2011	2012	2013	five-year increments			
						2014	2019	2024	2029
Population		37	92	151	220	293	712	1,192	1,706
Pop to Jobs	1.89								
Jobs		20	49	80	116	155	377	632	905
Industrial	0%	0	0	0	0	0	0	0	0
Office	33%	7	16	27	39	52	125	210	300
Big Box Commercial	67%	13	33	54	78	104	252	422	604
Square Footage									
Industrial	784	-	-	-	-	-	-	-	-
Office	241	1,588	3,900	6,428	9,316	12,421	30,197	50,568	72,389
Big Box Commercial	225	2,983	7,323	12,072	17,496	23,327	56,711	94,968	135,949

Area G

Scenario Two

	fiscal year-->	2010	2011	2012	2013	five-year increments			
						2014	2019	2024	2029
Population		15	37	62	90	120	292	487	699
Pop to Jobs	1.89								
Jobs		8	19	33	48	64	155	258	371
Neighborhood Commercial	100%	8	19	33	48	64	155	258	371
Square Footage									
Neighborhood Commercial	350	2,786	6,811	11,455	16,718	22,290	54,178	90,400	129,718

Total Nonresidential Absorption

Over the twenty-year period, the total nonresidential absorption is 4 million square feet of development and 9,812 jobs. Figure C-24 shows the breakdown of jobs by type and area as well as square footage by area for Scenario One.

Figure C-24: Scenario One Total Nonresidential Absorption

	Fiscal Analysis Zone (FAZ)							
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	TOTAL
Nonresidential Building Area	1,476,958	109,855	605,853	970,993	722,696	94,770	129,718	4,110,843
<i>Employment</i>								
Industrial	1,138	14	652	690	0	0	0	2,494
Office	1,438	357	137	624	1,048	122	0	3,725
Neighborhood Retail	680	37	176	799	1,343	187	371	3,593
Big Box Commercial	0	0	0	0	0	0	0	0
Total Employment	3,256	408	965	2,113	2,391	309	371	9,812

In Scenario Two, the total nonresidential square footage of development is 3.6 million with 10,309 jobs. Figure C-25 shows the breakdown of jobs by type and area as well as square footage by area for Scenario One.

Figure C-25: Scenario Two Total Nonresidential Absorption

	Fiscal Analysis Zone (FAZ)							TOTAL
	A: Olympian & Prospect	B: Olympian ext.	C: Bradley & Staley	D: Staley & Kirby	E: Southwest Champaign	F: Curtis Interchange	G: Infill	
Nonresidential Building Area	1,004,037	517,252	434,806	752,812	502,060	208,338	129,718	3,549,023
<i>Employment</i>								
Industrial	790	79	118	240	0	0	0	1,227
Office	936	1,455	496	819	728	300	0	4,735
Neighborhood Retail	456	299	635	1,049	933	0	371	3,743
Big Box Commercial	0	0	0	0	0	604	0	604
Total Employment	2,181	1,833	1,250	2,108	1,661	905	371	10,309