

Green Valley Area Annexation Fiscal Impact Analysis Study

Prepared for:
City of Manhattan, Kansas

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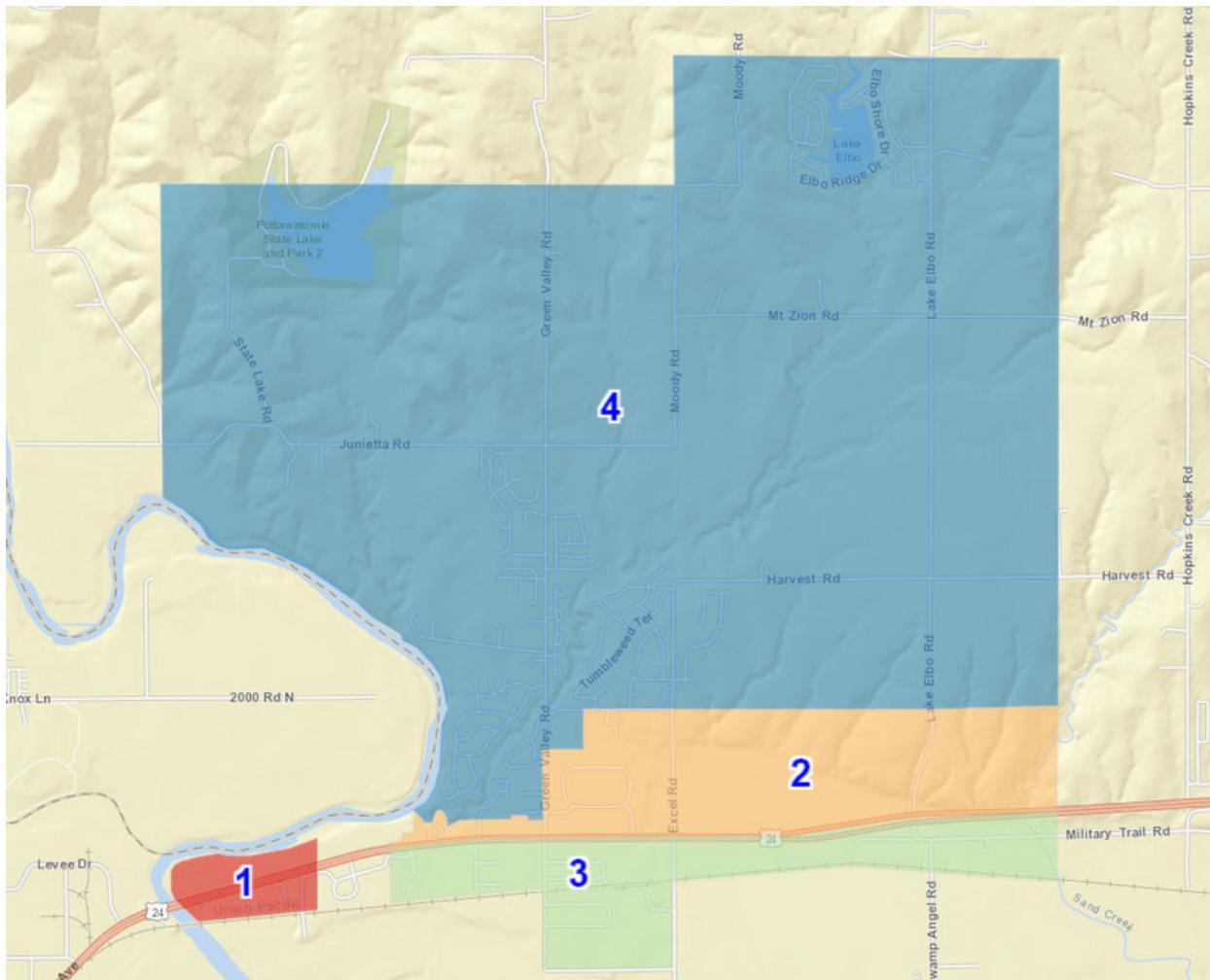
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EXECUTIVE SUMMARY

Study Overview

The City of Manhattan is investigating the fiscal impact of annexing the Green Valley area located in Pottawatomie County. The area analyzed is shown in Figure 1. City staff and TischlerBise divided the area into four subareas for purposes of the fiscal analysis—identified as “Fiscal Analysis Zones (FAZ)” in this report. (Further detail is provided in Appendix A.)

Figure 1. Green Valley Study Area (with Fiscal Analysis Zone Numbers)



Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, ESRI, HERE, Garmin, INCREMENT P, NGA, USGS.)

Scenarios Analyzed

Multiple growth scenarios are used to test the fiscal impacts of different levels of development in the annexation area. Growth projections for the Green Valley study area are based on trends, current plans, and market demand. Projections are not based on “land capacity,” which would determine how many acres are planned for a certain land use, assign an average density or floor area ratio, and project housing units and nonresidential square footage. Instead, this analysis captures market reality related to what has developed in recent years and what is in the pipeline, including areas that have been subdivided but not yet built.

Three scenarios are modeled in this analysis to test fiscal impacts of different paces of growth: Trends, Medium Growth, and High Growth.

- Scenario 1. Trends Scenario:** Based on what is known today in terms of approved housing units and historical nonresidential development in the study area.
- Scenario 2. Medium Alternative Growth Scenario:** This scenario increases both residential and nonresidential development to test the possibility of the area absorbing a higher share of the region’s housing and nonresidential development. Recent development trends are used as the baseline for both residential and nonresidential development.
- Scenario 3. High Alternative Growth Scenario:** This scenario further increases both residential and nonresidential development above the Medium Growth Scenario to test the possibility of the area absorbing an even greater share of the region’s housing and nonresidential development.

See Figure 2 for a summary of the scenarios modeled in this analysis.

Figure 2. Growth Scenarios: Existing Development and Projected Growth (20-Year Total and Net Increase)

	Existing Development in Study Area	SCENARIO 1: Trends		SCENARIO 2: Medium Alternative		SCENARIO 3: High Alternative	
		Year 20	Net Increase	Year 20	Net Increase	Year 20	Net Increase
TOTAL HOUSING UNITS	1,439	3,039	1,600	3,339	1,900	3,939	2,500
POPULATION	4,087	8,560	4,473	9,341	5,254	10,903	6,816
TOTAL NONRES. SF	481,483	1,126,308	644,825	1,219,603	738,120	1,309,483	828,000
TOTAL JOBS	805	1,771	967	1,967	1,163	2,155	1,350

Approach and Major Assumptions

Fiscal Impact Analysis

A fiscal impact analysis determines whether revenues generated by development are sufficient to cover the resulting costs for service and facility demands placed on a jurisdiction. Fiscal analysis enables local governments to estimate the difference between the costs of providing services to development and the taxes, user fees, and other revenues that will be collected by the government from new development.

The fiscal impact analysis conducted on potential annexation of the Green Valley by the City of Manhattan uses a marginal cost methodology to project revenues and expenditures (operating and capital) generated by existing and projected development.

Service level and revenue assumptions are based on TischlerBise’s interviews with City departments, follow-up discussions with staff, detailed analysis of City budgets and actuals, and other relevant documents. Additionally, our fiscal impact analysis experience conducting over 800 fiscal impact analyses nationwide was beneficial to this effort.

Assumptions are outlined in the Appendices to this report. Calculations are performed using a customized fiscal impact model designed specifically by TischlerBise for this assignment.

Level of Service

Revenue and cost projections are based on a “snapshot approach” in which it is assumed the City’s current levels of service will continue through the 20-year analysis period—given discussions and confirmation with City staff. Appendix B provides further detail on level-of-service assumptions.

Revenue Structure

Revenues are projected assuming that the current revenue structures and rates for the City of Manhattan, as set in FY2018 will not change during the analysis period.

It should be noted that other development funding options are not included in this analysis, including tools such as Tax Increment Financing (TIF), Community Improvement Districts, Transportation Development Districts, utility districts, development agreements, one-time fees, or grants.

Inflation Rate

The rate of inflation is assumed to be zero throughout the projection period, and revenue and expenditure projections are in constant 2018 dollars. This assumption avoids the difficulty of speculating on inflation

rates and their effect on revenue categories. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time.

Timing

A note on timing of the study: The base year for the study is 2018, prior to the onset of the COVID-19 pandemic as well as prior to release of updated Census 2020 population estimates. Development activity has continued as the study was being finalized. Therefore, as the City continues exploration of annexation and potentially moves toward service plans, demographic estimates and projections will need to be updated accordingly.

Non-Fiscal Evaluations

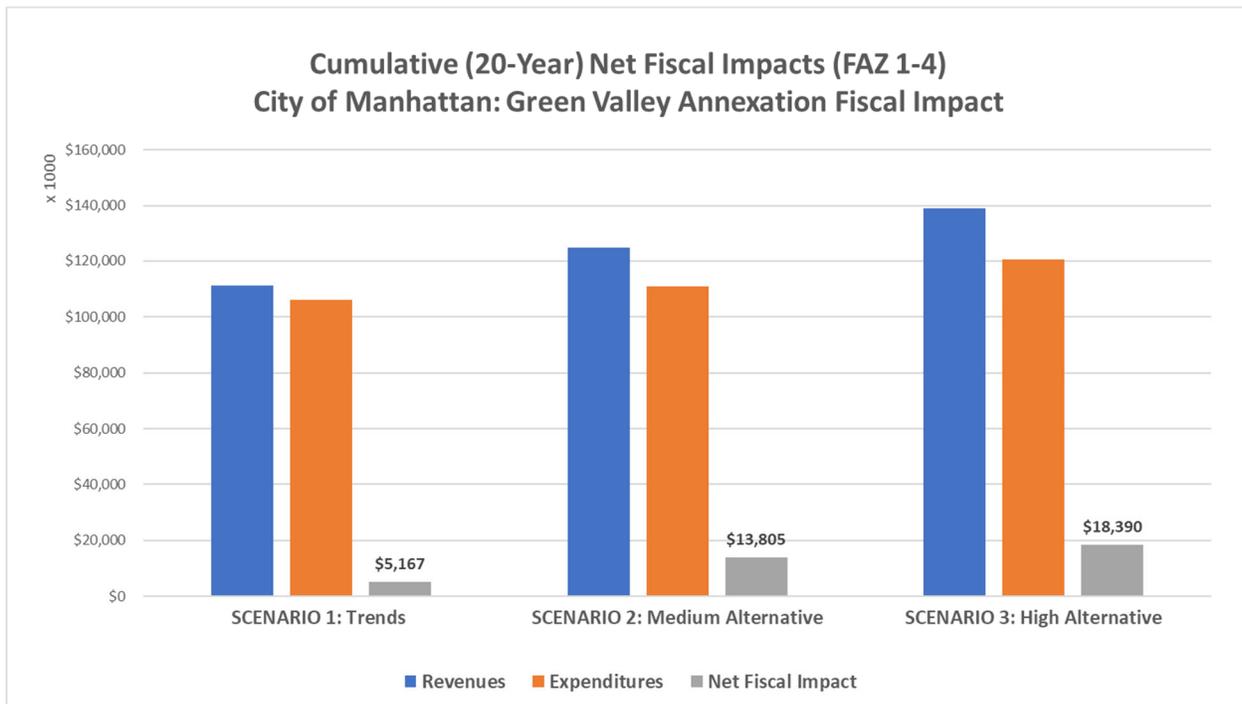
It should be noted that while a fiscal impact analysis is an important consideration in planning and policy decisions, it is only one of several issues that should be considered. Environmental and social issues, for example, should also be considered when making planning and policy decisions. The above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

Summary of Fiscal Impact Analysis Results

Cumulative Fiscal Impact Results

Cumulative net fiscal results below provide detail on total projected revenues and total projected expenditures over the 20-year period for the **entire study area (FAZ 1-4) combined**. All revenues (General Fund, Special Revenue Funds, and Capital Revenues) and operating and capital expenditures are captured in the figure below.

Figure 3. Cumulative (20-Year) Fiscal Impact Results (Fiscal Analysis Zones 1-4)

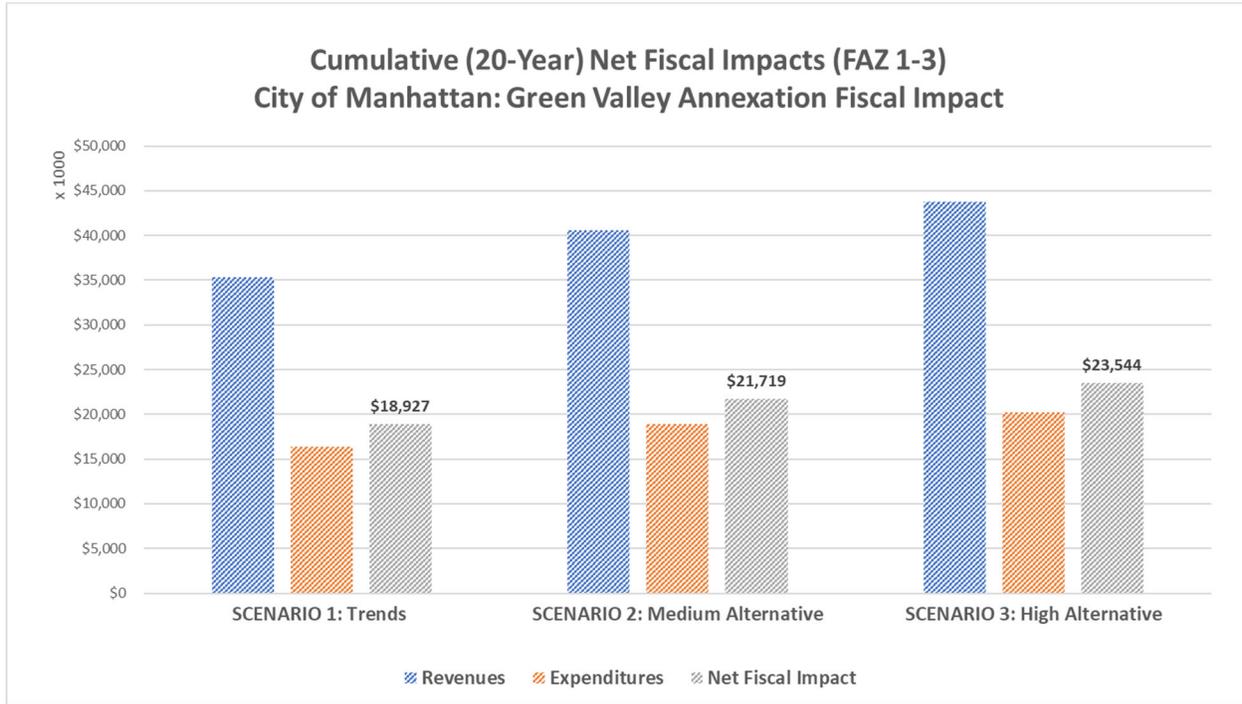


As shown in the figure above, surpluses are generated in all scenarios over the 20-year projection period, ranging from a cumulative net surplus from \$5.2 million in Scenario 1 to \$18.4 million in Scenario 3.

Scenario 3, reflecting the largest amount of growth, generates the largest relative positive fiscal results of the three scenarios.

Fiscal Analysis Zone 4 is projected to generate deficits based on the assumptions in this study. Including **Fiscal Analysis Zones 1, 2 and 3 only** produces the following **cumulative net fiscal results** over the 20-year period. All revenues (General Fund, Special Revenue Funds, and Capital Revenues) and operating and capital expenditures are captured in the figure below.

Figure 4. Cumulative (20-Year) Fiscal Impact Results (Fiscal Analysis Zones 1-3)

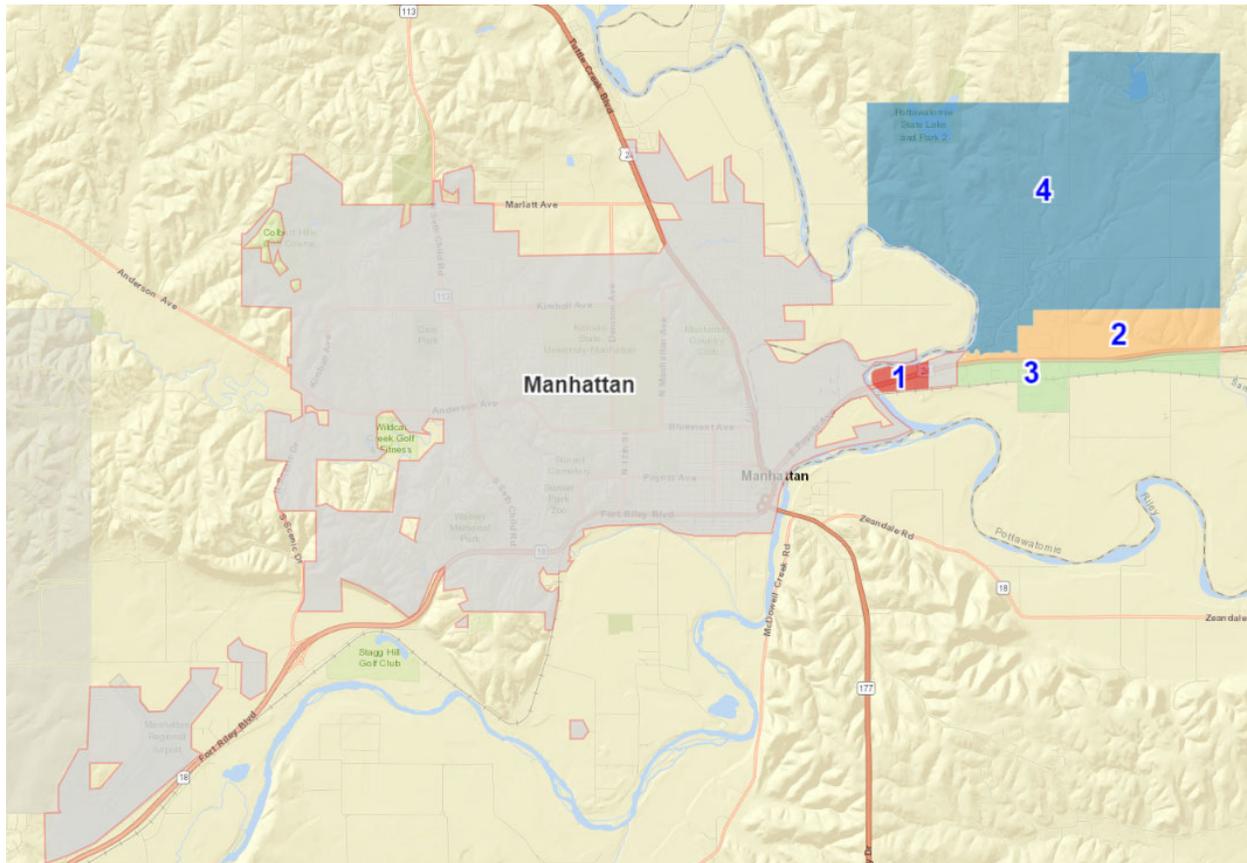


As shown in the figure above, surpluses are generated in all scenarios over the 20-year projection period for FAZ 1-3, ranging from a cumulative net surplus from almost \$19 million in Scenario 1 to \$23.5 million in Scenario 3. (Note: the scale above differs from the scale used in Figure 3.)

BACKGROUND

The City of Manhattan is interested in understanding the fiscal impact of annexing the Green Valley area located in Pottawatomie County. The area is east of current City boundaries with the exception of an area east of the Blue River already annexed into the City. See Figure 5.

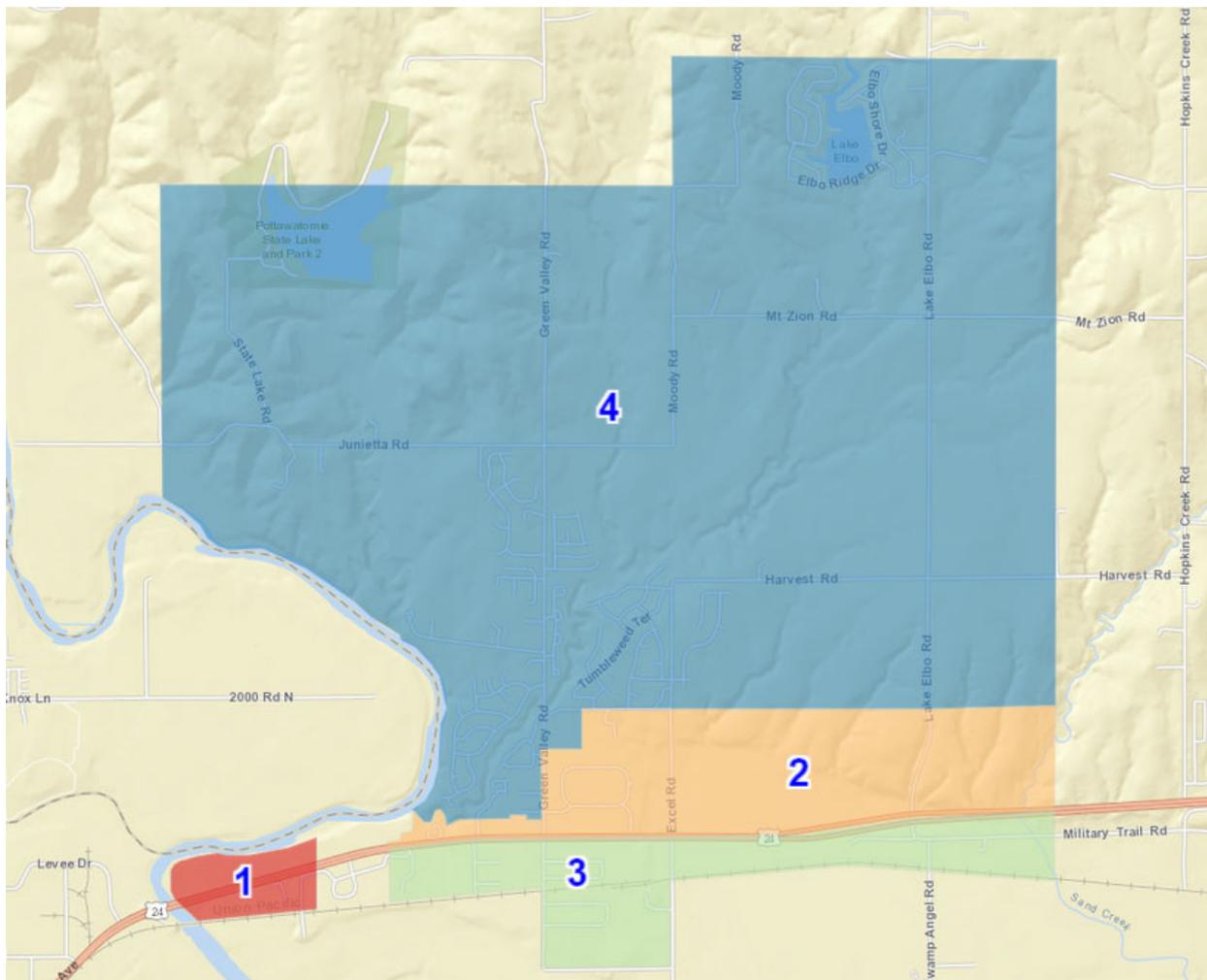
Figure 5. Green Valley Study Area: City Extent



The study area for the fiscal impact analysis of potential annexation is a portion of Blue Township in Pottawatomie County, commonly referred to as Green Valley. For purposes of the analysis, the study area has been divided into four smaller areas, referred to as Fiscal Analysis Zones (FAZ) in the study. The four areas are as follows and shown in Figure 1:

- **FAZ 1:** Area from the Blue River to the City-Annexed Area at Heritage Square
- **FAZ 2:** US 24 Corridor North of Route 24 (Including the Existing Industrial Park)
- **FAZ 3:** US 24 Corridor South of Route 24
- **FAZ 4:** The Rest of the Study Area North and West of the US 24 Corridor

Figure 6. Green Valley Study Area: Fiscal Analysis Zones



Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, Esri, HERE, Garmin, INCREMENT P, NGA, USGS.)

GROWTH SCENARIOS

Scenarios Analyzed

Multiple growth scenarios are used to test potential development in the study area. Growth projections for the Green Valley study area are based on trends, current plans, and market demand. Projections are not based purely on “land capacity,” which would determine how many acres are planned for a certain land use, assign an average density or floor area ratio, and project housing units and nonresidential square footage. Instead, this analysis captures market reality related to what has developed in recent years and what is in the pipeline, including areas that have been subdivided but not yet built.

Three scenarios are modeled in this analysis to test fiscal impacts of different paces of growth: Trends, Medium Growth, and High Growth.

- **Scenario 1. Trends Scenario:** Based on what is known today in terms of approved housing units and historical nonresidential development in the study area.
 - Initial residential growth projections in Study Area are assumed at 800 single family housing units over the next ten years; followed by another 750 single family units in the later ten years; along with a total of 50 multifamily units over the 20-year projection period. The resulting average number of housing units absorbed per year is approximately 85 units.
 - Nonresidential growth is based on recent growth trends and known projects. Total nonresidential development is projected at approximately 25,000 square feet per year, distributed among retail, office, industrial, and institutional. Retail development is projected based on a factor of 25 square feet per new resident, which reflects recent absorption of retail development in the study area. Institutional development includes known future school development.
- **Scenario 2. Medium Alternative Growth Scenario:** This scenario increases both residential and nonresidential development to test the possibility of the area absorbing a higher share of the region’s housing and nonresidential development. Recent development trends are used as the baseline for both residential and nonresidential development.
 - Housing unit absorption increases to 90 single family units per year, with the same proportional split between the first part of the projection period and the second half; as well as 100 total multifamily units.

- Nonresidential growth is increased commensurately from the Trends Scenario. Total nonresidential development is projected at almost 30,000 square feet per year, distributed among retail, office, industrial, and institutional. Retail development is projected based on a factor of 30 square feet per new resident. Institutional development includes known future school development.
- **Scenario 3. High Alternative Growth Scenario:** This scenario further increases both residential and nonresidential development above the Medium Growth Scenario to test the possibility of the area absorbing an even greater share of the region’s housing and nonresidential development.
 - Housing unit absorption increases to approximately 115 single family units per year, with the same proportional split between the first part of the projection period and the second half; along with 200 total multifamily units over the projection period.
 - Nonresidential growth projections are based more on market studies for retail (with a total increase of 200,000 square feet over the projection period), and an accelerated growth rate for office and industrial development, grounded in trends development in those categories. Institutional development includes known future school development.

See Figure 7 for a summary of the scenarios modeled in this analysis.

Figure 7. Growth Scenarios: Existing Development and Projected Growth (20-Year Total and Net Increase)

	Existing Development in Study Area	SCENARIO 1: Trends		SCENARIO 2: Medium Alternative		SCENARIO 3: High Alternative	
		Year 20	Net Increase	Year 20	Net Increase	Year 20	Net Increase
SINGLE FAMILY	1,439	2,989	1,550	3,239	1,800	3,739	2,300
MULTIFAMILY	0	50	50	100	100	200	200
TOTAL HOUSING UNITS	1,439	3,039	1,600	3,339	1,900	3,939	2,500
POPULATION	4,087	8,560	4,473	9,341	5,254	10,903	6,816
RETAIL SF	41,349	153,174	111,825	198,969	157,620	241,349	200,000
OFFICE SF	59,649	78,649	19,000	88,149	28,500	97,649	38,000
INDUSTRIAL SF	290,743	594,743	304,000	632,743	342,000	670,743	380,000
INSTITUTIONAL SF	89,742	299,742	210,000	299,742	210,000	299,742	210,000
TOTAL SF	481,483	1,126,308	644,825	1,219,603	738,120	1,309,483	828,000
TOTAL JOBS	805	1,771	967	1,967	1,163	2,155	1,350

APPROACH AND MAJOR ASSUMPTIONS

Fiscal Impact Analysis

A fiscal impact analysis determines whether revenues generated by development are sufficient to cover the resulting costs for service and facility demands placed on a jurisdiction. Fiscal analysis enables local governments to estimate the difference between the costs of providing services to development and the taxes, user fees, and other revenues that will be collected by the government from new development.

The fiscal impact analysis conducted on potential annexation of the Green Valley by the City of Manhattan uses a marginal cost methodology to project revenues and expenditures (operating and capital) generated by existing and projected development.

Service level and revenue assumptions are based on TischlerBise’s interviews with City departments, follow-up discussions with staff, detailed analysis of City budgets and actuals, and other relevant documents. Additionally, our fiscal impact analysis experience conducting over 800 fiscal impact analyses nationwide was beneficial to this effort.

Assumptions are outlined in the Appendices to this report. Calculations are performed using a customized fiscal impact model designed specifically by TischlerBise for this assignment.

For this analysis, all revenues and expenditures directly attributable to new development—by type of development—are included. Funds modeled in this analysis include the General Fund and Special Revenue Funds. Enterprise funds (e.g., utilities) are not integrated into the results of this analysis as they are assumed to be self-sufficient, however a summary of utility cost implications is included for discussion purposes.

Some revenues and expenditures are not expected to be affected by development and are therefore considered “fixed” in this analysis. TischlerBise reviewed City budgets and financial reports, available supporting documentation, and interviewed staff to develop baseline assumptions for the analysis.

Level of Service

Revenue and cost projections are based on a “snapshot approach” in which it is assumed the City’s current levels of service will continue through the 20-year analysis period—given discussions and confirmation with City staff. A “snapshot” approach does not attempt to speculate about how levels of service, revenues, policies, and other factors will change over time. Instead, it evaluates the fiscal impact to the City of annexing Green Valley today and in the future. Appendix B provides further detail on level-of-service assumptions.

Revenue Structure

Revenues are projected assuming that the current revenue structures and rates for the City of Manhattan, as set in FY2018 will not change during the analysis period.

It should be noted that other development funding options are not included in this analysis, including tools such as Tax Increment Financing (TIF), Community Improvement Districts, Transportation Development Districts, utility districts, development agreements, one-time fees, or grants.

Inflation Rate

The rate of inflation is assumed to be zero throughout the projection period, and revenue and expenditure projections are in constant 2018 dollars. This assumption is in accord with budget data and avoids the difficulty of speculating on inflation rates and their effect on revenue categories. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time. In general, including inflation is complicated and unpredictable. Using constant dollars avoids these issues.

Timing

A note on timing of the study: The base year for the study is 2018, prior to the onset of the COVID-19 pandemic as well as prior to release of updated Census 2020 population estimates. Development activity has continued as the study was being finalized. Therefore, as the City continues exploration of annexation and potentially moves toward service plans, demographic estimates and projections will need to be updated accordingly.

Non-Fiscal Evaluations

It should be noted that while a fiscal impact analysis is an important consideration in planning and policy decisions, it is only one of several issues that should 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 annexation and potential growth.

Funds Included

In addition to the General Fund, capital revenue (Bond and Interest Fund), capital expenditures, and Special Revenue Funds are included in the analysis. An inventory of the Special Revenue Funds included (and excluded) in the analysis and their accompanying *main* revenue sources and rates are shown below. (It should be noted that other *minor* revenue sources in these Special Revenue Funds are included in the analysis as well (not shown below).)

Figure 8. Special Revenue Funds Summary

Fund #	Fund Name	Include?	Prop Tax	Tax rate (FY18)	Sales Tax	Notes
			Levy	per \$1000	Rate	
102	City University	NO				
103	Aggieville BID	NO				
104	DowntownBID	NO				
105	Economic Development	NO				
106	Employee Benefits	YES	x	\$2.830		
107	Fire Equipment Reserve	YES	x	\$0.454		
108	Fire Pension KP&F	YES	x	\$1.573		
109	General Improvement	NO				
110	Industrial Promotion Fund	NO				
111	Library	YES	x	\$4.291		
112	Library Employee Benefits	YES	x	\$0.999		
113	Park Development Fund	NO				Not a separate rev source
	Recreation and Trails Fund	YES			0.250%	Sales tax (2017); 10-year sunset (last year modeled 2027)
115	Sales Tax Fund	YES			1.000%	Sales tax
116	Special Alcohol Programs	NO				This portion of liquor tax is for grants
117	Special Parks and Recreation	YES				Expenditures are captured under Capital Expenditures
118	Special Street and Highway Maintenance	YES				
119	Special Sunset Zoo	NO				
121	Tourism and Convention Promotion	NO				Transient tax for tourism; No lodging uses projected
124	Riley County Police Dept	YES	x	\$27.705		
126	Capital Improvement Reserve	NO				
127	Downtown Redevelopment TIF	NO				
129	Special Street Maintenance Fund	YES			0.200%	Sales tax (2016); 10-year sunset (last year modeled 2026)
301	Bond and Interest	YES	x	\$4.688		Output as capital revenue
Subtotal Special Revenue Funds				\$42.540		
General Fund				\$5.817		
GRAND TOTAL				\$48.357		

FISCAL IMPACT ANALYSIS RESULTS

Fiscal impact results are presented in several ways for the growth scenario modeled:

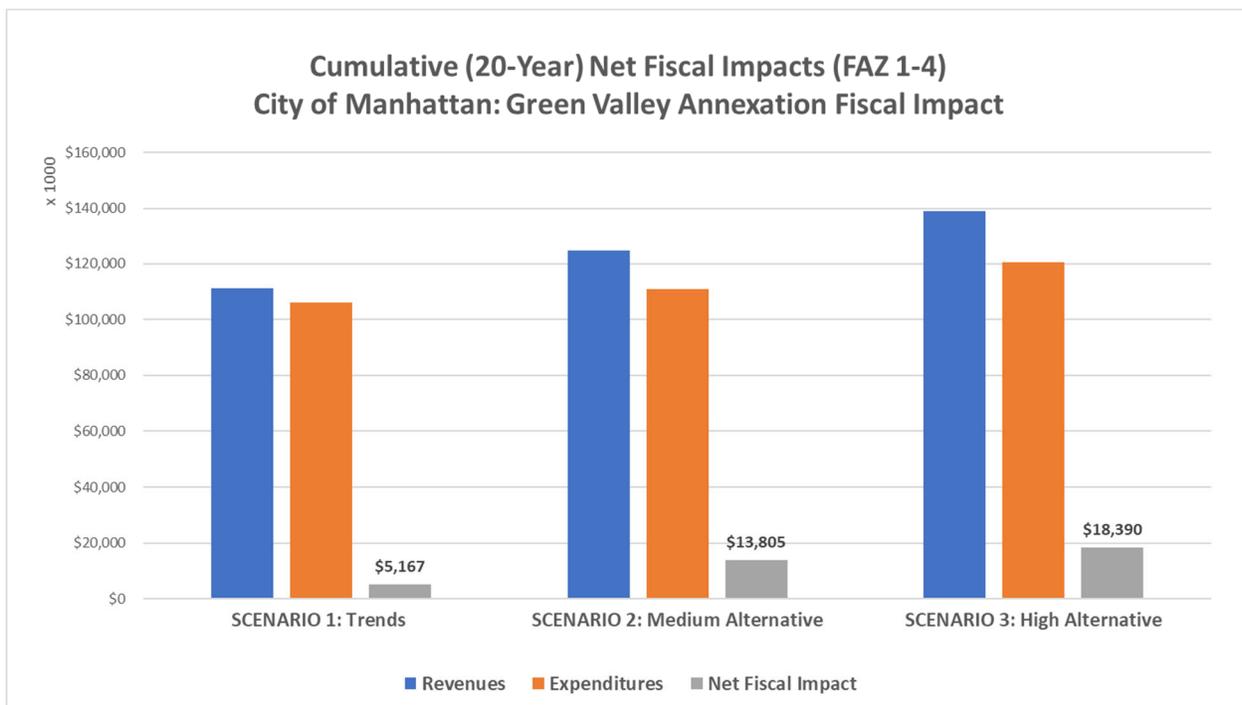
- Results for Fiscal Analysis Zones 1-4 are presented first followed by results for Fiscal Analysis Zones 1-3.
- Results for both sets of geographies are presented in two ways:
 - **Cumulative** net fiscal results are shown first.
 - Cumulative net results convey the projected grand total revenues minus grand total expenditures over the 20-year period to determine the overall net surplus or deficit.
 - **Annual** results are shown next.
 - Results convey revenues minus expenditures in each year without carrying surplus revenues (or deficits) forward.

Fiscal Analysis Zones 1-4

Cumulative Fiscal Impact Results

Cumulative net fiscal results below provide detail on total projected revenues and total projected expenditures over the 20-year period for the **entire study area (FAZ 1-4) combined**. All revenues (General Fund, Special Revenue Funds, and Capital Revenues) and operating and capital expenditures are captured in the figure below.

Figure 9. Cumulative (20-Year) Fiscal Impact Results (Fiscal Analysis Zones 1-4)



As shown in the figure above, surpluses are generated in all scenarios over the 20-year projection period, ranging from a cumulative net surplus from \$5.2 million in Scenario 1 to \$18.4 million in Scenario 3.

The figure below provides detail on the cumulative results by fund group. Revenues included under Special Revenue Funds include property taxes (in several funds) and the Sales Tax Fund. See Figure 8.

Figure 10. Cumulative (20-Year) Fiscal Impact Results by Fund Group (Fiscal Analysis Zones 1-4)

CUMULATIVE FISCAL IMPACTS - Scenario Comparisons [80% Riley County Police Department Costs]
City of Manhattan: Green Valley Annexation Fiscal Impact

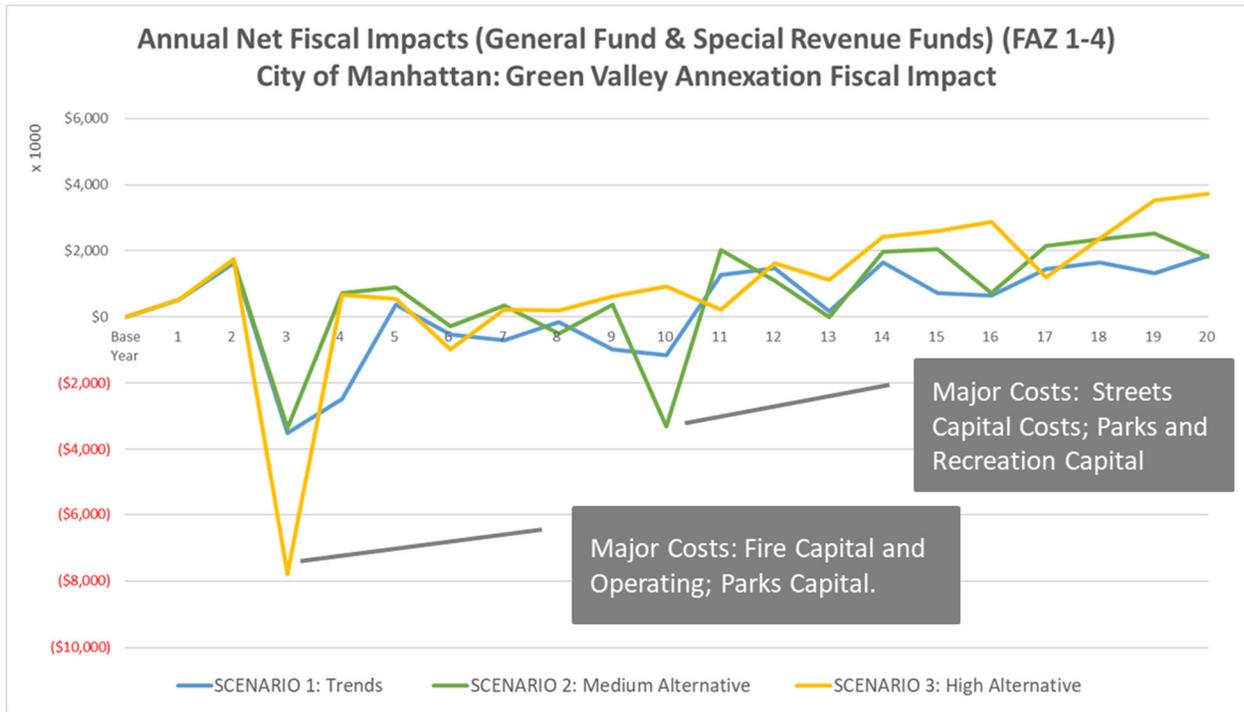
Category	SCENARIO (FY18\$)		
	SCENARIO 1: Trends	SCENARIO 2: Medium Alternative	SCENARIO 3: High Alternative
General Fund Operating Revenues	\$30,870,678	\$35,669,306	\$40,156,087
General Fund Operating Expenditures	\$55,060,483	\$57,015,454	\$62,642,680
GENERAL FUND NET FISCAL IMPACT	(\$24,189,805)	(\$21,346,147)	(\$22,486,592)
<i>Special Revenue Funds</i>			
Special Revenue Fund Revenues	\$73,457,601	\$81,500,307	\$90,404,349
Special Revenue Fund Expenditures	\$22,795,706	\$24,014,775	\$26,266,289
SPECIAL REVENUE FUND NET FISCAL IMPACT	\$50,661,895	\$57,485,533	\$64,138,061
<i>Capital</i>			
Capital Revenues	\$6,954,171	\$7,576,392	\$8,374,482
Capital Expenditures	\$28,258,894	\$29,911,094	\$31,636,094
CAPITAL NET FISCAL IMPACT	(\$21,304,723)	(\$22,334,702)	(\$23,261,611)
<i>GRAND TOTAL</i>			
GRAND TOTAL REVENUES	\$111,282,450	\$124,746,005	\$138,934,919
GRAND TOTAL EXPENDITURES	\$106,115,083	\$110,941,322	\$120,545,062
GRAND TOTAL NET FISCAL IMPACT	\$5,167,367	\$13,804,683	\$18,389,857

Annual Fiscal Impact Results

The charts below show the annual net fiscal results to the City for the three scenarios over the 20-year development period. By showing annual results, 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.

Net fiscal results are **revenues minus costs in each year**, including operating and capital costs. Data points above the \$0 line represent annual surpluses; points below the \$0 line represent annual deficits. Surpluses in any one year are not carried forward to the next year.

Figure 11. Annual Fiscal Impact Results (Fiscal Analysis Zones 1-4)



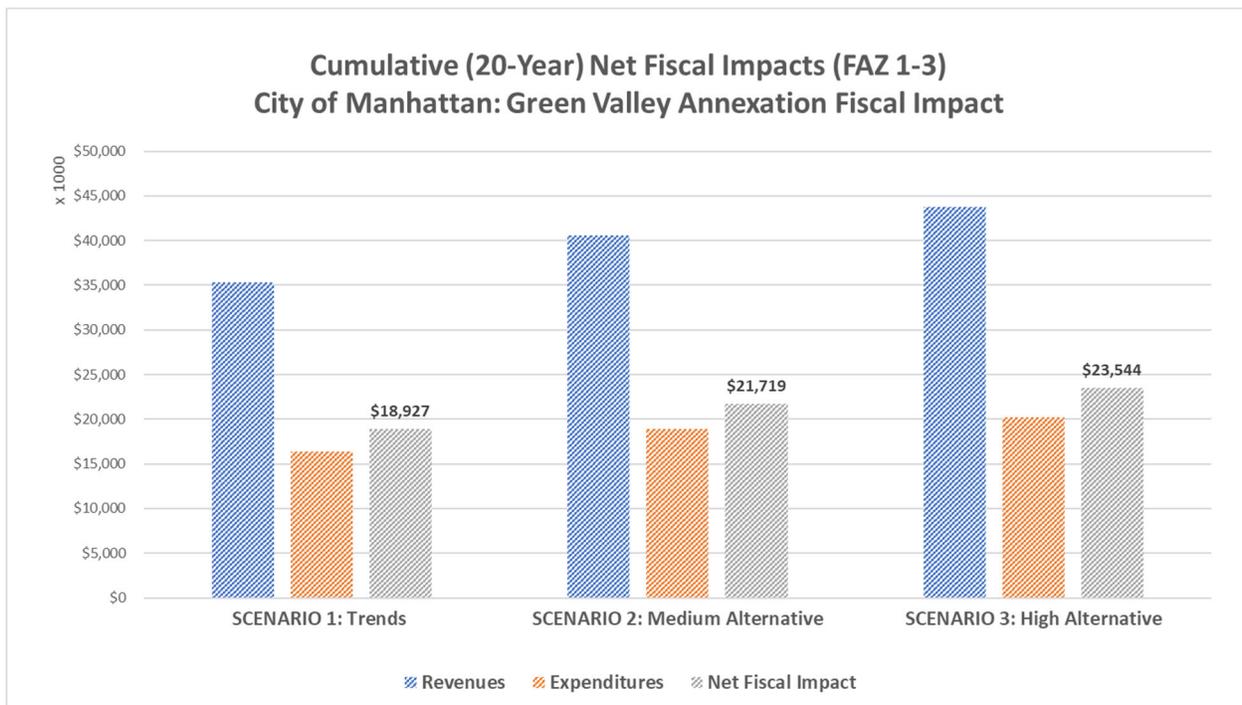
Annual fiscal results for all four Fiscal Analysis Zones generate initial net deficits due to capital expenditures in FAZ 4. By year 11, all growth scenarios are projected to generate positive results.

Fiscal Analysis Zones 1-3

Cumulative Fiscal Impact Results

Fiscal Analysis Zone 4 is projected to generate deficits based on the assumptions in this study. Results for **Fiscal Analysis Zones 1, 2 and 3 only** are shown in this section. **Cumulative net fiscal results**—totals over the 20-year period are shown below. All revenues (General Fund, Special Revenue Funds, and Capital Revenues) and operating and capital expenditures from existing and future growth in FAZ 1-3 are captured in the figure below.

Figure 12. Cumulative (20-Year) Fiscal Impact Results (Fiscal Analysis Zones 1-3)



As shown in the figure above, surpluses are generated in all scenarios over the 20-year projection period for FAZ 1-3, ranging from a cumulative net surplus from almost \$19 million in Scenario 1 to \$23.5 million in Scenario 3. (Note: the scale above differs from the scale used in Figure 9.)

Further detail is provided below by fund groupings. (Note: revenues included under Special Revenue Funds include property taxes (in several funds) and the Sales Tax Fund. See Figure 8.)

Figure 13. Cumulative (20-Year) Fiscal Impact Results by Fund Group (Fiscal Analysis Zones 1-3)

Cumulative Revenue Summary - Scenario Comparisons

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)		
	SCENARIO 1: Trends	SCENARIO 2: Medium Alternative	SCENARIO 3: High Alternative
	FAZ 1-3	FAZ 1-3	FAZ 1-3
General Fund	\$11,158,395	\$13,616,621	\$15,031,394
Special Revenue Funds	\$22,295,931	\$25,012,416	\$26,701,343
Capital	\$1,885,005	\$1,991,068	\$2,076,368
TOTAL	\$35,339,331	\$40,620,105	\$43,809,105

Cumulative Expenditures Summary - Scenario Comparisons [80% Riley County Police Department Costs]

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)		
	SCENARIO 1: Trends	SCENARIO 2: Medium Alternative	SCENARIO 3: High Alternative
	FAZ 1-3	FAZ 1-3	FAZ 1-3
General Fund	\$6,425,735	\$8,277,304	\$9,241,664
Special Revenue Funds [^]	\$3,945,653	\$4,583,213	\$4,982,132
Capital	\$6,040,870	\$6,040,870	\$6,040,870
TOTAL	\$16,412,259	\$18,901,388	\$20,264,666

[^] 80% Riley County Police Department Costs

Cumulative Net Fiscal Impact Summary - Scenario Comparisons [80% Riley County Police Department Costs]

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)		
	SCENARIO 1: Trends	SCENARIO 2: Medium Alternative	SCENARIO 3: High Alternative
	FAZ 1-3	FAZ 1-3	FAZ 1-3
<i>Grand Total</i>			
TOTAL REVENUES	\$35,339,331	\$40,620,105	\$43,809,105
TOTAL EXPENDITURES[^]	\$16,412,259	\$18,901,388	\$20,264,666
NET FISCAL IMPACT	\$18,927,073	\$21,718,717	\$23,544,438

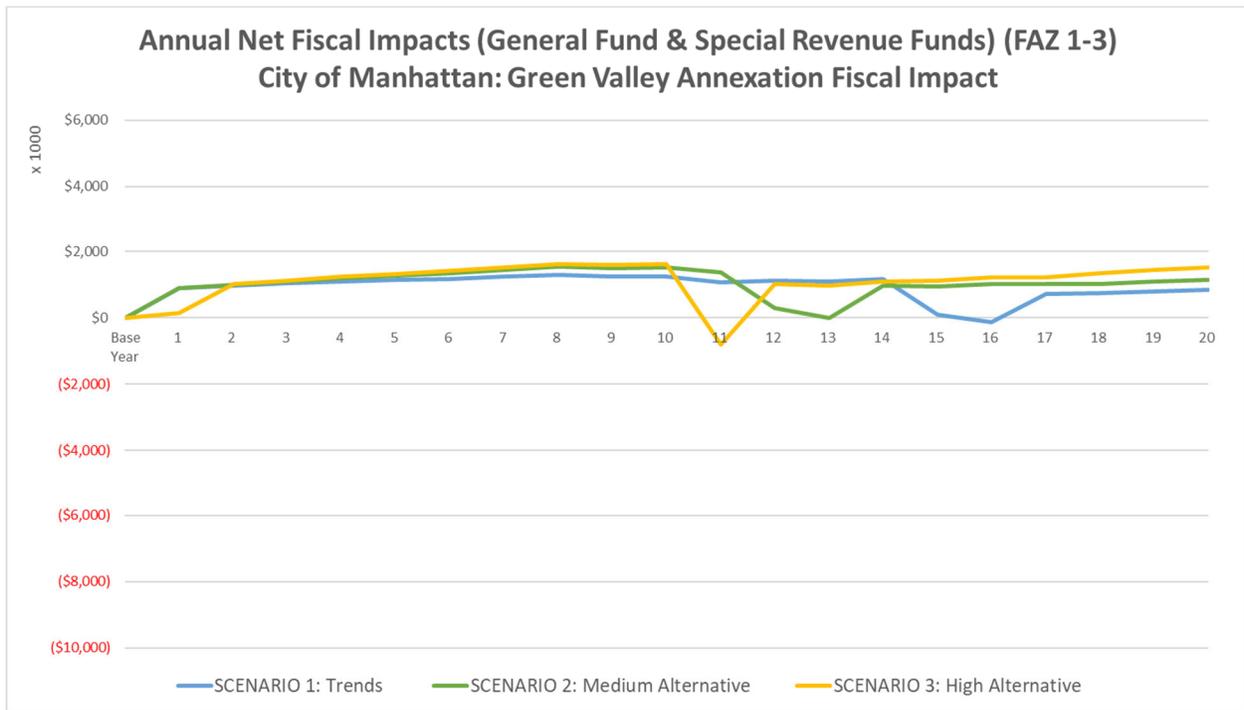
[^] 80% Riley County Police Department Costs

Annual Fiscal Impact Results

The charts below show the annual net fiscal results to the City for the three scenarios over the 20-year development period for FAZ 1-3. By showing annual results, 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.

Net fiscal results are **revenues minus costs in each year**, including operating and capital costs. Data points above the \$0 line represent annual surpluses; points below the \$0 line represent annual deficits. Surpluses in any one year are not carried forward to the next year. (Note: the scale of the below figure is the same as Figure 11.)

Figure 14. Annual Fiscal Impact Results (Fiscal Analysis Zones 1-3)

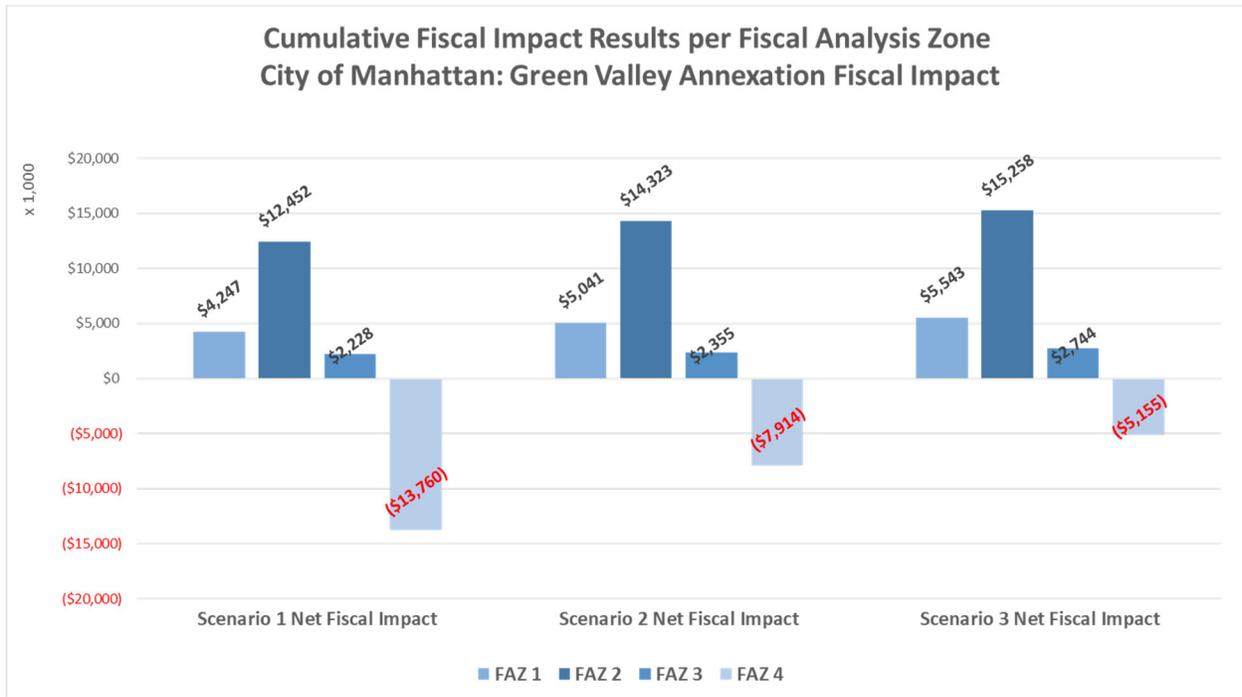


Annual fiscal results for Fiscal Analysis Zones 1-3 combined generate positive results generally, with the exception of Year 11 for the high growth alternative due to the need for Street capital improvements.

Fiscal Impact Results for Individual Fiscal Analysis Zones

Fiscal impact analysis results are shown for each scenario by Fiscal Analysis Zone in Figure 15. As shown, FAZ 1-3 each are projected to generate cumulative positive fiscal results with FAZ 4 projected to generate deficits. Negative fiscal results are generated for FAZ 4 due to the need for additional capital facilities (e.g., Fire Station) and related operating impacts.

Figure 15. Cumulative (20-Year) Fiscal Impact Results by Fiscal Analysis Zone



REVENUE AND EXPENDITURE DETAIL

Revenue and expenditure projection methodologies are explained in detail in the Appendix to this report, “Level of Service / Cost and Revenue Assumptions and Methodologies.” Summaries of outputs are provided in this section. **Note: the outputs shown here are for all four FAZ combined (unless otherwise noted).**

Revenues

Further details on revenue and expenditure projections are presented and discussed in this section.

General Fund

Cumulative General Fund revenues (total over 20 years) are shown below in Figure 16. Cumulative General Fund revenues from all four FAZ areas combined (FAZ 1-4) are projected at \$31 to \$40 million. Revenues are shown in constant 2018 dollars.

Figure 16. Cumulative Results: General Fund Revenue (Years 1-20) [FAZ 1-4]

Cumulative General Fund Revenue Detail - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
BEGINNING FUND BALANCE	\$0	0%	\$0	0%	\$0	0%
TAXES	\$25,239,358	82%	\$29,299,233	82%	\$32,754,704	82%
LICENSES & PERMITS	\$926,449	3%	\$1,009,292	3%	\$1,116,471	3%
SERVICES & SALES	\$1,096,125	4%	\$1,193,448	3%	\$1,332,065	3%
FINES	\$2,528,582	8%	\$2,799,126	8%	\$3,179,578	8%
CONTRIBUTIONS & OTHER REVENUE	\$0	0%	\$0	0%	\$0	0%
RISK MANAGEMENT	\$0	0%	\$0	0%	\$0	0%
TRANSFERS	\$0	0%	\$0	0%	\$0	0%
AIRPORT	\$0	0%	\$0	0%	\$0	0%
FIRE	\$0	0%	\$0	0%	\$0	0%
DOUGLASS CENTER	\$8,816	0%	\$11,167	0%	\$14,472	0%
POOLS	\$317,525	1%	\$402,198	1%	\$521,269	1%
DEPOT & PAVILION	\$0	0%	\$0	0%	\$0	0%
RECREATION	\$511,520	2%	\$647,926	2%	\$839,746	2%
DISCOVERY CENTER	\$162,732	1%	\$206,127	1%	\$267,151	1%
ANIMAL SHELTER	\$79,572	0%	\$100,791	0%	\$130,631	0%
TOTAL	\$30,870,678	100%	\$35,669,306	100%	\$40,156,087	100%

As shown above, the majority of revenue generated is from taxes, which includes property and sales tax revenues from current and future growth in the areas.

Special Revenue Funds

The analysis includes the Special Revenue Funds identified below in Figure 17.

Figure 17. Special Revenue Funds Summary

Fund #	Fund Name	Include?	Prop Tax	Tax rate (FY18)	Sales Tax	Notes
			Levy	per \$1000	Rate	
102	City University	NO				
103	Aggieville BID	NO				
104	DowntownBID	NO				
105	Economic Development	NO				
106	Employee Benefits	YES	x	\$2.830		
107	Fire Equipment Reserve	YES	x	\$0.454		
108	Fire Pension KP&F	YES	x	\$1.573		
109	General Improvement	NO				
110	Industrial Promotion Fund	NO				
111	Library	YES	x	\$4.291		
112	Library Employee Benefits	YES	x	\$0.999		
113	Park Development Fund	NO				Not a separate rev source
	Recreation and Trails Fund	YES			0.250%	Sales tax (2017); 10-year sunset (last year modeled 2027)
115	Sales Tax Fund	YES			1.000%	Sales tax
116	Special Alcohol Programs	NO				This portion of liquor tax is for grants
117	Special Parks and Recreation	YES				Expenditures are captured under Capital Expenditures
118	Special Street and Highway Maintenance	YES				
119	Special Sunset Zoo	NO				
121	Tourism and Convention Promotion	NO				Transient tax for tourism; No lodging uses projected
124	Riley County Police Dept	YES	x	\$27.705		
126	Capital Improvement Reserve	NO				
127	Downtown Redevelopment TIF	NO				
129	Special Street Maintenance Fund	YES			0.200%	Sales tax (2016); 10-year sunset (last year modeled 2026)
301	Bond and Interest	YES	x	\$4.688		Output as capital revenue
Subtotal Special Revenue Funds					\$42.540	
General Fund					\$5.817	
GRAND TOTAL					\$48.357	

Cumulative Special Revenue Fund revenues are projected at a range of approximately \$73 to \$90 million as shown in Figure 18. Riley County Police Department is funded through a dedicated property tax levy. Revenues are shown in constant 2018 dollars.

Figure 18. Cumulative Results Special Revenue Fund Revenues (Years 1-20) [FAZ 1-4]

Cumulative Special Revenue Funds Revenue Detail - Scenario Comparisons

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
EMPLOYEE BENEFIT CONTRIBUTION	\$4,571,979	6%	\$4,984,546	6%	\$5,519,536	6%
FIRE EQUIPMENT RESERVE	\$751,541	1%	\$819,514	1%	\$907,913	1%
FIRE PENSION	\$2,523,299	3%	\$2,750,843	3%	\$3,045,653	3%
LIBRARY; LIBRARY EMPLOYEE BENEFIT CONTRIBUTION	\$8,491,044	12%	\$9,256,788	11%	\$10,248,974	11%
RECREATION AND TRAILS FUND	\$614,083	1%	\$730,409	1%	\$773,167	1%
SALES TAX FUND	\$7,641,494	10%	\$9,640,267	12%	\$10,847,216	12%
SPECIAL PARKS AND RECREATION FUND	\$0	0%	\$0	0%	\$0	0%
SPECIAL STREET AND HIGHWAY FUND	\$3,748,469	5%	\$4,099,835	5%	\$4,593,943	5%
RILEY COUNTY POLICE DEPARTMENT	\$44,626,118	61%	\$48,651,967	60%	\$53,870,548	60%
SPECIAL STREET MAINTENANCE FUND	\$489,576	1%	\$566,139	1%	\$597,399	1%
TOTAL	\$73,457,601	100%	\$81,500,307	100%	\$90,404,349	100%

Capital Revenues

Cumulative Capital revenues are projected at a range of \$7 to 8.4 million as shown in Figure 19. Revenues are generated from a dedicated property tax levy. Results are shown in constant 2018 dollars.

Figure 19. Cumulative Results Special Fund Revenues: Capital Revenues (Years 1-20) [FAZ 1-4]

Cumulative Capital Revenues - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
TOTAL CAPITAL REVENUE	\$6,954,171	100%	\$7,576,392	100%	\$8,374,482	100%
TOTAL	\$6,954,171	100%	\$7,576,392	100%	\$8,374,482	100%

Expenditures

All variable operating expenditures are projected—including personnel and operating costs. Capital improvement expenditures are discussed in a separate section.

General Fund Expenditures

For most City Organizations, operations and personnel costs are projected separately. It should be noted that departments may have some portion of their budget considered “fixed” and assumed to not be affected by growth. That is, existing operations are anticipated to be able to absorb additional impacts from growth. The Level of Service Document provides detail on operating cost projection methodologies. General Fund operating expenditure results are provided in this section for the 20-year cumulative total amounts.

Figure 20. Cumulative Results: General Fund Expenditures (Years 1-20) [FAZ 1-4]

Cumulative Operating Expenditures Detail - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
Administration	\$0	0%	\$0	0%	\$0	0%
Finance	\$0	0%	\$0	0%	\$0	0%
Airport	\$0	0%	\$0	0%	\$0	0%
Fire	\$23,795,918	43%	\$24,082,188	42%	\$24,423,689	39%
Human Resources	\$959,231	2%	\$962,981	2%	\$973,507	2%
Public Works	\$17,514,774	32%	\$18,903,678	33%	\$21,506,091	34%
Parks and Recreation	\$5,338,393	10%	\$4,864,613	9%	\$6,631,672	11%
Community Development	\$995,565	2%	\$996,308	2%	\$997,365	2%
Legal Department	\$2,174,111	4%	\$2,532,611	4%	\$2,849,128	5%
General Services	\$3,311,182	6%	\$3,610,721	6%	\$4,070,839	6%
Outside Services	\$971,308	2%	\$1,062,355	2%	\$1,190,389	2%
Municipal Parking Lots	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$55,060,483	100%	\$57,015,454	100%	\$62,642,680	100%

As shown above, Fire and Public Works comprise most of the projected costs to serve Green Valley FAZ 1-4. Note: Police services are captured under Special Revenue Funds and shown below.

Special Revenue Fund Expenditures

Special Revenue Funds account for services that are funded through variable revenue sources (i.e., revenues that are affected by growth). The Special Revenue Funds included in the analysis are shown in the following figure along with the projected costs captured within the respective fund.

Figure 21. Cumulative Results: Special Fund Expenditures (Years 1-20) [FAZ 1-4]

Cumulative Special Fund Expenditures Detail - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
EMPLOYEE BENEFIT CONTRIBUTION	\$8,265,329	36%	\$8,617,333	36%	\$9,605,653	37%
FIRE EQUIPMENT RESERVE	\$0	0%	\$0	0%	\$0	0%
FIRE PENSION	\$0	0%	\$0	0%	\$0	0%
LIBRARY; LIBRARY EMPLOYEE BENEFIT CONTRIBUTION	\$735,094	3%	\$931,119	4%	\$1,206,779	5%
RECREATION AND TRAILS FUND	\$0	0%	\$0	0%	\$0	0%
SALES TAX FUND	\$0	0%	\$0	0%	\$0	0%
SPECIAL PARKS AND RECREATION FUND	\$0	0%	\$0	0%	\$0	0%
SPECIAL STREET AND HIGHWAY FUND	\$6,995,284	31%	\$7,666,323	32%	\$8,653,857	33%
RILEY COUNTY POLICE DEPARTMENT*	\$6,800,000	30%	\$6,800,000	28%	\$6,800,000	26%
SPECIAL STREET MAINTENANCE FUND	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$22,795,706	100%	\$24,014,775	100%	\$26,266,289	100%

* Reflects 80% costs

Note: Special Parks and Recreation Fund expenditures are captured under **Parks and Recreation Capital Expenditures**.

Capital Expenditure Projections

Capital costs and infrastructure improvements to serve new development are modeled based on demand generated by existing and future development in Green Valley FAZ 1-4.

The analysis includes capital improvement costs that are funded with local funds and are “pay as you go” expenditures (as opposed to debt financed). By assuming pay-go funding, the full costs of the improvements occur in the year that the improvement is triggered.

For vehicles and equipment, capital cost projections reflect both the initial cost of purchase as well as the cost to replace the unit once the assumed useful life is reached.

A summary of projected total capital costs over the 20-year period are shown below in Figure 22. Further detail on the improvements triggered by growth in Green Valley is shown in Figure 23.

Figure 22. Summary of Capital Costs

Cumulative Capital Impacts - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)					
	SCENARIO 1: Trends	%	SCENARIO 2: Medium Alternative	%	SCENARIO 3: High Alternative	%
Streets	\$19,268,894	68%	\$20,141,094	67%	\$20,141,094	64%
Parks and Recreation	\$4,740,000	17%	\$5,520,000	18%	\$7,245,000	23%
Fire	\$3,800,000	13%	\$3,800,000	13%	\$3,800,000	12%
Police	\$450,000	2%	\$450,000	2%	\$450,000	1%
Library	\$0	0%	\$0	0%	\$0	0%
General Government	\$0	0%	\$0	0%	\$0	0%
TOTAL	\$28,258,894	100%	\$29,911,094	100%	\$31,636,094	100%

Figure 23. Capital Facility Needs to Serve Green Valley

Cumulative Capital Needs
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	Unit	SCENARIO (FY18\$)						
		SCENARIO 1: Trends		SCENARIO 2: Medium Alternative		SCENARIO 3: High Alternative		
		20-Yr Cumulative Added*	\$	20-Yr Cumulative Added*	\$	20-Yr Cumulative Added*	\$	
CAPITAL NEEDS								
STREETS	Capacity Improvements: FAZ 1	\$	0	\$1,715,411	0	\$1,715,411	0	\$1,715,411
	Capacity Improvements: FAZ 2	\$	0	\$1,029,935	0	\$1,029,935	0	\$1,029,935
	Capacity Improvements: FAZ 3	\$	0	\$1,443,287	0	\$1,443,287	0	\$1,443,287
	Capacity Improvements: FAZ 4	\$	0	\$10,719,260	0	\$10,719,260	0	\$10,719,260
	Road Crew Vehicles and Equipment	Crew	5	\$4,361,000	6	\$5,233,200	6	\$5,233,200
PARKS AND RECREATION	Mini Park	Acre	0	\$0	0	\$0	0	\$0
	Neighborhood Park	Acre	10	\$800,000	12	\$960,000	16	\$1,280,000
	Community Park/Sports Complex	Acre	34	\$2,720,000	41	\$3,280,000	53	\$4,240,000
	Trails	Linear Miles	3	\$1,125,000	3	\$1,125,000	4	\$1,500,000
	Indoor Recreation Facilities	Square Feet	0	\$0	0	\$0	0	\$0
	Parks and Recreation Vehicles	Vehicles	1	\$70,000	2	\$105,000	3	\$175,000
	Parks and Rec Building Services Vehicles	Vehicles	0	\$0	0	\$0	0	\$0
	Animal Shelter Vehicles	Vehicles	1	\$25,000	1	\$50,000	1	\$50,000
FIRE & EMERGENCY SERVICES	Fire Station	Station	1	\$2,500,000	1	\$2,500,000	1	\$2,500,000
	Quint	Vehicle	1	\$1,300,000	1	\$1,300,000	1	\$1,300,000
POLICE	Police Station	Station	0	\$0	0	\$0	0	\$0
	Patrol Vehicles	Vehicle	10	\$450,000	10	\$450,000	10	\$450,000
LIBRARY	Libraries Existing LOS	Square Feet	0	\$0	0	\$0	0	\$0
	Library Vehicles	Vehicle	0	\$0	0	\$0	0	\$0
GENERAL GOVT.	General Government Facilities	Square Feet	0	\$0	0	\$0	0	\$0
	General Government Vehicles	Vehicle	0	\$0	0	\$0	0	\$0
TOTAL				\$28,258,894		\$29,911,094		\$31,636,094

* Includes replacement vehicles

Revenue and Expenditures by Individual Fiscal Analysis Zones

Summaries of Revenue and Expenditure outputs are provided in this section for each scenario by FAZ.

Figure 24. Scenario 1 Outputs by FAZ

Cumulative Revenue Summary - Scenario Comparisons

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 1: Trends				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$2,293,508	\$6,017,976	\$2,846,912	\$19,712,283	\$30,870,678
Special Revenue Funds	\$4,581,181	\$10,902,974	\$6,811,776	\$51,161,670	\$73,457,601
Capital	\$383,019	\$857,181	\$644,805	\$5,069,166	\$6,954,171
TOTAL	\$7,257,707	\$17,778,132	\$10,303,493	\$75,943,118	\$111,282,450

Cumulative Expenditures Summary - Scenario Comparisons [80% Riley County Police Department Costs]

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 1: Trends				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$947,744	\$1,817,601	\$3,660,390	\$48,634,747	\$55,060,483
Special Revenue Funds [^]	\$337,345	\$1,565,679	\$2,042,628	\$18,850,054	\$22,795,706
Capital	\$1,725,531	\$1,942,442	\$2,372,898	\$22,218,023	\$28,258,894
TOTAL	\$3,010,620	\$5,325,723	\$8,075,916	\$89,702,824	\$106,115,083

[^] 80% Riley County Police Department Costs

Cumulative Net Fiscal Impact Summary - Scenario Comparisons [80% Riley County Police Department Costs]

City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 1: Trends				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
<i>Grand Total</i>					
TOTAL REVENUES	\$7,257,707	\$17,778,132	\$10,303,493	\$75,943,118	\$111,282,450
TOTAL EXPENDITURES[^]	\$3,010,620	\$5,325,723	\$8,075,916	\$89,702,824	\$106,115,083
NET FISCAL IMPACT	\$4,247,088	\$12,452,409	\$2,227,576	(\$13,759,705)	\$5,167,367

Figure 25. Scenario 2 Outputs by FAZ

Cumulative Revenue Summary - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 2: Medium Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$2,696,799	\$7,506,341	\$3,413,481	\$22,052,685	\$35,669,306
Special Revenue Funds	\$5,020,569	\$12,502,943	\$7,488,905	\$56,487,892	\$81,500,307
Capital	\$399,443	\$914,822	\$676,803	\$5,585,324	\$7,576,392
TOTAL	\$8,116,811	\$20,924,105	\$11,579,188	\$84,125,900	\$124,746,005

Cumulative Expenditures Summary - Scenario Comparisons [80% Riley County Police Department Costs]
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 2: Medium Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$978,473	\$2,758,720	\$4,540,111	\$48,738,150	\$57,015,454
Special Revenue Funds [^]	\$371,499	\$1,900,255	\$2,311,459	\$19,431,561	\$24,014,775
Capital	\$1,725,531	\$1,942,442	\$2,372,898	\$23,870,223	\$29,911,094
TOTAL	\$3,075,503	\$6,601,418	\$9,224,467	\$92,039,934	\$110,941,322

[^] 80% Riley County Police Department Costs

Cumulative Net Fiscal Impact Summary - Scenario Comparisons [80% Riley County Police Department Costs]
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 2: Medium Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
<i>Grand Total</i>					
TOTAL REVENUES	\$8,116,811	\$20,924,105	\$11,579,188	\$84,125,900	\$124,746,005
TOTAL EXPENDITURES[^]	\$3,075,503	\$6,601,418	\$9,224,467	\$92,039,934	\$110,941,322
NET FISCAL IMPACT	\$5,041,308	\$14,322,688	\$2,354,721	(\$7,914,034)	\$13,804,683

Figure 26. Scenario 3 Outputs by FAZ

Cumulative Revenue Summary - Scenario Comparisons
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 3: High Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$2,923,333	\$8,355,141	\$3,752,921	\$25,124,693	\$40,156,087
Special Revenue Funds	\$5,281,868	\$13,470,407	\$7,949,068	\$63,703,007	\$90,404,349
Capital	\$411,729	\$959,321	\$705,318	\$6,298,115	\$8,374,482
TOTAL	\$8,616,930	\$22,784,869	\$12,407,306	\$95,125,814	\$138,934,919

Cumulative Expenditures Summary - Scenario Comparisons [80% Riley County Police Department Costs]
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 3: High Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
General Fund	\$954,596	\$3,442,819	\$4,844,248	\$53,401,016	\$62,642,680
Special Revenue Funds [^]	\$394,243	\$2,141,749	\$2,446,140	\$21,284,157	\$26,266,289
Capital	\$1,725,531	\$1,942,442	\$2,372,898	\$25,595,223	\$31,636,094
TOTAL	\$3,074,370	\$7,527,010	\$9,663,286	\$100,280,396	\$120,545,062

[^] 80% Riley County Police Department Costs

Cumulative Net Fiscal Impact Summary - Scenario Comparisons [80% Riley County Police Department Costs]
City of Manhattan: Green Valley Annexation Fiscal Impact

Category	SCENARIO (FY18\$)				
	SCENARIO 3: High Alternative				
	FAZ 1	FAZ 2	FAZ 3	FAZ 4	TOTAL
<i>Grand Total</i>					
TOTAL REVENUES	\$8,616,930	\$22,784,869	\$12,407,306	\$95,125,814	\$138,934,919
TOTAL EXPENDITURES[^]	\$3,074,370	\$7,527,010	\$9,663,286	\$100,280,396	\$120,545,062
NET FISCAL IMPACT	\$5,542,560	\$15,257,859	\$2,744,020	(\$5,154,581)	\$18,389,857

APPENDIX A: KEY DEMOGRAPHIC / LAND USE AND SCENARIO ASSUMPTIONS

APPENDIX A: TECHNICAL MEMORANDUM

To: Eric Cattell
City of Manhattan, KS

From: Julie Herlands, AICP, TischlerBise

Date: November 8, 2021 (*Added to Final Report//January 26, 2022*)

RE: **Green Valley Area Annexation Fiscal Impact Analysis: Key Demographic/Land Use and Scenario Assumptions**

This memo provides a summary of key demographic/land use and scenario assumptions for the fiscal impact analysis of the Green Valley Annexation study area. Data for both the City of Manhattan and the study area are provided in this memo. In some cases, study area data is for Blue Township; in other cases, data is limited to the study area and may be available by sub-area as well. This information is indicated where applicable.

BASE YEAR

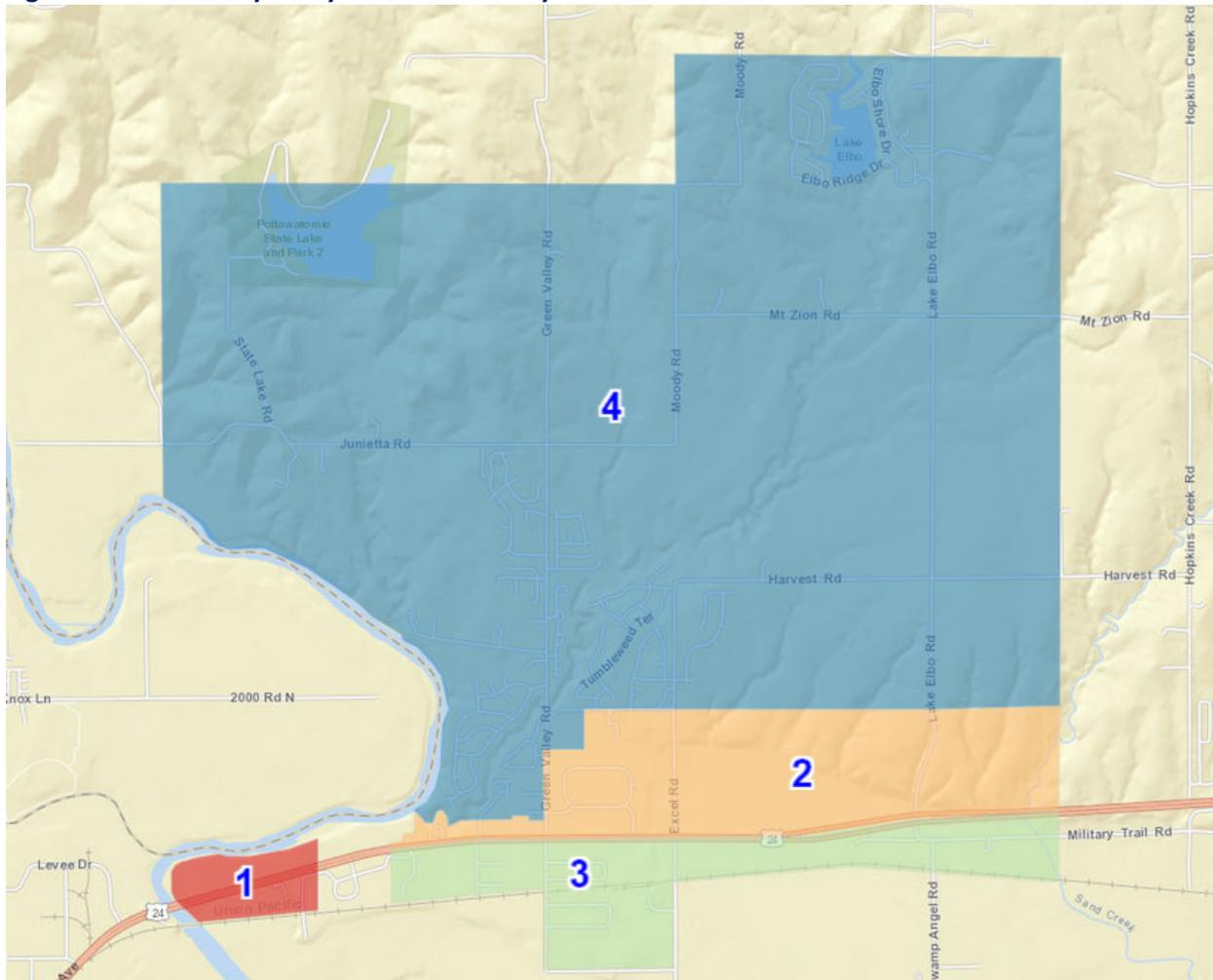
The City's **Fiscal Year 2018** Actual Revenues and Expenditures are being used for the analysis. The Fiscal Year is the same as the Calendar Year with the start date of January 1. The base year for the analysis will therefore be 2018 (i.e., population and employment estimates are as of December 2018).

STUDY AREA

The study area for the fiscal impact analysis of potential annexation is a portion of Blue Township in Pottawatomie County, commonly referred to as Green Valley. For purposes of the analysis, the study area has been divided into four smaller areas, referred to as Fiscal Analysis Zones (FAZ) in the study. The four areas are as follows and shown in Figure 1

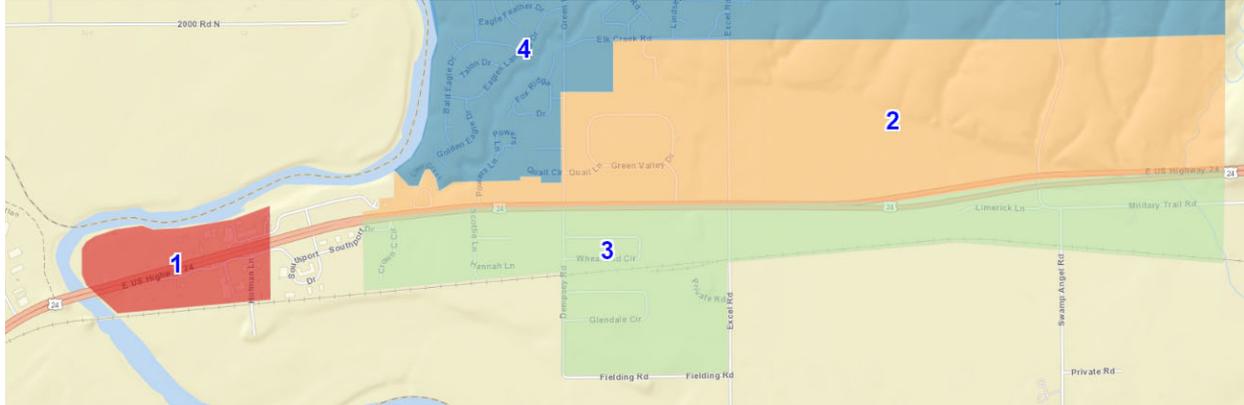
- **FAZ 1:** Area from the Blue River to the City-Annexed Area at Heritage Square
- **FAZ 2:** US 24 Corridor North of Route 24 (Including the Existing Industrial Park)
- **FAZ 3:** US 24 Corridor South of Route 24
- **FAZ 4:** The Rest of the Study Area North and West of the US 24 Corridor

Figure 1. Green Valley Study Area: Fiscal Analysis Zones



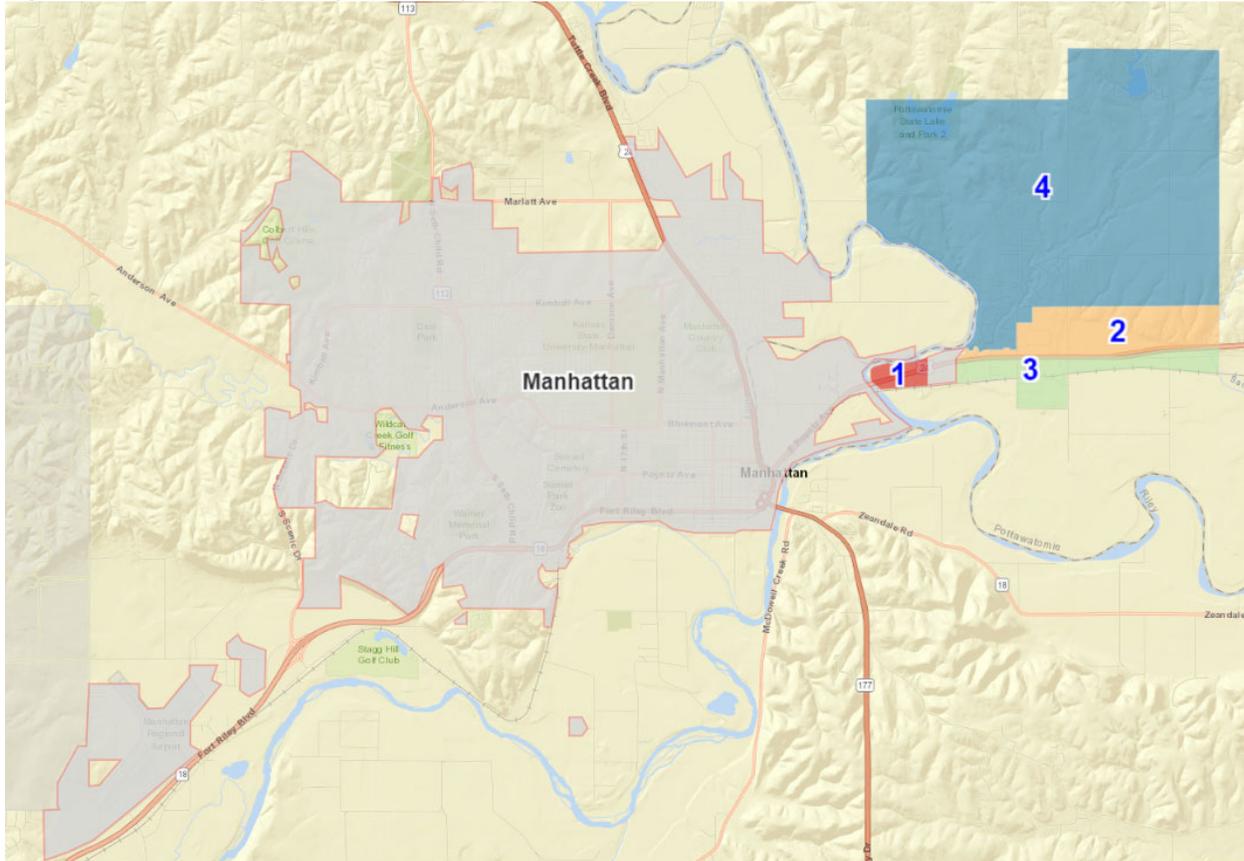
Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, Esri, HERE, Garmin, INCREMENT P, NGA, USGS.)

Figure 2. Green Valley Study Area: US-24 Corridor



Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, Esri, HERE, Garmin, INCREMENT P, NGA, USGS.)

Figure 3. Green Valley Study Area: City Extent



Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, Esri, HERE, Garmin, INCREMENT P, NGA, USGS.)

BASE YEAR DEMOGRAPHIC ESTIMATES

Key demographic data assumptions used in the Fiscal Impact Analysis are described below.

The table below summarizes estimates for base year (2018) population, housing units, employment, and nonresidential square footage in the City of Manhattan. These estimated values are used to determine cost and revenue factors that reflect current levels of service provided in the City of Manhattan. The fiscal impact analysis report will provide more detail on the specific methodologies and approaches to project future revenues and costs generated by development in the study area.

Figure 4. Base Year Demand Indicators

	Year->	Base 2018
Population [1]	POPULATION	54,959
	GREEN VALLEY POPULATION	4,087
	GREEN VALLEY JOBS	805
	GREEN VALLEY VEHICLE TRIPS	10,235
Pop and Jobs	POP AND JOBS	84,497
CITY Housing Units by Type [2]	SINGLE FAMILY UNITS	14,338
	MULTIFAMILY UNITS	12,634
	TOTAL UNITS	26,972
CITY Jobs by Type [3]	CITY RETAIL JOBS	7,569
	CITY OFFICE JOBS	9,203
	CITY INDUSTRIAL JOBS	3,350
	CITY INSTITUTIONAL JOBS	9,416
	TOTAL CITY JOBS	29,538
CITY Non-Residential Floor Area [4]	CITY RETAIL SF	3,231,937
	CITY OFFICE SF	3,101,451
	CITY INDUSTRIAL SF	2,107,257
	CITY INSTITUTIONAL SF	12,071,607
	TOTAL CITY NONRES SF	20,512,253

[1] U.S. Census, 2018 Population Estimate; City of Manhattan

[2] City of Manhattan

[3] US Census, OnTheMap Application

[4] TischlerBise estimate based on employment data and employee density factors

Sources for the above information are shown in the figure. “City” jobs reflect at-place employment in the current boundaries of the City of Manhattan. This encompasses the range of industries with a physical presence in the City.

Household Size

Household size is used to project population over the planning horizon in the study area. Two sets of figures are provided: (1) Household size within the current Blue Township boundaries; and (2) Household size within the current City of Manhattan boundaries.

Blue Township household size is used in the analysis to reflect the characteristics in the study area. City figures are provided for comparison purposes. It should be noted that the persons and housing unit estimates from the American Community Survey (ACS) shown will not equal the base year population or housing units shown above because the ACS uses a sample methodology. The ACS data are used to only derive the persons per housing unit factors used in the analysis.

Illustrated in the figures below, the average household size for a single family unit in Blue Township is estimated at 2.84 persons per housing unit (compare to 2.56 for the City of Manhattan). For a multifamily unit, the average household size is 1.42 persons per unit in Blue Township (and 1.67 in City of Manhattan). As indicated, Blue Township has more residents in single family units and fewer in multifamily units than comparable types of units in the current City limits. It is anticipated that new development in the Green Valley area will continue to reflect the characteristics of Blue Township.

Figure 5. Average Household Size: Blue Township

	<i>Total Persons</i>	Persons per Household/Housing Unit					
		<i>HHS</i>	<i>PPHH</i>	<i>HUs</i>	<i>PPHU</i>	<i>Single Family</i>	
1, detached or attached	3,211	1,116	2.88	1,131	2.84	2.84	
2-4 units	46	12	3.83	44	1.05	MF avg (w/ MH)	
5 or more	0	0	0.00	0	0.00	1.42	
Mobile home	150	84	1.79	112	1.34		
Boat, RV, van, etc.	77	36	2.14	36	2.14	<i>Vacant</i>	<i>Vacancy Rate</i>
TOTAL	3,484	1,248	2.79	1,323	2.63	75	6%

Source: U.S. Census Bureau 2013-2017 American Community Survey, 5-Yr Estimate

Figure 6. Average Household Size: City of Manhattan

	Total Persons	Persons per Household/Housing Unit				Vacant	Vacancy Rate
		HHs	PPHH	HUs	PPHU		
1, detached or attached	29,486	10,814	2.73	11,502	2.56		
2-4 units	4,883	2,176	2.24	2,757	1.77		
5 or more	12,808	6,682	1.92	8,068	1.59		
Mobile home	2,024	928	2.18	993	2.04		
Boat, RV, van, etc.	0	0	0.00	0	0.00		
TOTAL	49,201	20,600	2.39	23,320	2.11	2,720	13%

Single Family
2.56
MF avg (w/ MH)
1.67

Source: U.S. Census Bureau 2013-2017 American Community Survey, 5-Yr Estimate

Nonresidential Demand Factors

Employee density figures are used to convert nonresidential square footage to employees and vice versa. The highlighted land uses represent the land uses used in the analysis for future nonresidential development in the study area. As shown, the factors are derived from vehicle trip rates from the Institute of Transportation Engineers (ITE). This data is also used to project additional vehicle trips from development in the study area, which is discussed in the next section.

Figure 7. Demand Factors by Nonresidential Development Type

ITE Code	Demand Unit	Trip Generation Rate per Demand Unit*	Trip Adj. Rate*	Trip Ends per Employee*	Empl per Demand Unit^	Sq. Ft. per Employee^
820 Retail Average	1000 SF	37.75	33%	16.11	2.34	427
Retail (Small/Neighborhood)	1000 SF	93.69	28%	16.11	5.82	172
710 Office and Other Services	1000 SF	9.74	50%	3.28	2.97	337
Office and Other Services (Medium)	1000 SF	11.06	50%	5.65	1.96	510
Office and Other Services (Small)	1000 SF	11.37	50%	7.06	1.61	621
**770 Business Park	1000 SF	12.44	50%	4.04	3.08	325
^^110 General Light Industrial	1000 SF	4.96	50%	3.05	1.63	613
130 Industrial Park	1000 SF	3.37	50%	2.91	1.16	862
140 Manufacturing	1000 SF	3.93	50%	2.47	1.59	629
150 Warehousing	1000 SF	1.74	50%	5.05	0.34	2941
310 Hotel Average	1000 SF	11.94	50%	14.34	0.81	1229
310 Hotel (per room)	Room	8.36	50%	14.34	0.58	1724
520/53 School (Avg)	1000 sf	16.8	50%	21.63	0.78	1282

* Institute of Transportation Engineers, 10th Edition (2017); trip rates are adjusted to allocate between origin (residential) and destination (nonresidential)

^ Employees per development unit (1,000sf, room) calculated from trip rates

** Prototype assumed for future industrial development in the Green Valley area

^^ Prototype assumed for existing industrial development in the City of Manhattan.

Vehicle Trips

Vehicle Trips from different types of land uses will be used to develop projection factors for some types of costs (e.g., public safety costs).

Average Weekday Vehicle Trip Ends (also known as trip generation rates) by type of development are from the reference book, *Trip Generation, 10TH Edition*, published by the Institute of Transportation Engineers (ITE), in 2017. A “trip end” represents a vehicle either entering or exiting a development, as if a traffic counter were placed across a driveway. Trip rates have been adjusted to avoid double counting, as one vehicle trip is counted in the trip rates of both the origination and destination points.

Residential Vehicle Trip Rates

Residential vehicle trip rates can be derived with data specific to the study area, namely **Blue Township**.

A customized trip rate is calculated for single family and multifamily units in the study area. In Figure 8, the most recent data from the U.S. Census American Community Survey is inputted into equations provided by the ITE to calculate trip ends per household. A single family household (occupied housing unit) is estimated to generate 10.10 trip ends on an average weekday and a multifamily household is estimated to generate 6.90 trip ends on an average weekday.

Figure 8. Customized Residential Trip End Rates

	Households (2)			Vehicles per Household by Tenure
	Single Family Units*	Multifamily Units	Total	
Owner-occupied	2,575	1,054	36	2.36
Renter-occupied	387	146	12	2.45
TOTAL	2,962	1,200	48	2.37
Housing Units (6) =>	1,243	80	1,323	
Persons per Housing Unit =>	2.70	1.54	2.63	

	Persons (3)	Trip Ends (4)	Vehicles by Type of Housing	Trip Ends (5)	Average Trip Ends	Trip Ends per Housing Unit
Single Family Units*	3,361	8,695	2,848	16,459	12,577	10.10
Multifamily Units	123	362	114	744	553	6.90
TOTAL	3,484	9,057	2,962	17,204	13,130	9.90

* Includes Single Family Detached, Single Family Attached, and Manufactured Homes

(1) Vehicles available by tenure from **Table B25046**, American Community Survey, 2015 5-Yr.

(2) Households by tenure and units in structure from **Table B25032**, American Community Survey, 2015 5-Yr.

(3) Persons by units in structure from **Table B25033**, American Community Survey, 2015 5-Yr.

(4) Vehicle trip ends based on persons using formulas from **Trip Generation** (ITE 2012). For single family housing (ITE 210), the fitted curve equation is $EXP(0.91 * LN(persons) + 1.52)$. To approximate the average population of the ITE studies, persons were divided by 84 and the equation result multiplied by 84. For multifamily housing (ITE 220), the fitted curve equation is $(3.47 * persons) - 64.48$.

(5) Vehicle trip ends based on vehicles available using formulas from **Trip Generation** (ITE 2012). For single family housing (ITE 210), the fitted curve equation is $EXP(0.99 * LN(vehicles) + 1.81)$. To approximate the average number of vehicles in the ITE studies, vehicles available were divided by 130 and the equation result multiplied by 130. For multifamily housing (ITE 220), the fitted curve equation is $(3.94 * vehicles) + 293.58$.

(6) Housing units from **Table B25024**, American Community Survey, 2015 5-Yr.

Residential Vehicle Trip Rate Adjustment Factors

A vehicle trip end is the out-bound or in-bound leg of a vehicle trip. To not double count trips, a standard 50 percent adjustment is applied to trip ends to calculate a vehicle trip. For example, the out-bound trip

from a person's home to work is attributed to the housing unit and the trip from work back home is attributed to the employer.

Nonresidential Vehicle Trip Rates

Vehicle trip generation for nonresidential land uses are calculated using ITE's average daily trip end rates and adjustment factors as noted above. To estimate the trip generation in the study area, the weekday trip end per 1,000 square feet factors highlighted in Figure 7 are used.

Nonresidential Vehicle Trip Rate Adjustments

Trip generation rates are adjusted to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor of 50 percent is applied to the Office, Institutional, and Industrial categories. The Commercial/Retail category has a trip factor of less than 50 percent because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, the ITE data indicates that 34 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor of 66 percent is multiplied by 50 percent to calculate a trip adjustment factor for commercial land use of 33 percent.

CURRENT ESTIMATES IN THE STUDY AREA

To determine current and future demand for services and potential revenue generation, current estimates in the study area are needed. Figure 9 summarizes totals for the entirety of the study area. Population estimate is calculated based on housing units in the area multiplied by household size by type of unit (persons per housing unit (*pphu*)) shown in the figure. Detail for each FAZ is provided in the Appendix.

Figure 9. Study Area Land Use Estimates

TOTAL	All Study Area (FAZs 1-4)			% of Total Study Area
	2017	Constructed 2018	2019	
POPULATION			4,087	100.0%
<i>pphu</i>				
2.84 SINGLE FAMILY			1,439	100.0%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			1,439	100.0%
<i>SF/job</i>				
427 RETAIL SF	37,149	4,200	41,349	100.0%
337 OFFICE SF	59,649	0	59,649	100.0%
629 INDUSTRIAL SF	281,163	9,580	290,743	100.0%
1282 INSTITUTIONAL SF	69,742	20,000	89,742	100.0%
TOTAL NR SF	447,703	33,780	481,483	100.0%
RETAIL JOBS	87	10	97	100.0%
OFFICE JOBS	177	0	177	100.0%
INDUSTRIAL JOBS	447	15	462	100.0%
INSTITUTIONAL JOBS	53	16	69	100.0%
TOTAL JOBS	764		805	100.0%

Sources: US Census, On the Map Application, 2017; Pottawatomie County; Pottawatomie County GIS files

GROWTH ASSUMPTIONS AND PROJECTIONS

Growth projections for the Green Valley study area are based on trends, current plans, and market demand. Projections are not based purely on “land capacity,” which would determine how many acres are planned for a certain land use, assign an average density or floor area ratio, and project housing units and nonresidential square footage. Instead, this analysis captures market reality related to what has developed in recent years and what is in the pipeline, including areas that have been subdivided but not yet built.

Three scenarios are modeled in this analysis to test fiscal impacts of different paces of growth: Trends, Medium Growth, and High Growth.

- **Scenario 1. Trends Scenario:** Based on what is known today in terms of approved housing units and historical nonresidential development in the study area.
 - Initial residential growth projections in Study Area are assumed at 800 single family housing units over the next ten years; followed by another 750 single family units in the subsequent ten years; along with a total of 50 multifamily units over the 20-year projection period. The resulting average number of housing units absorbed per year is approximately 85 units.
 - Nonresidential growth is based on recent growth trends and known projects. Total nonresidential development is projected at approximately 25,000 square feet per year, distributed among retail, office, industrial, and institutional. Retail development is projected based on a factor of 25 square feet per new resident, which reflects recent absorption of retail development in the study area (see Figure 10). Institutional development includes known future school development.
- **Scenario 2. Medium Alternative Growth Scenario:** This scenario increases both residential and nonresidential development to test the possibility of a higher relative economic activity with the area absorbing a higher share of the region’s housing and nonresidential development. Recent development trends are used as the baseline for both residential and nonresidential development.
 - Housing unit absorption increases to 90 single family units per year, with the same proportional split between the first part of the projection period and the second half; as well as 100 total multifamily units.
 - Nonresidential growth is increased commensurately from the Trends Scenario. Total nonresidential development is projected at almost 30,000 square feet per year, distributed among retail, office, industrial, and institutional. Retail development is

projected based on a factor of 30 square feet per new resident. Institutional development includes known future school development.

- **Scenario 3. High Alternative Growth Scenario:** This scenario further increases both residential and nonresidential development above the Medium Growth Scenario to test the possibility of the area absorbing an even greater share of the region’s housing and nonresidential development.
 - Housing unit absorption increases to approximately 115 single family units per year, with the same proportional split between the first part of the projection period and the second half; along with 200 total multifamily units over the projection period.
 - Nonresidential growth projections are based more on market studies for retail (with a total increase of 200,000 square feet over the projection period), and an accelerated growth rate for office and industrial development, grounded in trends development in those categories. Institutional development includes known future school development.

Figure 10. Summary of Recent Development in Study Area

	Nonresidential Square Footage Built in Study Area				Housing Units built in Study Area			RETAIL			
	Industrial	Office	Retail	Grand Total	Urban Subdiv.	Outside Sewer in Study Area	Total	Retail sf/HU	Population Estimate	Retail sf/capita	Rounded
Grand Total (1999-2019)	381,500	26,353	89,297	497,150	1,080	29	1,109	81	3,150	28	
21-Year Average	18,167	1,255	4,465	23,674	55	2	57	79	160	28	30
Recent 10-Year Average	14,359	0	3,000	17,359	57	2	59	51	167	18	20
Recent 5-Year Average	14,281	0	6,000	20,281	74	1	75	80	212	28	30

Source: Pottawatomie County, KS

Given the above approach, below is a summary of growth assumptions for each scenario.

Figure 11. Scenario Growth Assumptions

	SCENARIO ASSUMPTIONS		
	Trends	Medium	High
SINGLE FAMILY	1,550	1,800	2,300
MULTIFAMILY	50	100	200
TOTAL UNITS	1,600	1,900	2,500
	4,473	5,254	
RETAIL SF	25 SF Per Capita	30 SF Per Capita	200,000 SF Total
OFFICE SF	1,000 SF Annual	1,500 SF Annual	2,000 SF Annual
INDUSTRIAL SF	16,000 SF Annual	18,000 SF Annual	20,000 SF Annual
INSTITUTIONAL SF	210,000 SF Total	210,000 SF Total	210,000 SF Total

Given these assumptions, the following is a summary of proposed growth scenarios for the study area.

Figure 12. Scenario Growth Projections (Total by Year 20 and Net Increase)

	Existing Development in Study Area	SCENARIO 1: Trends		SCENARIO 2: Medium Alternative		SCENARIO 3: High Alternative	
		Year 20	Net Increase	Year 20	Net Increase	Year 20	Net Increase
SINGLE FAMILY	1,439	2,989	1,550	3,239	1,800	3,739	2,300
MULTIFAMILY	0	50	50	100	100	200	200
TOTAL HOUSING UNITS	1,439	3,039	1,600	3,339	1,900	3,939	2,500
POPULATION	4,087	8,560	4,473	9,341	5,254	10,903	6,816
RETAIL SF	41,349	153,174	111,825	198,969	157,620	241,349	200,000
OFFICE SF	59,649	78,649	19,000	88,149	28,500	97,649	38,000
INDUSTRIAL SF	290,743	594,743	304,000	632,743	342,000	670,743	380,000
INSTITUTIONAL SF	89,742	299,742	210,000	299,742	210,000	299,742	210,000
TOTAL SF	481,483	1,126,308	644,825	1,219,603	738,120	1,309,483	828,000
TOTAL JOBS	805	1,771	967	1,967	1,163	2,155	1,350

Additional detail by year is provided in the Appendix.

Growth Assumptions and Projections by Fiscal Analysis Zone

Using recent trends, the Manhattan Urban Area Urban Comprehensive Plan (MUACP), Pottawatomie County land use data, recent Green Valley planning efforts, along with interviews with City and County staff and other stakeholders, TischlerBise allocated future growth to each Fiscal Analysis Zone (FAZ).

The first step was to synthesize existing information on current and planned allocation of land uses in each FAZ as shown in Figure 13.

Figure 13. Existing and Future Land Use Distribution by FAZ

Existing & Future Land Use (MUACP) (Acres)

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential	1%	11%	5%	84%	100%
Retail/Office	21%	46%	33%	0%	100%
Industrial	0%	100%	0%	0%	100%
Institutional	0%	27%	52%	21%	100%

Source: City of Manhattan Study Area Land Use GIS files

Existing Development (Hsg Units and Nonres SF)

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential	0%	1%	8%	90%	100%
Retail	28%	54%	7%	10%	100%
Office	2%	34%	7%	58%	100%
Industrial	9%	37%	47%	8%	100%
Institutional	0%	44%	0%	56%	100%

Sources: Pottawatomie County building permit records and GIS files; US Census OnTheMap Application

The next step was to use the above information and information gathered through stakeholder discussions to determine percentages by type of land use in each FAZ. Using those percentages, the total amount of growth projected in each Scenario is allocated by FAZ. Residential development is shown in housing units and nonresidential development is shown in square feet.

Figure 14. Green Valley Annexation Study Growth Assumptions

Green Valley Annexation Study Growth Assumptions (%)

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential	0%	1%	1%	98%	100%
Retail	15%	55%	20%	10%	100%
Office	30%	35%	25%	10%	100%
Industrial	10%	50%	40%	0%	100%
Institutional	0%	0%	0%	100%	100%

Source: TischlerBise; City of Manhattan

Green Valley Annexation Study Growth Assumptions (Housing Units or Sq. Ft.)

SCENARIO 1: Trends

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential Units	0	16	16	1,568	1,600
Retail Sq. Ft.	16,774	61,504	22,365	11,183	111,825
Office Sq. Ft.	5,700	6,650	4,750	1,900	19,000
Industrial Sq. Ft.	30,400	152,000	121,600	0	304,000
Institutional Sq. Ft.	0	0	0	210,000	210,000
Total NR SF	52,874	220,154	148,715	223,083	644,825

Source: TischlerBise; City of Manhattan

SCENARIO 2: Medium Alternative

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential Units	0	19	19	1,862	1,900
Retail Sq. Ft.	23,643	86,691	31,524	15,762	157,620
Office Sq. Ft.	8,550	9,975	7,125	2,850	28,500
Industrial Sq. Ft.	34,200	171,000	136,800	0	342,000
Institutional Sq. Ft.	0	0	0	210,000	210,000
Total NR SF	66,393	267,666	175,449	228,612	738,120

Source: TischlerBise; City of Manhattan

SCENARIO 3: High Alternative

	FAZ 1	FAZ 2	FAZ 3	FAZ 4	Total
Residential Units	0	25	25	2,450	2,500
Retail Sq. Ft.	30,000	110,000	40,000	20,000	200,000
Office Sq. Ft.	11,400	13,300	9,500	3,800	38,000
Industrial Sq. Ft.	38,000	190,000	152,000	0	380,000
Institutional Sq. Ft.	0	0	0	210,000	210,000
Total NR SF	79,400	313,300	201,500	233,800	828,000

Source: TischlerBise; City of Manhattan

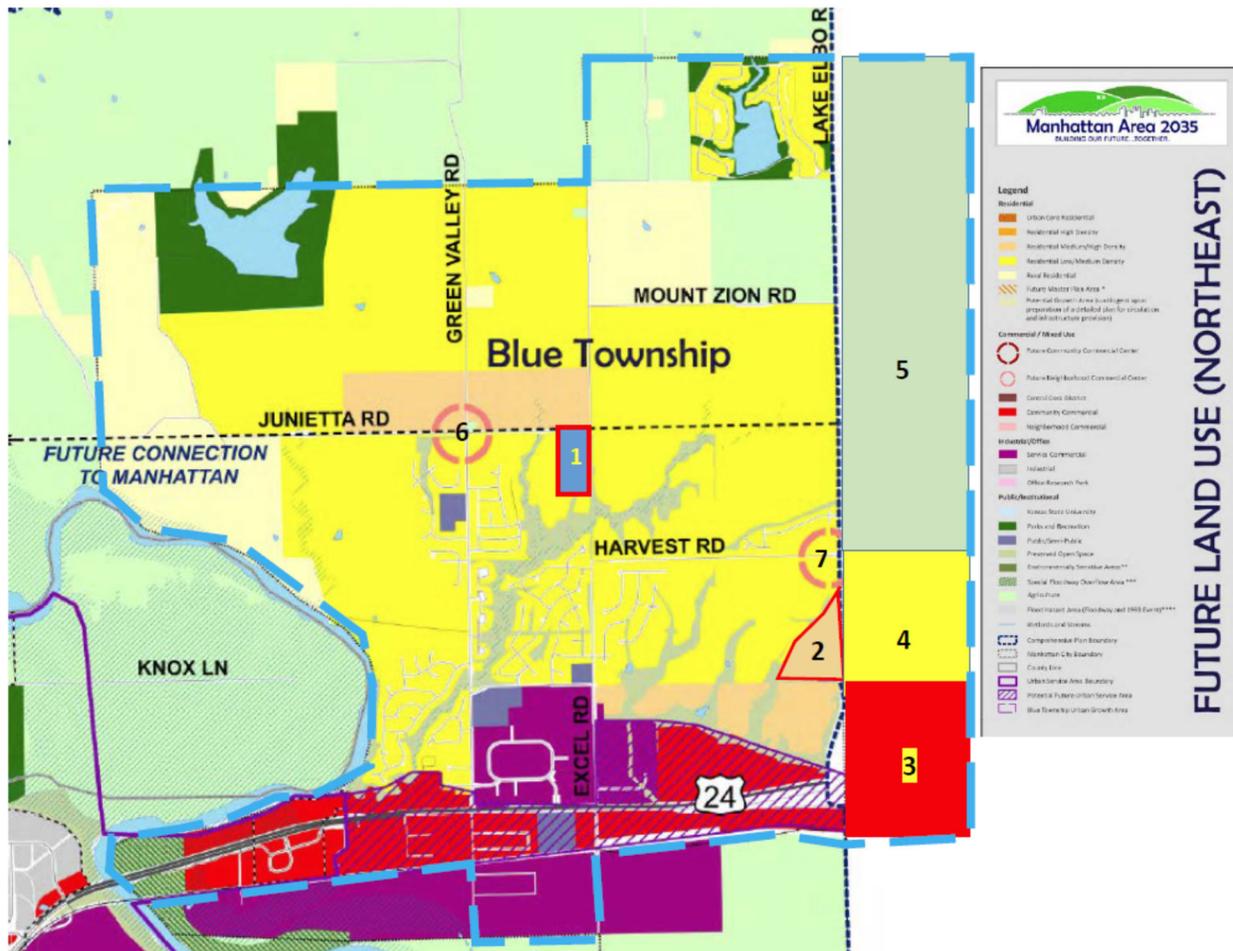
SUPPORTING MATERIAL

Additional supporting material and information is provided in this section.

Future Land Use Map

Future land use for the area is guided by the City of Manhattan Urban Area Comprehensive Plan, with some modifications specific to the areas delineated below.

Figure 15. Manhattan Urban Area Comprehensive Plan (Northeast/Green Valley Area)



The City of Manhattan provided the following assumptions on the map, which have been integrated into the growth projections:

1. **Area #1** is identified as the new USD 383 Elementary School site that has been purchased, shown as the blue area #1. It is approximately 20 acres in area. This replaces the previous site USD 383 was considering (Area #2) on the west side of Lake Elbo Road that was shown in the Manhattan Urban Area Comprehensive Plan as public/semi-public.
2. **Area #2** is now shown as Medium to High Density Residential (12-19 DUs/acre).
3. **Area #3** is added to match the FAZ map boundary and study area map boundary, which extend another half section east of Lake Elbo Road and east of the 2015 Manhattan Urban Area Comprehensive Plan boundary. This is shown as Community Commercial to generally match the area the Green Valley Plan shows as general commercial.
4. **Area #4** is added similarly to Area #3 and is shown as Low to Medium Density Residential (0-11 DUs/acre)
5. **Area #5** is added as ag land, similar to the Green Valley Plan.
6. **Area #6** is shown as a Neighborhood Commercial node, around the intersection of Green Valley Road and Junietta Road, in one of the quadrants. The Comprehensive Plan identifies neighborhood commercial nodes as around 10+ acres. The Green Valley Plan also includes an optional scenario with an 8-acre neighborhood commercial site on the southeast quadrant of the intersection.
7. **Area #7** is currently shown as Neighborhood Commercial and is being removed and shown as Low to Medium Density Residential (0-11 DUs/acre).

Historical Development in Study Area

To project future growth, particularly for the Trends Scenario, recent development history was used as provided by Pottawatomie County. For retail development, a square foot per capita factor was derived and used to project trends in retail development (at the midpoint of 25 square feet per new resident). Industrial and office is projected based on annual absorption. Annual detail is provided below in Figure 16.

Figure 16. Detail on Recent Development in Study Area

Year	Nonresidential Square Footage Built in Study Area				Housing Units built in Study Area		
	Industrial	Office	Retail	Grand Total	Urban Subdiv.	Outside Sewer in Study Area	Total
1999	36,160	0	3,200	39,360	16	0	16
2000	19,176	0	15,800	34,976	11	2	13
2001	1,000	0	0	1,000	35	0	35
2002	48,675	0	9,737	58,412	20	2	22
2003	12,500	2,700	5,600	20,800	34	4	38
2004	32,000	0	0	32,000	37	2	39
2005	3,600	23,653	2,000	29,253	87	0	87
2006	43,857	0	22,960	66,817	135	0	135
2007	6,000	0	0	6,000	49	1	50
2008	30,900	0	0	30,900	38	1	39
2009	4,044	0	0	4,044	45	2	47
2010	9,000	0	0	9,000	21	1	22
2011	18,000	0	0	18,000	20	2	22
2012	15,569	0	0	15,569	52	2	54
2013	20,412	0	0	20,412	62	1	63
2014	9,200	0	0	9,200	50	4	54
2015	15,096	0	5,100	20,196	64	1	65
2016	38,091	0	10,700	48,791	64	1	65
2017	8,640	0	10,000	18,640	92	2	94
2018	9,580	0	1,800	11,380	78	1	79
2019	0	0	2,400	2,400	70	0	70
Grand Total (1999-2019)	381,500	26,353	89,297	497,150	1,080	29	1,109

	Nonresidential Square Footage Built in Study Area				Housing Units built in Study Area			RETAIL			
	Industrial	Office	Retail	Grand Total	Urban Subdiv.	Outside Sewer in Study Area	Total	Retail sf/HU	Population Estimate	Retail sf/capita	Rounded
Grand Total (1999-2019)	381,500	26,353	89,297	497,150	1,080	29	1,109	81	3,150	28	30
21-Year Average	18,167	1,255	4,465	23,674	55	2	57	79	160	28	30
Recent 10-Year Average	14,359	0	3,000	17,359	57	2	59	51	167	18	20
Recent 5-Year Average	14,281	0	6,000	20,281	74	1	75	80	212	28	30

Source: Pottawatomie County, KS

Detail on Current Development in Study Area

Further detail on current development in the Study Area by FAZ is provided below.

Figure 17. Detail on Recent Development in Study Area: FAZ 1

FAZ1	Area from the Blue River to the City-Annexed Area at Heritage Square			% of Total Study Area located in FAZ 1
	2017	Constructed 2018-2019	2019	
POPULATION			9	0.2%
<i>pphu</i>				
2.84 SINGLE FAMILY			3	0.2%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			<u>3</u>	<u>0.2%</u>
<i>SF/job</i>				
427 RETAIL SF	11,529	0	11,529	27.9%
337 OFFICE SF	1,011	0	1,011	1.7%
629 INDUSTRIAL SF	25,789	0	25,789	8.9%
1282 INSTITUTIONAL SF	0	0	0	0.0%
TOTAL NR SF	<u>38,329</u>	<u>0</u>	<u>38,329</u>	<u>8.0%</u>
RETAIL JOBS	27	0	27	27.9%
OFFICE JOBS	3	0	3	1.7%
INDUSTRIAL JOBS	41	0	41	8.9%
INSTITUTIONAL JOBS	0	0	0	0.0%
TOTAL JOBS	<u>71</u>	<u>0</u>	<u>71</u>	<u>8.8%</u>

Figure 18. Detail on Recent Development in Study Area: FAZ 2

FAZ2	US 24 Corridor North of Route 24 (Including the Existing Industrial Park)			% of Total Study Area located in FAZ 2
	2017	Constructed 2018-2019	2019	
POPULATION			45	1.1%
<i>pphu</i>				
2.84 SINGLE FAMILY			16	1.1%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			16	1.1%
<i>SF/job</i>				
427 RETAIL SF	20,069	2,400	22,469	54.3%
337 OFFICE SF	20,220	0	20,220	33.9%
629 INDUSTRIAL SF	96,866	9,580	106,446	36.6%
1282 INSTITUTIONAL SF	39,742	0	39,742	44.3%
TOTAL NR SF	176,897	11,980	188,877	39.2%
RETAIL JOBS	47	6	53	54.3%
OFFICE JOBS	60	0	60	33.9%
INDUSTRIAL JOBS	154	15	169	36.6%
INSTITUTIONAL JOBS	31	0	31	45.2%
TOTAL JOBS	292	21	313	38.9%

Figure 19. Detail on Recent Development in Study Area: FAZ 3

FAZ3	US 24 Corridor South of Route 24			% of Total Study Area located in FAZ 3
	2017	Constructed 2018-2019	2019	
POPULATION			341	8.3%
<i>pphu</i>				
2.84 SINGLE FAMILY			120	8.3%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			120	8.3%
<i>SF/job</i>				
427 RETAIL SF	1,281	1,800	3,081	7.5%
337 OFFICE SF	4,044	0	4,044	6.8%
629 INDUSTRIAL SF	135,864	0	135,864	46.7%
1282 INSTITUTIONAL SF	0	0	0	0.0%
TOTAL NR SF	141,189	1,800	142,989	29.7%
RETAIL JOBS	3	4	7	7.5%
OFFICE JOBS	12	0	12	6.8%
INDUSTRIAL JOBS	216	0	216	46.7%
INSTITUTIONAL JOBS	0	0	0	0.0%
TOTAL JOBS	231		235	29.2%

Figure 20. Detail on Recent Development in Study Area: FAZ 4

FAZ4	The Rest of the Study Area North and West of the US 24 Corridor			% of Total Study Area located in FAZ 4
	2017	Constructed 2018-2019	2019	
POPULATION			3,692	90.3%
<i>pphu</i>				
2.84 SINGLE FAMILY			1,300	90.3%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			1,300	90.3%
<i>SF/job</i>				
427 RETAIL SF	4,270	0	4,270	10.3%
337 OFFICE SF	34,374	0	34,374	57.6%
629 INDUSTRIAL SF	22,644	0	22,644	7.8%
1282 INSTITUTIONAL SF	30,000	20,000	50,000	55.7%
TOTAL NR SF	91,288	20,000	111,288	23.1%
RETAIL JOBS	10	0	10	10.3%
OFFICE JOBS	102	0	102	57.6%
INDUSTRIAL JOBS	36	0	36	7.8%
INSTITUTIONAL JOBS	22	16	38	54.8%
TOTAL JOBS	170		186	23.1%

Figure 21. Detail on Recent Development in Study Area: TOTAL

TOTAL	All Study Area (FAZs 1-4)			% of Total Study Area
	2017	Constructed 2018	2019	
POPULATION			4,087	100.0%
<i>pphu</i>				
2.84 SINGLE FAMILY			1,439	100.0%
1.42 MULTIFAMILY			0	0.0%
TOTAL UNITS			1,439	100.0%
<i>SF/job</i>				
427 RETAIL SF	37,149	4,200	41,349	100.0%
337 OFFICE SF	59,649	0	59,649	100.0%
629 INDUSTRIAL SF	281,163	9,580	290,743	100.0%
1282 INSTITUTIONAL SF	69,742	20,000	89,742	100.0%
TOTAL NR SF	447,703	33,780	481,483	100.0%
RETAIL JOBS	87	10	97	100.0%
OFFICE JOBS	177	0	177	100.0%
INDUSTRIAL JOBS	447	15	462	100.0%
INSTITUTIONAL JOBS	53	16	69	100.0%
TOTAL JOBS	764		805	100.0%

Sources: US Census, On the Map Application, 2017; Pottawatomie County; Pottawatomie County GIS files

Detail on Projected Growth by Scenario

Annual projections of growth by scenario are provided below. The figures include projected growth aggregated for all Fiscal Analysis Zones (FAZs 1-4).

Figure 22. Projected Growth for Scenario 1: Trends

SCENARIO 1: Trends

	Existing Development in Study Area	5-Year Interval															20-Year Net Increase	
		1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033		20 2038
POPULATION	4,087	4,318	4,549	4,780	5,011	5,241	5,472	5,703	5,934	6,165	6,396	6,637	6,877	7,117	7,358	8,560	4,473	
Net Increase		231	231	231	231	231	231	231	231	231	231	240	240	240	240	240		
	<i>pphu</i>																	
SINGLE FAMILY	1,439	1,519	1,599	1,679	1,759	1,839	1,919	1,999	2,079	2,159	2,239	2,322	2,406	2,489	2,572	2,989	1,550	
MULTIFAMILY	0	3	5	8	11	13	16	18	21	24	26	29	32	34	37	50	50	
TOTAL UNITS	1,439	1,522	1,604	1,687	1,770	1,852	1,935	2,017	2,100	2,183	2,265	2,351	2,437	2,523	2,609	3,039	1,600	
Net Increase		83	83	83	83	83	83	83	83	83	83	86	86	86	86	86		
RETAIL SF	41,349	47,122	52,896	58,669	64,443	70,216	75,990	81,763	87,536	93,310	99,083	105,093	111,103	117,113	123,124	153,174	111,825	
OFFICE SF	59,649	60,649	61,649	62,649	63,649	64,649	65,649	66,649	67,649	68,649	69,649	70,649	71,649	72,649	73,649	78,649	19,000	
INDUSTRIAL SF	290,743	306,743	322,743	338,743	354,743	370,743	386,743	402,743	418,743	434,743	450,743	466,743	482,743	498,743	514,743	594,743	304,000	
INSTITUTIONAL SF	89,742	89,742	89,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	299,742	299,742	210,000	
TOTAL NR SF	481,483	504,256	527,030	609,803	632,577	655,350	678,124	700,897	723,670	746,444	769,217	792,227	815,237	838,247	1,011,258	1,126,308	644,825	
Net Increase		22,773	22,773	82,773	22,773	22,773	22,773	22,773	22,773	22,773	22,773	23,010	23,010	23,010	173,010	23,010		
	<i>sf/job</i>																	
RETAIL JOBS	427	97	110	124	137	151	164	178	191	205	219	232	246	260	274	288	359	262
OFFICE JOBS	337	177	180	183	186	189	192	195	198	201	204	207	210	213	216	219	233	56
INDUSTRIAL JOBS	629	462	488	513	539	564	589	615	640	666	691	717	742	767	793	818	946	483
INSTITUTIONAL JOBS	1282	69	69	117	117	117	117	117	117	117	117	117	117	117	117	234	234	165
TOTAL JOBS	805	847	889	979	1,021	1,062	1,104	1,146	1,188	1,230	1,272	1,315	1,357	1,400	1,559	1,771	967	
Net Increase		42	42	90	42	42	42	42	42	42	42	42	42	42	159	42		

Figure 23. Projected Growth for Scenario 2: Medium Alternative

SCENARIO 2: Medium Alternative

	Existing Development in Study Area	5-Year Interval															20-Year Net Increase	
		1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033		20 2038
POPULATION		4,087	4,401	4,715	5,029	5,344	5,658	5,972	6,286	6,600	6,915	7,229	7,463	7,698	7,933	8,167	9,341	5,254
Net Increase			314	314	314	314	314	314	314	314	314	235	235	235	235	235		
	<i>pphu</i>																	
SINGLE FAMILY	2.84	1,439	1,547	1,655	1,763	1,871	1,979	2,087	2,195	2,303	2,411	2,519	2,599	2,679	2,759	2,839	3,239	1,800
MULTIFAMILY	1.42	0	5	11	16	21	26	32	37	42	47	53	58	63	68	74	100	100
TOTAL UNITS		1,439	1,552	1,666	1,779	1,892	2,005	2,119	2,232	2,345	2,458	2,572	2,657	2,742	2,827	2,913	3,339	1,900
Net Increase			113	113	113	113	113	113	113	113	113	85	85	85	85	85		
RETAIL SF		41,349	50,775	60,201	69,626	79,052	88,478	97,904	107,330	116,755	126,181	135,607	142,647	149,688	156,728	163,768	198,969	157,620
OFFICE SF		59,649	61,149	62,649	64,149	65,649	67,149	68,649	70,149	71,649	73,149	74,649	76,149	77,649	79,149	80,649	88,149	28,500
INDUSTRIAL SF		290,743	308,743	326,743	344,743	362,743	380,743	398,743	416,743	434,743	452,743	470,743	488,743	506,743	524,743	542,743	632,743	342,000
INSTITUTIONAL SF		89,742	89,742	89,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	299,742	210,000
TOTAL NR SF		481,483	510,409	539,335	628,260	657,186	686,112	715,038	743,964	772,889	801,815	830,741	857,281	883,822	910,362	936,902	1,219,603	738,120
Net Increase			28,926	28,926	88,926	28,926	28,926	28,926	28,926	28,926	28,926	28,926	26,540	26,540	26,540	26,540	176,540	
	<i>sf/job</i>																	
RETAIL JOBS	427	97	119	141	163	185	207	229	251	273	296	318	334	351	367	384	466	369
OFFICE JOBS	337	177	181	186	190	195	199	204	208	213	217	222	226	230	235	239	262	85
INDUSTRIAL JOBS	629	462	491	519	548	577	605	634	663	691	720	748	777	806	834	863	1,006	544
INSTITUTIONAL JOBS	1282	69	69	69	117	117	117	117	117	117	117	117	117	117	117	117	234	165
TOTAL JOBS		805	860	915	1,018	1,073	1,129	1,184	1,239	1,294	1,349	1,404	1,454	1,503	1,553	1,603	1,967	1,163
Net Increase			55	55	103	55	55	55	55	55	55	55	50	50	50	50	167	

Figure 24. Projected Growth for Scenario 3: High Alternative

SCENARIO 3: High Alternative

		Existing Development in Study Area																20-Year Net Increase
		5-Year Interval																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2038	
POPULATION		4,087	4,494	4,900	5,307	5,714	6,121	6,528	6,935	7,342	7,749	8,155	8,461	8,766	9,071	9,376	10,903	6,816
	<i>Net Increase</i>		407	407	407	407	407	407	407	407	407	407	305	305	305	305	305	
	<i>pphu</i>																	
SINGLE FAMILY	2.84	1,439	1,577	1,715	1,853	1,991	2,129	2,267	2,405	2,543	2,681	2,819	2,921	3,023	3,126	3,228	3,739	2,300
MULTIFAMILY	1.42	0	11	21	32	42	53	63	74	84	95	105	116	126	137	147	200	200
TOTAL UNITS		1,439	1,588	1,736	1,885	2,033	2,182	2,330	2,479	2,627	2,776	2,924	3,037	3,150	3,263	3,375	3,939	2,500
	<i>Net Increase</i>		149	149	149	149	149	149	149	149	149	149	113	113	113	113	113	
RETAIL SF		41,349	51,875	62,402	72,928	83,454	93,981	104,507	115,033	125,560	136,086	146,612	157,138	167,665	178,191	188,717	241,349	200,000
OFFICE SF		59,649	61,649	63,649	65,649	67,649	69,649	71,649	73,649	75,649	77,649	79,649	81,649	83,649	85,649	87,649	97,649	38,000
INDUSTRIAL SF		290,743	310,743	330,743	350,743	370,743	390,743	410,743	430,743	450,743	470,743	490,743	510,743	530,743	550,743	570,743	670,743	380,000
INSTITUTIONAL SF		89,742	89,742	89,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	149,742	299,742	299,742	299,742	299,742	299,742	210,000
TOTAL NR SF		481,483	514,009	546,536	639,062	671,588	704,115	736,641	769,167	801,694	834,220	866,746	1,049,272	1,081,799	1,114,325	1,146,851	1,309,483	828,000
	<i>Net Increase</i>		32,526	32,526	92,526	32,526	32,526	32,526	32,526	32,526	32,526	32,526	182,526	32,526	32,526	32,526	32,526	
	<i>sf/job</i>																	
RETAIL JOBS	427	97	121	146	171	195	220	245	269	294	319	343	368	393	417	442	565	468
OFFICE JOBS	337	177	183	189	195	201	207	213	219	224	230	236	242	248	254	260	290	113
INDUSTRIAL JOBS	629	462	494	526	558	589	621	653	685	717	748	780	812	844	876	907	1,066	604
INSTITUTIONAL JOBS	1282	69	69	69	117	117	117	117	117	117	117	117	234	234	234	234	234	165
TOTAL JOBS		805	867	929	1,040	1,102	1,165	1,227	1,290	1,352	1,414	1,477	1,656	1,718	1,781	1,843	2,155	1,350
	<i>Net Increase</i>		62	62	111	62	62	62	62	62	62	62	179	62	62	62	62	

APPENDIX B: LEVEL OF SERVICE / COST AND REVENUE ASSUMPTIONS AND METHODOLOGIES

APPENDIX B: TECHNICAL MEMORANDUM

To: Eric Cattell
City of Manhattan, KS

From: Julie Herlands, AICP, TischlerBise

Date: November 8, 2021 (*Added to Final Report//January 26, 2022*)

RE: **Green Valley Area Annexation Fiscal Impact Analysis: Level of Service and Cost and Revenue Assumptions and Methodologies**

This technical document provides a summary of key level of service and cost and revenue assumptions for the fiscal impact analysis of the Green Valley Annexation study area. (This version incorporates changes from review and feedback received on the initial draft from March 2020.)

This technical memo provides detailed input tables from the model and narrative for further evaluation and feedback. This document ultimately will be an Appendix to the final Fiscal Impact Report to be used for future reference.

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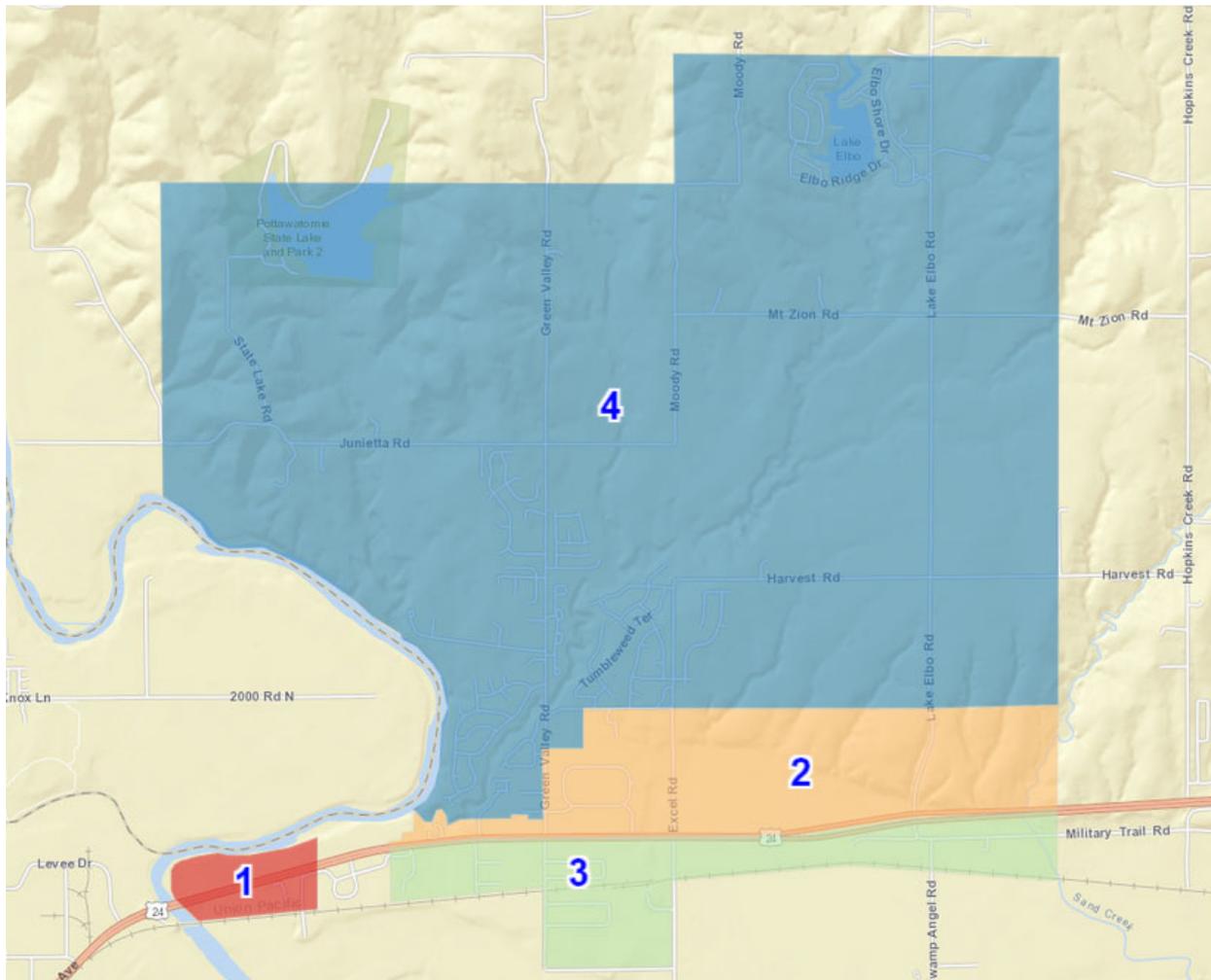
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OVERVIEW

The City of Manhattan is investigating the fiscal impact of annexing the Green Valley area located in Pottawatomie County. The area analyzed is shown in Figure 1. City staff and TischlerBise divided the area into four subareas for purposes of the fiscal analysis.

Figure 1. Green Valley Study Area (with Fiscal Analysis Zone Numbers)



Source: City of Manhattan GIS files; ESRI map created by TischlerBise. (ESRI sources: Riley County IT/GIS, ESRI, HERE, Garmin, INCREMENT P, NGA, USGS.)

PROTOTYPE LAND USE AND RELATED DEMAND FACTORS

The fiscal impact analysis models future growth according to three scenarios documented under separate cover. Growth in housing units and nonresidential square footage is converted into demand, which is projected based on the characteristics of different types of development anticipated to occur in the Green Valley Area such as household size and vehicle trip rates. Characteristics are summarized below.

Figure 2. Residential Land Use Prototypes

Residential Land Use Prototypes	Appraised Value Per Unit [1]	Assessed Value Per Unit [2]	Persons per Unit [3]	Vehicle Trip generation rate [4]	Trip Adj. Factor % [5]
Single-family Detached	\$235,000	\$27,025	2.84	10.10	65%
Multi-family	\$72,000	\$8,280	1.42	6.90	65%

[1] Pottawatomie County Data; average values in Green Valley area

[2] Assessment rates vary by land use; residential rate is 11.5 percent of appraised value.

[3] 2017, 5-Year Estimates, U.S. Census American Community Survey

[4] Residential trip rates adjusted to Blue Township demographics and vehicle ownership.

[5] Trip rates are adjusted to allocate between origin (residential) and destination (nonresidential) and to Blue Township commuter profile

Sources: Pottawatomie County; ITE; TischlerBise

Figure 3. Nonresidential Land Use Prototypes

Nonresidential Land Use Prototypes	Appraised Value Per Unit [1]	Avg. Assessed Value Per Sq. Ft. [2]	ITE Code [3]	Employees per 1,000 Sq. Ft. [4]	Vehicle Trips per 1,000 Sq. Ft. [1]	Trip Adj. Factor % [5]	Adjusted Trip Rate per 1,000 Sq. Ft.
Retail	\$90.00	\$23	820	2.34	37.75	33%	12.46
Office	\$135.00	\$34	710	2.97	9.74	50%	4.87
Industrial	\$60.00	\$15	770	3.08	12.44	50%	6.22
Institutional	\$0.00	\$0	520/530	0.78	16.80	50%	8.40

[1] Pottawatomie County Data; average values in Green Valley area

[2] Assessment rates vary by land use; commercial and industrial rate is 25 percent of appraised value.

[3] Institute of Transportation Engineers, 2017.

[4] Employees per development unit (1,000sf) calculated from trip rates

[5] Trip rates are adjusted to allocate between origin (residential) and destination (nonresidential)

Sources: Pottawatomie County; ITE; TischlerBise

(Further detail is provided in the Memo to City of Manhattan, “Green Valley Annexation Study: Key Demographic/Land Use Assumptions and Growth Projections.”)

FUNDS INCLUDED

The Fiscal Impact Analysis evaluates the effect of annexation on revenues and expenditures to the General Fund as well as a subset of Special Revenue Funds that are supported by dedicated revenue sources (i.e., property tax or sales tax) and/or restricted to services or capital improvements that will be affected by growth. A summary list of Special Revenue Funds is provided below:

Figure 4. Special Revenue Funds Summary

Fund #	Fund Name	Include?	Prop Tax	Tax rate (FY18)	Sales Tax	Notes
			Levy	per \$1000	Rate	
102	City University	NO				
103	Aggieville BID	NO				
104	DowntownBID	NO				
105	Economic Development	NO				
106	Employee Benefits	YES	x	\$2.830		
107	Fire Equipment Reserve	YES	x	\$0.454		
108	Fire Pension KP&F	YES	x	\$1.573		
109	General Improvement	NO				
110	Industrial Promotion Fund	NO				
111	Library	YES	x	\$4.291		
112	Library Employee Benefits	YES	x	\$0.999		
113	Park Development Fund	NO				Not a separate rev source
	Recreation and Trails Fund	YES			0.250%	Sales tax (2017); 10-year sunset (last year modeled 2027)
115	Sales Tax Fund	YES			1.000%	Sales tax
116	Special Alcohol Programs	NO				This portion of liquor tax is for grants
117	Special Parks and Recreation	YES				
118	Special Street and Highway Maintenance	YES				
119	Special Sunset Zoo	NO				
121	Tourism and Convention Promotion	NO				Transient tax for tourism; No lodging uses projected
124	Riley County Police Dept	YES	x	\$27.705		
126	Capital Improvement Reserve	NO				
127	Downtown Redevelopment TIF	NO				
129	Special Street Maintenance Fund	YES			0.200%	Sales tax (2016); 10-year sunset (last year modeled 2026)
301	Bond and Interest	YES	x	\$4.688		Output as capital revenue
Subtotal Special Revenue Funds				\$42.540		
General Fund				\$5.817		
GRAND TOTAL				\$48.357		

Note: In addition, projected utility costs are included for water, wastewater, and stormwater. As Enterprise Funds, it is expected that respective rates will be adjusted to cover costs—therefore revenues are not included in the analysis. However, to understand potential impacts, the study includes discussion of projected costs but does **not** include those costs in the bottom line fiscal impact results.

METHODOLOGY OVERVIEW

The Fiscal Impact Analysis uses a case study marginal approach to project revenues and operating and capital costs from future growth in the Green Valley area. Not all revenues and costs will increase with annexation, therefore the analysis examines revenue and expenditure line items to determine whether the revenues and costs will remain “fixed” (not change with annexation) or increase. An increase in demand is modeled based on specific factors reflecting demand, including population; jobs; population and jobs; vehicle trips; etc.

Levels of Service

The approach of the Fiscal Impact Analysis is to project future needs based on **current levels of service**. A “snapshot approach” is used in which it is assumed the current level of service, as funded in **FY18 City actual revenues and expenditures** and as provided in current capital facilities, will continue through the analysis period. Demand base data is used to calculate per unit costs and service level thresholds. No judgment is made as to whether the levels of service are adequate, inadequate, or better than adequate. Nor are any assumptions made regarding changes in levels of service or revenue sources.

Revenue Structure

Revenues are projected using the current revenue structure and rates in place as of FY18 and are held constant during the analysis period.

It should be noted that other development funding options are not included in this analysis, including tools such as Tax Increment Financing (TIF), Community Improvement Districts, Transportation Development Districts, utility districts, development agreements, one-time fees, or grants.

Inflation Rate

The rate of inflation is assumed to be zero throughout the projection period, and cost and revenue projections are in constant 2018 dollars. This assumption is in accord with budget data and avoids the difficulty of speculating on inflation rates and their effect on cost and revenue categories. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time. 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 dollars avoids these issues.

Timing

A note on timing of the study: The base year for the study is 2018, prior to the onset of the COVID-19 pandemic as well as prior to release of updated Census 2020 population estimates. Development activity has continued as the study was being finalized. Therefore, as the City continues exploration of annexation

and potentially moves toward service plans, demographic estimates and projections will need to be updated accordingly.

Non-Fiscal Evaluations

It is also important to acknowledge that fiscal issues are only one aspect of evaluating development and growth trends. Environmental, land use, quality of the development, jobs/housing balance, transportation, education, and other issues should also be taken into consideration when determining land use-related policies and direction for the City.

Annual costs and revenues attributable to new development are projected using the methodologies described below.

COSTS AND REVENUES LEVEL OF SERVICE

This section provides supporting detail on projection factors to be used in the City of Manhattan (KS) Annexation Fiscal Impact Model to model revenues and costs as a result of potential annexation and growth in the Green Valley Area of Pottawatomie County.

Per Capita (population)

If a cost or revenue is assumed to be allocated on a per capita basis, the budget item is divided by base year City population to arrive at the current level-of-service factor.

Per Capita and Employee (Population and Jobs)

Some costs and revenues use both a *per capita and employee (job)* approach. If a cost or revenue is assumed to be allocated on a *per capita and job* basis, it is divided by the City population and job estimate to determine the current level-of-service factor.

Custom/Marginal (E.g., Other Factor)

A marginal cost approach identifies factors that will be impacted by demographic or land use changes and allocates the changes on a marginal basis. These variable factors are determined through a detailed examination of the applicable budgets and conversations with appropriate staff. In these instances, the projection factor is identified as ***Direct Entry*** or by specific factor (e.g., retail sales for sale tax revenue calculations). Further description is provided in this document where appropriate.

Fixed

Revenue and cost factors that are directly attributable to new development are included in the fiscal impact analysis. Some factors—or a portion—are not expected to be impacted by demographic changes and are fixed in the analysis. As with the variable factors, fixed factors are determined through a detailed examination of applicable budgets and conversations with staff.

Demand Factors

Demand factors used in the fiscal impact analysis model are as follows:

Figure 5. Base Year Demand Factors

	Year->	Base 2018
POPULATION		54,959
UNIV ENROLLMENT		21,719
PARK POPULATION		59,046
NET POPULATION		59,046
LIBRARY POPULATION		59,046
GREEN VALLEY POPULATION		4,087
GREEN VALLEY JOBS		805
GREEN VALLEY VEHICLE TRIPS		10,235
TOTAL CITY JOBS		29,538
POP AND JOBS		84,497
MOTOR VEHICLES		36,563
CITY FT STAFF		400
FIRE STAFF		107
FIRE OPERATIONS STAFF		87
FACILITY SF		104,385
FIRE STATIONS		5
CODE VIOLATIONS		185
PARK ACRES		1,207
LANE MILES		481.4

- All data is for the year 2018.
- Population is City of Manhattan population
- Park and Library Population is current City population plus existing population in Green Valley Area. This figure reflects the demand base that City services are already providing.
- Net Population is a model artifact for other non-Park or Library services where the current base includes City and Green Valley population.
- Total City Jobs is the number of jobs located in the City of Manhattan (i.e., “at-place employment”)
- Motor Vehicles is the number of vehicles registered in the City of Manhattan; this factor is used to calculate Motor Vehicle Tax in the General Fund and some Special Revenue Funds.
- City FT Staff: Full-time City of Manhattan staff; used in operating and capital cost analysis.
- Fire Operations Staff: Current City Fire Operations staff; used in operating and capital cost analysis.
- Facility Square Feet: Reflects the amount of square footage currently maintained by the City.

- Code Violations: Current average number of code violations in Green Valley Area.
- Park Acres: City of Manhattan maintained Park acres (includes City parks, greenways acres, public lands).
- Lane Miles: Current number of lane miles in City of Manhattan.

GENERAL FUND REVENUES

The following detailed tables are excerpted from the Fiscal Impact Model from the Revenue section.

A few notes on the figure:

- *Base Year Amount* is the current City FY18 **actual amounts**.
- *Project Using Which Demand Base?* Identifies the projection methodology used, as described above.
- *LOS Std* is the level of service factors that is either calculated based on the demand factor (shown in far right column without highlighting) or shown in pale yellow as a direct entered value (typically for tax rates). Further discussion is provided below the figures.

For **property tax revenues**, values from new development are projected based on average appraised values in the area, which is then reduced to an assessed value based on required assessment rates for residential and nonresidential values as follows:

- Residential: **11.5 percent**
- Nonresidential: **25 percent**

Applicable values are summarized below:

Residential Land Use Prototypes	Appraised Value Per Unit [1]	Assessed Value Per Unit [2]
Single-family Detached	\$235,000	\$27,025
Multi-family	\$72,000	\$8,280

[1] Pottawatomie County Data; average values in Green Valley area

[2] Assessment rates vary by land use; residential rate is 11.5 percent of appraised value.

Nonresidential Land Use Prototypes	Appraised Value Per Unit [1]	Avg. Assessed Value Per Sq. Ft. [2]
Retail	\$90.00	\$23
Office	\$135.00	\$34
Industrial	\$60.00	\$15
Institutional	\$0.00	\$0

[1] Pottawatomie County Data; average values in Green Valley area

[2] Assessment rates vary by land use; commercial & industrial rate is 25 percent of appraised value.

General Fund Revenue model excerpts are provided below.

Figure 6. General Fund Revenue Projection Methodology

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
BEGINNING FUND BALANCE	Beginning Fund Balance	\$1,736,880	FIXED	\$0.00
TAXES	Ad Valorem	\$3,200,156	CUMUL TAXABLE VALUE	\$5.817
TAXES	Special Assessments	\$14,993	FIXED	\$0.00
TAXES	Delinquent / Ad Valorem	\$30,661	FIXED	\$0.00
TAXES	Motor Vehicle Tax	\$233,511	MOTOR VEHICLES	\$6.39
TAXES	Health Department Taxes	\$2	FIXED	\$0.00
TAXES	Property Taxes	\$16,909	FIXED	\$0.00
TAXES	Special Liquor Tax	\$484,028	FIXED	\$0.00
TAXES	City Sales Tax	\$5,244,948	RETAIL SALES	1%
TAXES	Riley County Sales Tax	\$2,645,723	FIXED	\$0.00
TAXES	Pottawatomie County Sales Tax	\$301,298	RETAIL SALES	0.174%
TAXES	City Use Tax	\$590,455	RETAIL SALES	0.174%
TAXES	Riley County Use Tax	\$340,438	FIXED	\$0.00
TAXES	Pottawatomie County Use Tax	\$38,701	FIXED	\$0.00
TAXES	Electric & Gas Franchise Fee	\$2,655,285	POPULATION	\$48.31
TAXES	Telecommunications Franchise Fee	\$60,424	POPULATION	\$1.10
TAXES	Cable Franchise Fee	\$555,766	POPULATION	\$10.11
LICENSES & PERMITS	Liquor License	\$23,575	FIXED	\$0.00
LICENSES & PERMITS	Cereal Malt License	\$2,125	FIXED	\$0.00
LICENSES & PERMITS	Sidewalk / Plaza License	\$500	FIXED	\$0.00
LICENSES & PERMITS	Master / Journeyman License	\$15,400	FIXED	\$0.00
LICENSES & PERMITS	Occupational License	\$8,130	FIXED	\$0.00
LICENSES & PERMITS	Mobile Home Permit	\$16,535	FIXED	\$0.00
LICENSES & PERMITS	Contractor Permit	\$51,651	FIXED	\$0.00
LICENSES & PERMITS	Building Permit Fees	\$330,839	CUMUL TAXABLE VALUE	\$0.00058
LICENSES & PERMITS	Planning Fees	\$15,335	POP AND JOBS	\$0.18
LICENSES & PERMITS	Non-Business / Misc Fees	\$7,708	POP AND JOBS	\$0.09
LICENSES & PERMITS	Mechanical Permit	\$4,321	POP AND JOBS	\$0.05
LICENSES & PERMITS	Electrical Permit	\$1,515	POP AND JOBS	\$0.02
LICENSES & PERMITS	Moving Permit	\$100	POP AND JOBS	\$0.00
LICENSES & PERMITS	Mobile Home Permit	\$225	POP AND JOBS	\$0.00
LICENSES & PERMITS	Plumbing Permit	\$4,560	POP AND JOBS	\$0.05
LICENSES & PERMITS	Parking Permit	\$6,995	POP AND JOBS	\$0.08
LICENSES & PERMITS	Alarm Permit	\$2,600	FIXED	\$0.00
LICENSES & PERMITS	Curb Cut Permit	\$45	FIXED	\$0.00
LICENSES & PERMITS	Code Variances	\$360	FIXED	\$0.00
LICENSES & PERMITS	Reinspection Fees	\$550	FIXED	\$0.00
SERVICES & SALES	Administrative Fees	\$610,768	POP AND JOBS	\$7.23
SERVICES & SALES	Lot Sales / Sunrise	\$33,169	FIXED	\$0.00
SERVICES & SALES	Services / Sunset	\$10,500	FIXED	\$0.00
SERVICES & SALES	Services / Sunrise	\$42,650	FIXED	\$0.00
SERVICES & SALES	Cemetery Transfer Fees	\$25	FIXED	\$0.00
FINES	Fines	\$722,065	POPULATION	\$13.14
FINES	Court Fines Before Conversion	\$869	FIXED	\$0.00
FINES	Attorney Fees	\$12,197	FIXED	\$0.00
FINES	Misc Revenue Court	\$34,896	FIXED	\$0.00
FINES	Expungement Fees	\$1,320	FIXED	\$0.00
FINES	Collection Fees	\$633	FIXED	\$0.00
FINES	Court Costs	\$295,982	POPULATION	\$5.39
FINES	Victim Witness Fee	\$18,930	FIXED	\$0.00
FINES	Technology Fee*	\$49,923	FIXED	\$0.00
FINES	Parking Fines	\$176,918	NET POPULATION	\$3.00
FINES	Traffic Violations	\$81,451	NET POPULATION	\$1.38
CONTRIBUTIONS & OTHER REVE	Mall Land Rent	\$185,000	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Investment Interest	\$129,505	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Copying	\$3	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Postage	\$90,000	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Reimbursement of Exp / Other	\$25,471	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Damages to City Property	\$1,296	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Contributions & Other / Misc	\$189,661	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Cash Long / Short	-\$172	FIXED	\$0.00
CONTRIBUTIONS & OTHER REVE	Cancel PY Encumbrance	\$16,941	FIXED	\$0.00
RISK MANAGEMENT	Damages	\$21,701	FIXED	\$0.00
TRANSFERS	Fee in Lieu of Tax	\$595,000	FIXED	\$0.00
TRANSFERS	Administration Fee	\$1,488,084	FIXED	\$0.00
TRANSFERS	Sales Tax Transfer	\$2,112,805	FIXED	\$0.00
TRANSFERS	Franchise Fee	\$510,000	FIXED	\$0.00
TRANSFERS	Transfer from Special Rev	\$100,000	FIXED	\$0.00
TRANSFERS	Proceeds from Loans / Principal	\$15,429	FIXED	\$0.00

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AIRPORT	City Sales Tax	\$7,790	FIXED	\$0.00
AIRPORT	Riley County Sales Tax	\$2,412	FIXED	\$0.00
AIRPORT	Airline Landing Fees	\$44,351	FIXED	\$0.00
AIRPORT	Charters Landing Fees	\$9,628	FIXED	\$0.00
AIRPORT	Fuel Flowage	\$71,168	FIXED	\$0.00
AIRPORT	Other Fees / Miscellaneous	\$5,768	FIXED	\$0.00
AIRPORT	Rental Car Fees	\$242,418	FIXED	\$0.00
AIRPORT	De-Icing Services	\$93,280	FIXED	\$0.00
AIRPORT	Advertising	\$4,627	FIXED	\$0.00
AIRPORT	Hangar Rent	\$70,411	FIXED	\$0.00
AIRPORT	Clearspan Hangar Rent	\$16,370	FIXED	\$0.00
AIRPORT	Office Rent	\$43,364	FIXED	\$0.00
AIRPORT	Stone Hangar Rent	\$16,194	FIXED	\$0.00
AIRPORT	Common Area	\$100	FIXED	\$0.00
AIRPORT	Land Leases	\$2,324	FIXED	\$0.00
AIRPORT	Farm Income	\$35,124	FIXED	\$0.00
AIRPORT	Contributions & Other / Misc	\$3,630	FIXED	\$0.00
FIRE	Student Fire Fighters	\$18,637	FIXED	\$0.00
FIRE	False Alarm - Fire	\$2,300	FIXED	\$0.00
FIRE	False Alarm - Intrusion	\$11,200	FIXED	\$0.00
FIRE	FALSE ALARM - COMBINATION	\$200	FIXED	\$0.00
FIRE	Contributions & Other / Misc	\$11,387	FIXED	\$0.00
DOUGLASS CENTER	Misc. Programs	\$8,966	PARK POPULATION	\$0.15
DOUGLASS CENTER	Facilities	\$1,885	PARK POPULATION	\$0.03
DOUGLASS CENTER	Fitness Memberships	\$430	PARK POPULATION	\$0.01
DOUGLASS CENTER	Tutoring	\$468	PARK POPULATION	\$0.01
DOUGLASS CENTER	Donations	\$775	FIXED	\$0.00
POOLS	Pool Punch Card Sales	\$128,771	PARK POPULATION	\$2.18
POOLS	Pool Daily Admissions	\$199,767	PARK POPULATION	\$3.38
POOLS	Pool Parties	\$14,139	PARK POPULATION	\$0.24
POOLS	Pool Concessions	\$9,882	PARK POPULATION	\$0.17
POOLS	Swim Lessons / CiCo Pool	\$27,582	PARK POPULATION	\$0.47
POOLS	Swim Lessons / Northview	\$8,978	PARK POPULATION	\$0.15
POOLS	Swim Lessons / City Pool	\$13,108	PARK POPULATION	\$0.22
POOLS	Adult Swim Programs	\$20,951	PARK POPULATION	\$0.35
DEPOT & PAVILION	Depot Fees	\$20,438	FIXED	\$0.00
DEPOT & PAVILION	Pavilion Fees	\$7,593	FIXED	\$0.00
DEPOT & PAVILION	Blue Earth Plaza Rental	\$3,585	FIXED	\$0.00
RECREATION	Discount Tickets	\$110	FIXED	\$0.00
RECREATION	Misc. Programs	\$15,830	FIXED	\$0.00
RECREATION	Shelter Rental	\$10,730	PARK POPULATION	\$0.18
RECREATION	Facilities	\$42,980	PARK POPULATION	\$0.73
RECREATION	Ice Rink *	\$87,084	PARK POPULATION	\$1.47
RECREATION	Tennis	\$2,660	PARK POPULATION	\$0.05
RECREATION	Adult Basketball	\$8,100	PARK POPULATION	\$0.14
RECREATION	Adult Softball	\$38,295	PARK POPULATION	\$0.65
RECREATION	Twin Oaks	\$23,695	PARK POPULATION	\$0.40
RECREATION	Adult Volleyball	\$26,165	PARK POPULATION	\$0.44
RECREATION	Adult Soccer	\$3,750	PARK POPULATION	\$0.06
RECREATION	Adult Kickball	\$1,485	PARK POPULATION	\$0.03
RECREATION	Adult Crafts **	\$4,495	PARK POPULATION	\$0.08
RECREATION	Seniors	\$19,907	PARK POPULATION	\$0.34
RECREATION	Special Populations	\$30,311	PARK POPULATION	\$0.51
RECREATION	Special Bookings	\$3,084	PARK POPULATION	\$0.05
RECREATION	Arts and Pottery	\$5,190	PARK POPULATION	\$0.09
RECREATION	Dance	\$12,394	PARK POPULATION	\$0.21
RECREATION	Children's Theatre	\$12,627	PARK POPULATION	\$0.21
RECREATION	Day Camp	\$165,183	PARK POPULATION	\$2.80
RECREATION	Home School PE	\$1,733	PARK POPULATION	\$0.03
RECREATION	Soccer	\$9,343	PARK POPULATION	\$0.16
RECREATION	Micro Soccer	\$7,975	PARK POPULATION	\$0.14
RECREATION	Youth Soccer	\$14,225	PARK POPULATION	\$0.24
RECREATION	Wildcat Soccer	\$150	PARK POPULATION	\$0.00
RECREATION	Youth Soccer Camp	\$3,624	PARK POPULATION	\$0.06
RECREATION	Youth Baseball	\$13,915	PARK POPULATION	\$0.24
RECREATION	Wildcat Baseball	\$19,270	PARK POPULATION	\$0.33
RECREATION	Youth Softball	\$10,486	PARK POPULATION	\$0.18
RECREATION	Summer Optimist	\$5,093	PARK POPULATION	\$0.09
RECREATION	Youth Basketball	\$16,905	PARK POPULATION	\$0.29
RECREATION	Wildcat Basketball	\$9,900	PARK POPULATION	\$0.17
RECREATION	Basketball Camp	\$2,108	PARK POPULATION	\$0.04
RECREATION	Youth Volleyball	\$7,913	PARK POPULATION	\$0.13
RECREATION	Summer Youth Volleyball	\$13,670	PARK POPULATION	\$0.23
RECREATION	Volleyball Camp	\$4,100	PARK POPULATION	\$0.07
RECREATION	Youth Flag Football	\$10,800	PARK POPULATION	\$0.18
RECREATION	Cheerleading	\$1,333	PARK POPULATION	\$0.02
RECREATION	Admissions - Tournaments	\$14,071	PARK POPULATION	\$0.24
RECREATION	Concessions Ice Rink *	\$4,677	PARK POPULATION	\$0.08
RECREATION	Concessions - Contracted	\$11,518	PARK POPULATION	\$0.20
RECREATION	Youth Choir	\$780	PARK POPULATION	\$0.01
RECREATION	Contributions & Other / Misc	\$25,250	FIXED	\$0.00

DISCOVERY CENTER	Admission Fees	\$216,879	NET POPULATION	\$3.67
DISCOVERY CENTER	Gift Shop	\$86,784	FIXED	\$0.00
DISCOVERY CENTER	Educational Programs	\$56,112	FIXED	\$0.00
DISCOVERY CENTER	Facility Rental	\$92,848	FIXED	\$0.00
DISCOVERY CENTER	Memberships	\$73,378	FIXED	\$0.00
DISCOVERY CENTER	Donations	\$29,650	FIXED	\$0.00
DISCOVERY CENTER	Sponsorships / Grants	\$40,870	FIXED	\$0.00
DISCOVERY CENTER	Transfer from Special Rev	\$260,000	FIXED	\$0.00
ANIMAL SHELTER	Pet Licenses	\$22,024	NET POPULATION	\$0.37
ANIMAL SHELTER	Other County / City Contributions	\$86,350	FIXED	\$0.00
ANIMAL SHELTER	Boarding Fee	\$21,450	NET POPULATION	\$0.36
ANIMAL SHELTER	Adoption Fee	\$18,405	NET POPULATION	\$0.31
ANIMAL SHELTER	Rabies Forfeiture	\$4,550	FIXED	\$0.00
ANIMAL SHELTER	Neutering Fees	\$95	FIXED	\$0.00
ANIMAL SHELTER	Miscellaneous	\$1,425	FIXED	\$0.00
ANIMAL SHELTER	Taxable Merchandise	\$1,072	FIXED	\$0.00
ANIMAL SHELTER	Spay / Neuter / Pain	\$44,170	NET POPULATION	\$0.75
ANIMAL SHELTER	Rabies	\$45	FIXED	\$0.00
ANIMAL SHELTER	Donations	\$25,840	FIXED	\$0.00
	TOTAL	\$29,216,230		

Notes:

- Riley County Sales Tax: This revenue source will be FIXED given the annexed areas are in Pottawatomie County.
- Pottawatomie County Sales Tax: Annexed and future retail located in Pottawatomie County will yield sales tax revenue per the Pottawatomie County formula. The formula is based on the average of two variables—population share in the Manhattan portion of Pottawatomie County and the share of valuation in the Manhattan portion of Pottawatomie County. With the annexed areas, the average percentage would be approximately 17 percent (an increase from 5.5 percent). Sales tax revenue is based on a factor of 1 percent of the 17 percent.
- City Use Tax: The same 17 percent is used for this factor as well.

GENERAL FUND EXPENDITURES

Costs are modeled using actual expenditures from FY18 and demand factors discussed elsewhere. Each figure includes the following columns:

- *Expenditure Name*: Expenditures are listed according to the categories in the City budget and based on discussions with City staff.
- *Base Year Budget Amount*: FY18 actuals
- *Project Using Which Demand Base?* Identifies the projection methodology as described above.
- *Demand Unit Multiplier*: The percentage of the expenditure that is variable. For most departments, the multiplier is “1” with the exception of those departments that are funded through an enterprise fund, internal service funds, earmarked grants, or to reflect non-variable personnel costs (i.e., costs remaining fixed regardless of growth such as a departments having only one director regardless of growth).
- *Projection Methodology*: Provides mechanism to use a snapshot of current expenditures (CONSTANT) or escalate costs using alternative functions such as linear, logarithmic, or exponential.
- *Annual Change*: Used in conjunction with Projection Methodology to allow for annual escalation. Set at 0 percent using “constant” methodology.
- *LOS Std \$ per Demand Unit*: The calculated level of service factor (cost per demand unit) used to project costs.

Note: Capital expenditures to serve new development are addressed separately.

For some departments, there is a bottom portion of the figure that shows **personnel** and is labeled “STAFFING INPUT.” Headings are as follows:

- *Category*: Position titles.
- *Base Year FTE Positions*: Number of staff in each position in base year (FY18).
- *Project Using Which Demand Base*: The demand factor to be used to project future positions (e.g., population; population and jobs), if the position is affected by growth.
- *Current Demand Units Serviced per Position*: Number of demand units served by existing staff (e.g., number of persons and jobs served per position).
- *Percent Estimate of Available Capacity*: Estimate of available capacity of the position, expressed as a percentage. For example, 0% capacity means existing staff cannot handle any additional workload.

- *Remaining Capacity/Initial Hire Threshold*: The number of additional demand units the existing staff can serve; e.g., how many more persons and jobs in the City would trigger hiring of another position.
- *Estimated Service Capacity Per Position*: The number of demand units each position serves, which considers existing service levels plus the trigger for the next hire.

A summary of General Fund operating expenditure methodologies is provided in Figure 7. For those line item expenditures that are marked as other than fixed, further detail is provided in this section through a series of figures excerpted from the model. *Figures for fixed expenditures are not included.*

Figure 7. Summary of General Fund Operating Expenditure Methodologies

Department and Division	Expenditure Category	FY18 Actuals	% of Fund	Allocation Methodology				
				Population	Population & Jobs	Jobs	Custom Analysis	Fixed
GENERAL FUND								
ADMINISTRATION: General Government Division	Personnel Expense	\$773,694	3.0%					◆
	Contractual Services	\$48,862	0.2%					◆
	Commodities	\$6,348	0.0%					◆
	Commodities-CIP	\$3,683	0.0%					◆
FINANCE: Finance Division	Personnel Expense	\$689,254	2.6%					◆
	Contractual Services	\$43,669	0.2%					◆
	Commodities	\$4,152	0.0%					◆
	Commodities-CIP	\$3,549	0.0%					◆
FINANCE: Information Technology Division	Personnel Expense	\$272,424	1.0%				CITY FT STAFF	
	Contractual Services	\$30,966	0.1%					◆
	Commodities	\$3,917	0.0%					◆
	Commodities-CIP	\$4,513	0.0%					◆
	Capital Outlay	\$1,544	0.0%					◆
FINANCE: Customer Service Division	Personnel Expenses	\$172,838	0.7%		◆			
	Contractual Service	\$5,624	0.0%					◆
	Commodities	\$2,152	0.0%					◆
	Commodities - Cip	\$790	0.0%					◆
AIRPORT: Administration Division	Total	\$276,736	1.1%					◆
AIRPORT: Operations Division	Total	\$1,075,152	4.1%					◆
FIRE: Administration Division	Personnel Expenses	\$320,391	1.2%					◆
	Contractual Service	\$162,951	0.6%				TOTAL FIRE AND EMS CALLS	
	Commodities	\$9,421	0.0%					◆
	Commodities - Cip	\$11,737	0.0%					◆
	Debt Service	\$0	0.0%					◆
FIRE: Operations Division	Personnel Expenses	\$4,545,077	17.4%				DIRECT ENTRY: Cost incurred when station built	
	Contractual Service	\$167,307	0.6%				FIRE OPERATIONS STAFF; FIRE OPERATIONS STAFF	
	Commodities	\$202,538	0.8%				FIRE OPERATIONS STAFF; TOTAL FIRE AND EMS CALLS	
	Commodities - Cip	\$13,704	0.1%					◆
	Capital Outlay	\$3,500	0.0%					◆
FIRE: Technical Services Division	Personnel Expenses	\$776,993	3.0%		◆		CODE VIOLATIONS	
	Contractual Service	\$34,668	0.1%		◆			
	Commodities	\$21,249	0.1%		◆			
	Commodities - Cip	\$3,429	0.0%					◆
	Capital Outlay	\$0	0.0%					◆
HUMAN RESOURCES: Administration Division	Total	\$128,949	0.5%					◆
HUMAN RESOURCES: Personnel Division	Personnel Expenses	\$167,053	0.6%				CITY FT STAFF	
	Contractual Service	\$44,743	0.2%				CITY FT STAFF	
	Commodities	\$6,273	0.0%					◆
	Commodities - Cip	\$2,305	0.0%					◆

Green Valley Area Annexation Fiscal Impact Analysis: Methodology Document
City of Manhattan, Kansas

Department and Division	Expenditure Category	FY18 Actuals	% of Fund	Population	Population & Jobs	Jobs	Custom Analysis	Fixed
GENERAL FUND								
PUBLIC WORKS: Administration Division	Total	\$185,263	0.7%					◆
PUBLIC WORKS: Street Division	Personnel Expenses	\$1,197,117	4.6%				LANE MILES	
	Contractual Service	\$54,280	0.2%				LANE MILES	
	Commodities	\$290,838	1.1%				LANE MILES	
	Commodities - Cip	\$27,308	0.1%					◆
	Debt Service	\$93,903	0.4%					◆
PUBLIC WORKS: Engineering Division	Personnel Expenses	\$865,748	3.3%				AVG ANNUAL CAPITAL COSTS	
	Contractual Service	\$39,351	0.2%					◆
	Commodities	\$21,667	0.1%				AVG ANNUAL CAPITAL COSTS	
	Commodities - Cip	\$28,084	0.1%					◆
	Capital Outlay	\$11,161	0.0%					◆
PUBLIC WORKS: Traffic Division	Personnel Expenses	\$358,652	1.4%				LANE MILES	
	Contractual Service	\$148,471	0.6%				LANE MILES	
	Commodities	\$31,812	0.1%				LANE MILES	
	Commodities - Cip	\$13,839	0.1%					◆
	Capital Outlay	\$77,621	0.3%					◆
	Debt Service	\$31,118	0.1%					◆
PARKS AND RECREATION: Administration Division	Total	\$267,981	1.0%					◆
PARKS AND RECREATION: Douglass Center Division	Personnel Expenses	\$141,221	0.5%	◆				
	Contractual Service	\$35,468	0.1%	◆				
	Commodities	\$9,295	0.0%	◆				
	Commodities - Cip	\$3,126	0.0%					◆
PARKS AND RECREATION: Swimming Pools Division	Total	\$808,851	3.1%					◆
PARKS AND RECREATION: City Parks Division	Personnel Expenses	\$1,729,616	6.6%	◆			PARK ACRES	
	Contractual Service	\$292,053	1.1%				PARK ACRES	
	Commodities	\$321,967	1.2%				PARK ACRES	
	Commodities - Cip	\$44,138	0.2%				PARK ACRES	
	Capital Outlay	\$13,600	0.1%					◆
PARKS AND RECREATION: Zoo Division	Total	\$1,066,114	4.1%					◆
PARKS AND RECREATION: Blue Earth Park Division	Total	\$24,862	0.1%					◆
PARKS AND RECREATION: Recreation Administration Division	Personnel Expenses	\$642,542	2.5%				DIRECT ENTRY: Operating cost incurred if Rec Ctr built	
	Contractual Service	\$65,153	0.2%					
	Commodities	\$20,854	0.1%					
	Commodities - Cip	\$2,981	0.0%					
	Capital Outlay	\$19,601	0.1%					
PARKS AND RECREATION: Recreation Pavilion Division	Total	\$7,422	0.0%					◆
PARKS AND RECREATION: Recreation Depot Division	Total	\$14,995	0.1%					◆
PARKS AND RECREATION: Recreation Programs Division	Personnel Expenses	\$521,069	2.0%	◆				
	Contractual Service	\$280,571	1.1%	◆				
	Commodities	\$0	0.0%					
PARKS AND RECREATION: Building Services Division	Expenses	\$326,139	1.2%				FACILITY SQ. FT.	
	Contractual Service	\$0	0.0%				FACILITY SQ. FT.	
	Commodities	\$0	0.0%				FACILITY SQ. FT.	
	Commodities - Cip	\$0	0.0%					◆
PARKS AND RECREATION: Discovery Center	Total	\$1,067,565	4.1%					◆
PARKS AND RECREATION: Animal Shelter Division	Personnel Expenses	\$365,335	1.4%	◆				
	Contractual Service	\$97,175	0.4%	◆				
	Commodities	\$57,546	0.2%	◆				
	Commodities - Cip	\$2,168	0.0%					◆
	Capital Outlay	\$25,439	0.1%					◆

Department and Division	Expenditure Category	FY18 Actuals	% of Fund	Population	Population & Jobs	Jobs	Custom Analysis	Fixed
GENERAL FUND								
COMMUNITY DEVELOPMENT DEPARTMENT	Personnel Expenses	\$504,332	1.9%		◆			
	Contractual Service	\$26,010	0.1%					◆
	Commodities	\$4,660	0.0%		◆			
	Commodities - Cip	\$605	0.0%					◆
LEGAL DEPARTMENT: Legal Services Division	Personnel Expenses	\$234,757	0.9%		◆			
	Contractual Service	\$126,039	0.5%		◆			
	Commodities	\$4,442	0.0%					◆
	Commodities - Cip	\$954	0.0%					◆
LEGAL DEPARTMENT: Municipal Court Division	Personnel Expenses	\$651,381	2.5%				TOTAL POLICE CALLS	
	Contractual Service	\$104,521	0.4%				TOTAL POLICE CALLS	
	Commodities	\$9,428	0.0%				TOTAL POLICE CALLS	
	Commodities - Cip	\$5,042	0.0%				TOTAL POLICE CALLS	
	Capital Outlay	\$3,324	0.0%					◆
GENERAL SERVICES DEPARTMENT	Personnel Expenses	\$358,938	1.4%					◆
	Contractual Service	\$966,459	3.7%				LANE MILES; CITY FT STAFF	
	Commodities	\$6,016	0.0%					◆
	Commodities - Cip	\$52,315	0.2%				CITY FT STAFF	
	Capital Outlay	\$0	0.0%					◆
	Debt Service	\$112,996	0.4%					◆
	Other Charges	\$34,054	0.1%					◆
OUTSIDE SERVICES	Social Svcs Ag. Board Allocations	\$423,536	1.6%					◆
	Grants	\$584,285	2.2%	◆				
	Transfers	\$143,690	0.5%					◆
MUNICIPAL PARKING LOTS (GF)	Total	\$24,090	0.1%					◆
		\$26,175,106	100.0%					

Variable Operating Expenditures

For those expenditures indicated above as being affected by the annexation of Green Valley and/or future growth in the area, detailed figures excerpted from the Fiscal Model are provided below.

Note: If divisional costs are assumed as “fixed” (indicated above in Figure 7), no figures are provided in this section.

Finance

Finance expenditures are based on an increase in City staff and population and jobs in Green Valley. For additional City staff, the model tracks the increase in staff and projects costs where indicated as a result.

Figure 8. Finance: IT Division

<i>Personnel Expenses</i>							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Exempt-Full Time	\$72,222	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
Non-Exempt-Full Time	\$199,942	SEE BELOW	1.00	CONSTANT	0%	\$0.000	
Salaries-Temporary	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Cell Phone Allowance	\$260	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
TOTAL	\$272,424						

<i>Personnel Expenses STAFFING INPUT</i>							
Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position	
I.S. SOFTWARE SPECIALIST	1.0	FIXED	0	0%	0	0	
I.S. SUPPORT SPECIALIST	2.0	CITY FT STAFF	200	25%	50	150	
INFORMATION SYSTEMS MANAGER	1.0	FIXED	0	0%	0	0	
PC NETWORK COORDINATOR	1.0	FIXED	0	0%	0	0	
	5.0						

<i>SALARIES</i>						
	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly	
I.S. SOFTWARE SPECIALIST	\$48,500	0%	0%	\$48,500	\$23.33	
I.S. SUPPORT SPECIALIST	\$43,800	0%	0%	\$43,800	\$21.07	
INFORMATION SYSTEMS MANAGER	\$75,200	0%	0%	\$75,200	\$36.14	
PC NETWORK COORDINATOR	\$70,300	0%	0%	\$70,300	\$33.78	

Figure 9. Finance: Customer Service Division

FINANCE: Customer Service Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$65,645	FIXED	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$107,193	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
TOTAL	\$172,838					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
CUSTOMER SERVICE SUPERVISOR	1.0	FIXED	0	0%	0	0
FINANCE CLERK	1.0	FIXED	0	0%	0	0
FINANCE TECHNICIAN	2.0	POP AND JOBS	42,249	30%	12,675	32,391
UTILITY BILLING SPECIALIST	1.0	FIXED	0	0%	0	0
	5.0					

SALARIES

Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly
CUSTOMER SERVICE SUPERVISOR	\$67,600	0%	0%	\$67,600	\$32.51
FINANCE CLERK	\$31,300	0%	0%	\$31,300	\$15.06
FINANCE TECHNICIAN	\$35,400	0%	0%	\$35,400	\$17.03
UTILITY BILLING SPECIALIST	\$58,500	0%	0%	\$58,500	\$28.14

Fire

Fire operating costs are projected primarily based on the need for an additional Fire Station to serve the Green Valley area. Based on input from the City of Manhattan Fire Department, it is assumed that a maximum of one station will be needed to serve the area. However, this assumption would vary if only a portion of the area is annexed. (Detail is provided in the Capital Costs section.) Other ancillary costs are projected based on Fire calls for service (see below) or an increase in Fire Operations staff.

Fire Calls for Service Methodology

Calls for service data for 2016-2018 was provided for the Green Valley Area for residential, nonresidential, and traffic calls. The number of calls were then allocated to residential (per capita), nonresidential (per nonresidential trip), and traffic (per trip) using the share of personnel responding to each category of calls.

Figure 10. Fire Calls for Service Factors

FIRE/RESCUE DATA INPUT AREA

Blue Township Fire Department: Green Valley Area Fire/EMS Calls

Fire/Rescue Calls for Service Data (2016, 2017, 2018 Call Data)

<i>Land Use</i>	<i># Calls for Service</i>	<i># Personnel Dispatched</i>	<i>% of Calls</i>	<i>% of Personnel</i>
Residential	367	1,404	70%	68%
Nonresidential	72	279	14%	14%
Traffic Related	85	380	16%	18%
Total Fire Calls Matched	524	2,063	100%	100%
Other no address/land use match	128	636		
GRAND TOTAL	652	2,699		

	<i>Demand Unit</i>	<i>Base Year Demand Units</i>	<i>Allocated Level of Effort*</i>	<i>Level of Effort per Demand Unit</i>
Residential	GREEN VALLEY POPULATION	4,087	357	0.087
Nonresidential	GREEN VALLEY NONRES TRIPS	2,968	71	0.024
Traffic	GREEN VALLEY VEHICLE TRIPS	10,235	97	0.009
TOTAL			524	

* Allocated based on % of Personnel

Source: City of Manhattan, EMS/Fire Department Calls for Service data for Green Valley Area, 2016-2018.

Figure 11. Fire: Administration Division

FIRE: Administration Division
Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$12,219	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$1.55
Medical Exam	\$672	FIXED	1.00	CONSTANT	0%	\$0.00
Pre-Employ Medical Test	\$4,965	FIXED	1.00	CONSTANT	0%	\$0.00
Gas & Electricity	\$84,036	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$10.64
Copy Machine	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Security	\$4,220	FIXED	1.00	CONSTANT	0%	\$0.00
Software Maintenance Agreements	\$21,020	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$2.66
Telecommunications	\$27,607	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$3.49
Freight	\$737	FIXED	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan	\$4,187	FIXED	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$362	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$1,092	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$240	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$217	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$741	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$286	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$50	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$300	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$162,951					

Figure 12. Fire: Operations Division

FIRE: Operations Division
Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$488,398	SEE BELOW	1.00	CONSTANT	0%	\$0
Non-Exempt-Full Time	\$3,958,344	SEE BELOW	1.00	CONSTANT	0%	\$0
Salaries-Temporary	\$82,175	SEE BELOW	1.00	CONSTANT	0%	\$0
Cell Phone Allow	\$4,010	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$46
Clothing Allow	\$12,150	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$140
FIRE STATION OPERATING IMPACT	\$0	DIRECT ENTRY	1.00	CONSTANT	0%	\$1,200,000
TOTAL	\$4,545,077					

- When a Fire Station is “built” by the model, an operating impact of \$1.2 million is triggered with 12 FTEs.

FIRE: Operations Division

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$8,543	FIXED	1.00	CONSTANT	0%	\$0.00
Medical Exam	\$23,834	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$273.95
Equipment Testing	\$3,324	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$38.21
HVAC	\$17,826	FIXED	1.00	CONSTANT	0%	\$0.00
Electrical Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Trash Service	\$3,290	FIXED	1.00	CONSTANT	0%	\$0.00
Janitorial Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Building Maintenance	\$54,837	FIRE STATIONS	1.00	CONSTANT	0%	\$10,967.40
Equipment Maintenance	\$28,769	FIRE STATIONS	1.00	CONSTANT	0%	\$5,753.80
Software Maint. Agreements	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Rentals / Equipment & Vehicle Rent	\$1,800	FIXED	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$29	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$1,185	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$1,090	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$12,804	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$147.17
In-House Training	\$3,066	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$35.24
Travel-Meals	\$3,619	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$41.60
Travel-Lodging	\$1,498	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$17.22
Travel-Airfare	\$1,025	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$11.78
Travel-Mileage	\$768	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$8.83
TOTAL	\$167,307					

FIRE: Operations Division

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Books	\$1,566	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$18.00
Uniforms	\$27,222	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$312.90
Safety Clothing	\$38,467	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$442.15
Operating Supplies	\$7,611	FIRE OPERATIONS STAFF	1.00	CONSTANT	0%	\$87.48
Agricultural Supplies	\$84	FIXED	1.00	CONSTANT	0%	\$0.00
Chemicals	\$7,292	FIXED	1.00	CONSTANT	0%	\$0.00
Snow / Ice Control	\$658	FIXED	1.00	CONSTANT	0%	\$0.00
First Aid	\$1,509	FIXED	1.00	CONSTANT	0%	\$0.00
Food	\$2,460	FIXED	1.00	CONSTANT	0%	\$0.00
Kitchen & Bunkroom Supply	\$9,883	FIXED	1.00	CONSTANT	0%	\$0.00
Computer Supplies	\$147	FIXED	1.00	CONSTANT	0%	\$0.00
Building Materials	\$373	FIXED	1.00	CONSTANT	0%	\$0.00
Janitorial Supplies	\$11,371	FIXED	1.00	CONSTANT	0%	\$0.00
Maintenance Supplies	\$10,512	FIXED	1.00	CONSTANT	0%	\$0.00
Electrical Supplies	\$1,381	FIXED	1.00	CONSTANT	0%	\$0.00
Motor Vehicle Supplies / Repair Parts	\$40,134	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$5.08
Fuel & Lube	\$41,868	TOTAL FIRE AND EMS CALLS	1.00	CONSTANT	0%	\$5.30
TOTAL	\$202,538					

Figure 13. Fire: Technical Services Division

FIRE: Technical Services Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$342,962	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$423,595	FIXED	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Part Time	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Cell Phone Allow	\$4,266	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$2,990	FIXED	1.00	CONSTANT	0%	\$0.00
Benefits-Vehicle Allow	\$3,180	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$776,993					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
ADMINISTRATIVE ASSISTANT	2.0	FIXED	0	0%	0	0
ASST CHIEF OF RISK RED & CODE	1.0	FIXED	0	0%	0	0
CODE & ZONING OFFICER I AND II	5.0	NET POP AND JOBS	16,899	25%	4,225	14,787
CODE & ZONING OFFICER II	0.0	FIXED	0	0%	0	0
CODE SERVICES OFFICER II	1.0	CODE VIOLATIONS	185	50%	93	139
DEPUTY BUILDING OFFICIAL	1.0	FIXED	0	0%	0	0
DEPUTY FIRE MARSHAL	1.0	FIXED	0	0%	0	0
FIRE STAFF CAPTAIN II	2.0	FIXED	0	0%	0	0
PLANS EXAMINER	2.0	FIXED	0	0%	0	0
SENIOR CODE & ZONING OFFICER	1.0	FIXED	0	0%	0	0
	16.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly
ADMINISTRATIVE ASSISTANT	\$37,200	0%	0%	\$37,200	\$17.90
ASST CHIEF OF RISK RED & CODE	\$97,000	0%	0%	\$97,000	\$46.63
CODE & ZONING OFFICER I AND II	\$38,100	0%	0%	\$38,100	\$18.30
CODE & ZONING OFFICER II	\$44,800	0%	0%	\$44,800	\$21.53
CODE SERVICES OFFICER II	\$44,400	0%	0%	\$44,400	\$21.35
DEPUTY BUILDING OFFICIAL	\$70,300	0%	0%	\$70,300	\$33.81
DEPUTY FIRE MARSHAL	\$66,700	0%	0%	\$66,700	\$32.05
FIRE STAFF CAPTAIN II	\$76,900	0%	0%	\$76,900	\$36.97
PLANS EXAMINER	\$51,200	0%	0%	\$51,200	\$24.62
SENIOR CODE & ZONING OFFICER	\$54,700	0%	0%	\$54,700	\$26.31

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Medical Exam	\$577	FIXED	1.00	CONSTANT	0%	\$0.00
Ground Maintenance / Code	\$146	FIXED	1.00	CONSTANT	0%	\$0.00
Equipment Maintenance	\$13,502	NET POP AND JOBS	1.00	CONSTANT	0%	\$0.16
Copy Machine	\$1,530	FIXED	1.00	CONSTANT	0%	\$0.00
Software Maint. Agreements	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Legal Publications	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Marketing / Public Relation	\$884	FIXED	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan	\$3,435	FIXED	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$2,017	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$1,828	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$3,743	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$2,566	FIXED	1.00	CONSTANT	0%	\$0.00
In-House Training	\$225	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$1,265	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$2,330	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$50	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$570	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$34,668					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Books	\$897	FIXED	1.00	CONSTANT	0%	\$0.00
Subscription	\$1,355	FIXED	1.00	CONSTANT	0%	\$0.00
Uniforms	\$2,870	FIXED	1.00	CONSTANT	0%	\$0.00
Safety Clothing	\$890	FIXED	1.00	CONSTANT	0%	\$0.00
Operating Supplies	\$665	FIXED	1.00	CONSTANT	0%	\$0.00
Food	\$539	FIXED	1.00	CONSTANT	0%	\$0.00
Computer Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Motor Vehicle Supplies / Repair Parts	\$4,966	NET POP AND JOBS	1.00	CONSTANT	0%	\$0.06
Fuel & Lube	\$9,067	NET POP AND JOBS	1.00	CONSTANT	0%	\$0.11
TOTAL	\$21,249					

Human Resources

Human Resource expenditures are based on an increase in City staff. The model tracks the increase in staff and projects costs to the HR department as a result.

Figure 14. Human Resources: Personnel Division

HUMAN RESOURCES: Personnel Division

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$56,311	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$89,020	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
Non-Exempt-Part Time	\$17,454	CITY FT STAFF	1.00	CONSTANT	0%	\$43.64
Salaries-Temporary	\$4,268	CITY FT STAFF	1.00	CONSTANT	0%	\$10.67
TOTAL	\$167,053					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
HUMAN RESOURCE GENERALIST	1.0	CITY FT STAFF	400	5%	20	210
HUMAN RESOURCE SPECIALIST	1.0	FIXED	0	0%	0	0
	2.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly
HUMAN RESOURCE GENERALIST	\$48,400	0%	0%	\$48,400	\$23.25
HUMAN RESOURCE SPECIALIST	\$58,800	0%	0%	\$58,800	\$28.28

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Drug Testing	\$9,987	CITY FT STAFF	1.00	CONSTANT	0%	\$24.97
Employment Screening	\$11,838	CITY FT STAFF	1.00	CONSTANT	0%	\$29.60
Software Maint Agreements	\$825	CITY FT STAFF	1.00	CONSTANT	0%	\$2.06
Telecommunications	\$3,860	CITY FT STAFF	1.00	CONSTANT	0%	\$9.65
Recruitment	\$8,136	FIXED	1.00	CONSTANT	0%	\$0.00
Other Advertising	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan	\$9,446	CITY FT STAFF	1.00	CONSTANT	0%	\$23.62
Printing / Binding	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$458	FIXED	1.00	CONSTANT	0%	\$0.00
Seminars & Conference Registrations	\$108	FIXED	1.00	CONSTANT	0%	\$0.00
Reference Materials	\$85	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$44,743					

Public Works

City Public Works Department will take over 82.5 lane miles of public roads in the Green Valley Area upon annexation. The summary by FAZ is shown below.

Figure 15. Current Inventory of Local Lane Miles by FAZ

	FISCAL ANALYSIS ZONE				Grand Total
	1	2	3	4	
Dirt Rd	0.0	0.0	0.0	0.4	0.4
Gravel Rd	0.0	0.0	6.5	16.0	22.5
Paved Rd	1.7	4.1	4.0	40.6	50.3
Private Dr	0.0	0.9	0.1	8.3	9.3
Grand Total	1.7	5.0	10.6	65.2	82.5

The model also projects **new** lane miles to capture future ongoing operating impact to the City. The methodology employed is as follows:

- Existing non-state lane miles in the study area were divided by current vehicle trips in the study area to determine a current level of service (i.e., amount of infrastructure per vehicle trip in the study area (.0081 lane miles per trip)). This amount of infrastructure is then applied to projected new vehicle trips from growth in each FAZ.¹
- The projected number of new local lane miles will vary by scenario (and is documented in the Fiscal Impact Analysis report).
- Personnel needed from additional lane miles accepted into the City’s jurisdiction is captured by adding Road Crews. Four Road Crews serve the city. One crew includes: 1 Crew Leader Maintenance I/II, 2 Equipment Operators, and 2 Maintenance Technicians. These positions are aggregated into one crew and projected based on annexed and projected new lane miles.

¹ As a check on this assumption, **local** lane miles in the study area (82.5) (the majority of which are in residential neighborhoods) was divided by the current number of housing units (1,439) resulting in approximately 150 linear feet per housing unit in the study area. This is a reasonable assumption in terms of the density and road frontage per housing unit in a suburban area.

Figure 16. Public Works: Street Division

PUBLIC WORKS: Street Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$192,749	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$987,186	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
Cell Phone Allow	\$3,807	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$13,375	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$1,197,117					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
EQUIPMENT MECHANIC I and II	3	FIXED	0	0%	0	0
EQUIPMENT OPERATOR	8	FIXED	0	0%	0	0
FLEET MAINTENANCE SUPERVISOR	1	FIXED	0	0%	0	0
MAINTENANCE CREWLEADER I AND II	5	FIXED	0	0%	0	0
MAINTENANCE TECHNICIAN	9	FIXED	0	0%	0	0
MAINTENANCE WORKER I (T)	1	FIXED	0	0%	0	0
SR ADMINISTRATIVE ASSISTANT	1	FIXED	0	0%	0	0
STREET & FLEET SUPERINTENDENT	1	FIXED	0	0%	0	0
STREET SUPERVISOR	1	FIXED	0	0%	0	0
WELDER	1	FIXED	0	0%	0	0
ROAD CREW	4	LANE MILES	120	15%	18	100
	31.0					

SALARIES

Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly
EQUIPMENT MECHANIC I and II	\$43,100	0%	0%	\$43,100	\$20.74
EQUIPMENT OPERATOR	\$45,200	0%	0%	\$45,200	\$21.74
FLEET MAINTENANCE SUPERVISOR	\$59,300	0%	0%	\$59,300	\$28.49
MAINTENANCE CREWLEADER I AND II	\$51,300	0%	0%	\$51,300	\$24.67
MAINTENANCE TECHNICIAN	\$36,400	0%	0%	\$36,400	\$17.48
MAINTENANCE WORKER I (T)	\$32,300	0%	0%	\$32,300	\$15.51
SR ADMINISTRATIVE ASSISTANT	\$46,900	0%	0%	\$46,900	\$22.55
STREET & FLEET SUPERINTENDENT	\$78,700	0%	0%	\$78,700	\$37.86
STREET SUPERVISOR	\$59,400	0%	0%	\$59,400	\$28.58
WELDER	\$56,000	0%	0%	\$56,000	\$26.92
ROAD CREW	\$214,500	0%	0%	\$214,500	\$0.00

Green Valley Area Annexation Fiscal Impact Analysis: Methodology Document
City of Manhattan, Kansas

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$4,965	LANE MILES	1.00	CONSTANT	0%	\$10.31
File Fees / Registration	\$203	FIXED	1.00	CONSTANT	0%	\$0.0000000
Street Repairs	\$2,200	LANE MILES	1.00	CONSTANT	0%	\$4.57
Trash Service	\$5,315	LANE MILES	1.00	CONSTANT	0%	\$11.04
Gas & Electricity	\$15,757	LANE MILES	1.00	CONSTANT	0%	\$32.73
Snow Removal	\$943	LANE MILES	1.00	CONSTANT	0%	\$1.96
Building Maintenance	\$3,476	LANE MILES	1.00	CONSTANT	0%	\$7.22
Equipment Maintenance	\$3,499	LANE MILES	1.00	CONSTANT	0%	\$7.27
Software Maintenance Agreements	\$2,343	LANE MILES	1.00	CONSTANT	0%	\$4.87
Equipment & Vehicle Rent	-\$503	FIXED	1.00	CONSTANT	0%	\$0.00
Telecommunications	\$10,258	LANE MILES	1.00	CONSTANT	0%	\$21.31
Copy / Image / Scan	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$544	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$375	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$1,850	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$82	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$394	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$2,430	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$149	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$54,280					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Copying Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Office Supplies	\$3,299	LANE MILES	1.00	CONSTANT	0%	\$6.85
Books	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Uniform	\$6,466	LANE MILES	1.00	CONSTANT	0%	\$13.43
Safety Clothing	\$2,160	LANE MILES	1.00	CONSTANT	0%	\$4.49
Operating Supplies	\$21,221	LANE MILES	1.00	CONSTANT	0%	\$44.08
Snow & Ice Control-Salt	\$0	LANE MILES	1.00	CONSTANT	0%	\$0.00
Snow & Ice Control-Deicer	\$30,725	LANE MILES	1.00	CONSTANT	0%	\$63.82
First Aid	\$74	LANE MILES	1.00	CONSTANT	0%	\$0.15
Food	\$4,935	LANE MILES	1.00	CONSTANT	0%	\$10.25
Sign Materials	\$4,967	LANE MILES	1.00	CONSTANT	0%	\$10.32
Road Material-Asphalt	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Road Material-Concrete	\$1,384	LANE MILES	1.00	CONSTANT	0%	\$2.88
Road Material-Other	\$43,061	LANE MILES	1.00	CONSTANT	0%	\$89.45
Building Material	\$477	LANE MILES	1.00	CONSTANT	0%	\$0.99
Janitorial Supplies	\$2,201	LANE MILES	1.00	CONSTANT	0%	\$4.57
Maintenance Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Motor Vehicle Supplies / Repair Parts	\$86,850	LANE MILES	1.00	CONSTANT	0%	\$180.41
Fuel & Lube	\$83,018	LANE MILES	1.00	CONSTANT	0%	\$172.45
TOTAL	\$290,838					

Figure 17. Public Works: Engineering Division

PUBLIC WORKS: Engineering Division

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$455,785	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$375,069	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Salaries-Temporary	\$23,478	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0006
Cell Phone Allow	\$4,381	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$3,435	FIXED	1.00	CONSTANT	0%	\$0.00
Benefits-Vehicle Allow	\$3,600	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$865,748					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
CITY ENGINEER/ASST DIR OF PW	1	FIXED	0	0%	0	0
ENGINEER I	1	AVG ANNUAL CAPITAL COSTS	37,789,764	1%	377,898	19,083,831
ENGINEER III	1	AVG ANNUAL CAPITAL COSTS	37,789,764	1%	377,898	19,083,831
ENGINEERING AIDE I-III	7	AVG ANNUAL CAPITAL COSTS	5,398,538	1%	53,985	4,730,469
ENGINEERING TECHNICIAN II	1	AVG ANNUAL CAPITAL COSTS	37,789,764	1%	377,898	19,083,831
GIS COORDINATOR	1	FIXED	0	0%	0	0
GIS TECHNICIAN	1	AVG ANNUAL CAPITAL COSTS	37,789,764	1%	377,898	19,083,831
INFRASTRUCTURE ANALYST	1	AVG ANNUAL CAPITAL COSTS	37,789,764	1%	377,898	19,083,831
PRINCIPAL CIVIL ENGINEER	1	FIXED	0	0%	0	0
PROJECT COORDINATOR	1	FIXED	0	0%	0	0
	16.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly
CITY ENGINEER/ASST DIR OF PW	\$136,000	0%	0%	\$136,000	\$65.37
ENGINEER I	\$53,700	0%	0%	\$53,700	\$25.81
ENGINEER III	\$69,600	0%	0%	\$69,600	\$33.46
ENGINEERING AIDE I-III	\$47,200	0%	0%	\$47,200	\$22.67
ENGINEERING TECHNICIAN II	\$45,300	0%	0%	\$45,300	\$21.76
GIS COORDINATOR	\$61,400	0%	0%	\$61,400	\$29.51
GIS TECHNICIAN	\$45,500	0%	0%	\$45,500	\$21.88
INFRASTRUCTURE ANALYST	\$52,300	0%	0%	\$52,300	\$25.16
PRINCIPAL CIVIL ENGINEER	\$108,800	0%	0%	\$108,800	\$52.30
PROJECT COORDINATOR	\$58,200	0%	0%	\$58,200	\$27.98

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
File Fees / Registration	\$1,040	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Construction Projects	\$0	FIXED	1.00	CONSTANT	0%	\$0.000000
Equipment Maintenance	\$1,377	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Copy Machine	\$704	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Software Maintenance Agreements	\$17,035	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Telecommunications	\$8,630	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Postage	\$63	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Legal Publications	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Recruitment	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Marketing / Public Relations	\$194	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan	\$655	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$1,827	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$1,534	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$1,310	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Reference Materials	\$394	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Training	\$1,725	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$137	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$1,526	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$1,122	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$78	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.00
TOTAL	\$39,351					

COMMODITIES							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Office Supplies	\$1,066	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0000	
Paper Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.0000	
Books	\$106	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0000	
Subscriptions	\$0	FIXED	1.00	CONSTANT	0%	\$0.0000	
Uniforms	\$2,012	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0001	
Operating Supplies	\$219	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0000	
Drafting Supplies	\$2,455	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0001	
Food	\$550	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0000	
Surveying Supplies	\$3,094	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0001	
Computer Supplies	\$2,706	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0001	
Motor Vehicle Supplies / Repair Parts	\$1,297	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0000	
Tires	\$0	FIXED	1.00	CONSTANT	0%	\$0.0000	
Fuel & Lube	\$8,162	AVG ANNUAL CAPITAL COSTS	1.00	CONSTANT	0%	\$0.0002	
TOTAL	\$21,667						

Figure 18. Public Works: Traffic Division

PUBLIC WORKS: Traffic Division							
Personnel Expenses							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Exempt-Full Time	\$76,637	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
Non-Exempt-Full Time	\$270,218	SEE BELOW	1.00	CONSTANT	0%	\$0.0000	
Salaries-Temporary	\$6,403	LANE MILES	1.00	CONSTANT	0%	\$13.30	
Cell Phone Allow	\$2,080	FIXED	1.00	CONSTANT	0%	\$0.00	
Clothing Allow	\$3,314	FIXED	1.00	CONSTANT	0%	\$0.00	
TOTAL	\$358,652						

Personnel Expenses STAFFING INPUT							
Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position	
SEASONAL LABORER (S)	1.0	FIXED	0	0%	0	0	
TRAFFIC SIGN & MARKINGS SPEC I	3.0	LANE MILES	160	30%	48	132	
TRAFFIC SIGNS & MARKINGS SUPER	1.0	FIXED	0	0%	0	0	
TRAFFIC SUPERINTENDENT	1.0	FIXED	0	0%	0	0	
TRAFFIC TECHNICIAN	2.0	LANE MILES	241	30%	72	185	
	8.0						

SALARIES						
Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost	
SEASONAL LABORER (S)	\$20,800	0%	0%	\$20,800	\$10.00	
TRAFFIC SIGN & MARKINGS SPEC I	\$39,800	0%	0%	\$39,800	\$19.13	
TRAFFIC SIGNS & MARKINGS SUPER	\$49,300	0%	0%	\$49,300	\$23.70	
TRAFFIC SUPERINTENDENT	\$78,300	0%	0%	\$78,300	\$37.63	
TRAFFIC TECHNICIAN	\$44,200	0%	0%	\$44,200	\$21.23	

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Traffic Control-Professional Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Professional Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Signal Repairs	\$19,891	LANE MILES	1.00	CONSTANT	0%	\$41.32
Trash Service	\$1,028	LANE MILES	1.00	CONSTANT	0%	\$2.14
Gas & Electricity	\$18,828	LANE MILES	1.00	CONSTANT	0%	\$39.11
Traffic Control	\$52,401	LANE MILES	1.00	CONSTANT	0%	\$108.85
School Flashers	\$2,626	LANE MILES	1.00	CONSTANT	0%	\$5.45
Repairs & Maintenance / Signals	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Equipment Maintenance	\$992	LANE MILES	1.00	CONSTANT	0%	\$2.06
Sign Maintenance-Blanks	\$39,299	LANE MILES	1.00	CONSTANT	0%	\$81.63
Pavement Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Software Maint Agreements	\$7,725	LANE MILES	1.00	CONSTANT	0%	\$16.05
Equipment & Vehicle Rent	\$191	LANE MILES	1.00	CONSTANT	0%	\$0.40
Telecommunications	\$2,623	LANE MILES	1.00	CONSTANT	0%	\$5.45
Postage	\$490	LANE MILES	1.00	CONSTANT	0%	\$1.02
Legal Publications	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan		FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$720	LANE MILES	1.00	CONSTANT	0%	\$1.50
Seminar & Conference Registrations	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Reference Materials	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
In-House Training	\$1,657	LANE MILES	1.00	CONSTANT	0%	\$3.44
Travel-Meals	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$148,471					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Office Supplies	\$582	LANE MILES	1.00	CONSTANT	0%	\$1.21
Uniforms	\$1,490	LANE MILES	1.00	CONSTANT	0%	\$3.10
Safety Clothing	\$986	LANE MILES	1.00	CONSTANT	0%	\$2.05
Operating Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
First Aid	\$1,459	LANE MILES	1.00	CONSTANT	0%	\$3.03
Food	\$112	LANE MILES	1.00	CONSTANT	0%	\$0.23
Computer Supplies	\$1,051	LANE MILES	1.00	CONSTANT	0%	\$2.18
Traffic Paint & Beads	\$6,558	LANE MILES	1.00	CONSTANT	0%	\$13.62
Janitorial Supplies	\$1,678	LANE MILES	1.00	CONSTANT	0%	\$3.49
Maintenance Supplies	\$932	LANE MILES	1.00	CONSTANT	0%	\$1.94
Electrical Supplies	\$1,041	LANE MILES	1.00	CONSTANT	0%	\$2.16
Motor Vehicle Supplies / Repair Parts	\$5,220	LANE MILES	1.00	CONSTANT	0%	\$10.84
Fuel & Lube	\$10,703	LANE MILES	1.00	CONSTANT	0%	\$22.23
TOTAL	\$31,812					

Parks

Based on discussions with the City of Manhattan Parks Department, current Parks Department operations are currently serving both City residents and residents in the study area. Therefore, operating level of service for this analysis is based on a demand base that includes City population plus the existing population in Green Valley.² This is indicated as “Park Population” in the model.

It should be noted however that for capital facilities, the level of service used is current City population. This is the demand base the City uses to plan for future facilities. This is addressed in the Capital section of this document.

Figure 19. Parks and Recreation: Douglass Center Division

PARKS AND RECREATION: Douglass Center Division

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$107,742	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$0	FIXED	1.00	CONSTANT	0%	\$0.0000
Salaries-Temporary *	\$32,019	PARK POPULATION	1.00	CONSTANT	0%	\$0.54
Cell Phone Allow	\$260	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Vehicle Allow	\$1,200	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$141,221					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
ACTIVITY ASSISTANT (PT)	1.0	FIXED	0	0%	0	0
ATTENDANT (PT)	2.0	PARK POPULATION	29,523	50%	14,761	24,602
DOUGLASS CENTER DIRECTOR	1.0	FIXED	0	0%	0	0
INSTRUCTOR (S)	4.0	PARK POPULATION	14,761	50%	7,381	13,285
RECREATION COORDINATOR	1.0	FIXED	0	0%	0	0
	9.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost
ACTIVITY ASSISTANT (PT)	\$31,000	0%	0%	\$31,000	\$14.90
ATTENDANT (PT)	\$20,800	0%	0%	\$20,800	\$10.00
DOUGLASS CENTER DIRECTOR	\$70,900	0%	0%	\$70,900	\$34.09
INSTRUCTOR (S)	\$20,800	0%	0%	\$20,800	\$10.00
RECREATION COORDINATOR	\$40,600	0%	0%	\$40,600	\$19.54

² It should be noted that this differs from the City of Manhattan’s Strategic Facilities Plan

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Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services Programs	\$410	FIXED	1.00	CONSTANT	0%	\$0.00
Miscellaneous / New Programs	\$2,556	PARK POPULATION	1.00	CONSTANT	0%	\$0.04
Facilities Program Expense	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Dance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Tutoring	\$1,236	PARK POPULATION	1.00	CONSTANT	0%	\$0.02
Trash Service	\$1,962	FIXED	1.00	CONSTANT	0%	\$0.00
Gas & Electricity *	\$20,740	FIXED	1.00	CONSTANT	0%	\$0.00
Janitorial Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Ground Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Building Maintenance	\$2,636	FIXED	1.00	CONSTANT	0%	\$0.00
Equipment Maintenance	\$2,062	FIXED	1.00	CONSTANT	0%	\$0.00
Copy Machine	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Security	\$300	FIXED	1.00	CONSTANT	0%	\$0.00
Software Maint Agreements	\$269	FIXED	1.00	CONSTANT	0%	\$0.00
Telecommunications	\$2,267	FIXED	1.00	CONSTANT	0%	\$0.00
Marketing / Public Relations	\$186	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$730	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$114	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$35,468					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Copying Supplies	\$1,053	PARK POPULATION	1.00	CONSTANT	0%	\$0.02
Office Supplies	\$725	PARK POPULATION	1.00	CONSTANT	0%	\$0.01
Paper Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Books	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Subscriptions	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Uniforms	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Operating Supplies	\$671	PARK POPULATION	1.00	CONSTANT	0%	\$0.01
Agricultural Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Food	\$1,216	PARK POPULATION	1.00	CONSTANT	0%	\$0.02
Building Material	\$2,004	PARK POPULATION	1.00	CONSTANT	0%	\$0.03
Janitorial Supplies *	\$3,626	PARK POPULATION	1.00	CONSTANT	0%	\$0.06
TOTAL	\$9,295					

Figure 20. Parks and Recreation: City Parks Division

PARKS AND RECREATION: City Parks Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$491,171	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$1,069,525	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
Salaries-Temporary	\$143,672	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Cell Phone Allow	\$5,256	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$13,992	FIXED	1.00	CONSTANT	0%	\$0.00
Benefits-Vehicle Allow	\$6,000	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$1,729,616					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
AERIAL OPERATOR II	2	FIXED	0	0%	0	0
ASST DIR OF PARKS & RECREATION	1	FIXED	0	0%	0	0
CEMETERY SEXTON	1	FIXED	0	0%	0	0
CHEMICAL TECHNICIAN	1	FIXED	0	0%	0	0
FORESTRY SUPERVISOR	1	FIXED	0	0%	0	0
HORTICULTURAL SUPERVISOR	1	FIXED	0	0%	0	0
INTERN (T)	3	FIXED	0	0%	0	0
MAINTENANCE WORKER I	10	PARK ACRES	121	0%	0	110
MAINTENANCE WORKER II	7	PARK ACRES	172	0%	0	151
PARK MECHANIC	1	FIXED	0	0%	0	0
PARK PLANNER	1	FIXED	0	0%	0	0
PARK SUPERINTENDENT	1	FIXED	0	0%	0	0
PARK SUPERVISOR	1	FIXED	0	0%	0	0
PARK TECHNICIAN	4	PARK ACRES	302	0%	0	241
SEASONAL LABORER (S)	21	PARK ACRES	57	0%	0	55
	56.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost
AERIAL OPERATOR II	\$50,300	0%	0%	\$50,300	\$24.19
ASST DIR OF PARKS & RECREATION	\$91,100	0%	0%	\$91,100	\$43.81
CEMETERY SEXTON	\$78,900	0%	0%	\$78,900	\$37.94
CHEMICAL TECHNICIAN	\$40,800	0%	0%	\$40,800	\$19.61
FORESTRY SUPERVISOR	\$81,100	0%	0%	\$81,100	\$38.98
HORTICULTURAL SUPERVISOR	\$52,700	0%	0%	\$52,700	\$25.33
INTERN (T)	\$25,000	0%	0%	\$25,000	\$12.00
MAINTENANCE WORKER I	\$34,900	0%	0%	\$34,900	\$16.78
MAINTENANCE WORKER II	\$37,200	0%	0%	\$37,200	\$17.91
PARK MECHANIC	\$51,500	0%	0%	\$51,500	\$24.78
PARK PLANNER	\$59,900	0%	0%	\$59,900	\$28.79
PARK SUPERINTENDENT	\$76,300	0%	0%	\$76,300	\$36.68
PARK SUPERVISOR	\$56,600	0%	0%	\$56,600	\$27.21
PARK TECHNICIAN	\$38,400	0%	0%	\$38,400	\$18.46
SEASONAL LABORER (S)	\$21,200	0%	0%	\$21,200	\$10.21

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$1,137	FIXED	1.00	CONSTANT	0%	\$0.00
Repair Services	\$450	FIXED	1.00	CONSTANT	0%	\$0.00
New Hire Expense	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Trash Service	\$11,932	FIXED	1.00	CONSTANT	0%	\$0.00
Gas & Electricity	\$135,572	PARK ACRES	1.00	CONSTANT	0%	\$112.32
Janitorial Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Ground Maintenance	\$48,390	PARK ACRES	1.00	CONSTANT	0%	\$40.09
Building Maintenance	\$16,924	PARK ACRES	1.00	CONSTANT	0%	\$14.02
Elevator Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Equipment Maintenance	\$21,285	FIXED	1.00	CONSTANT	0%	\$0.00
Copy Machine	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Software Maintenance Agreement	\$8,546	FIXED	1.00	CONSTANT	0%	\$0.00
Equipment & Vehicle Rent	\$21,488	PARK ACRES	1.00	CONSTANT	0%	\$17.80
Telecommunications	\$15,552	PARK ACRES	1.00	CONSTANT	0%	\$12.88
Postage	\$12	FIXED	1.00	CONSTANT	0%	\$0.00
Legal Publications	\$25	FIXED	1.00	CONSTANT	0%	\$0.00
Recruitment	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Other Advertising	\$25	FIXED	1.00	CONSTANT	0%	\$0.00
Marketing / Public Relations	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Printing / Binding	\$505	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$2,796	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$1,665	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$2,430	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$208	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$2,931	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$180	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$292,053					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Copying Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Office Supplies	\$2,003	FIXED	1.00	CONSTANT	0%	\$0.00
Paper Supplies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Books	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Subscriptions	\$196	FIXED	1.00	CONSTANT	0%	\$0.00
Uniforms	\$7,762	FIXED	1.00	CONSTANT	0%	\$0.00
Safety Clothing	\$1,356	FIXED	1.00	CONSTANT	0%	\$0.00
Operating Supplies	\$57,121	PARK ACRES	1.00	CONSTANT	0%	\$47.32
Agricultural Supplies	\$50,644	PARK ACRES	1.00	CONSTANT	0%	\$41.96
Chemicals	\$19,380	PARK ACRES	1.00	CONSTANT	0%	\$16.06
First Aid	\$312	FIXED	1.00	CONSTANT	0%	\$0.00
Food	\$2,085	FIXED	1.00	CONSTANT	0%	\$0.00
Sports Supplies	\$13,755	PARK ACRES	1.00	CONSTANT	0%	\$11.40
Computer Supplies	\$495	FIXED	1.00	CONSTANT	0%	\$0.00
Sign Materials	\$525	FIXED	1.00	CONSTANT	0%	\$0.00
Road & Signal Repair	\$12,143	PARK ACRES	1.00	CONSTANT	0%	\$10.06
Building Material	\$7,364	PARK ACRES	1.00	CONSTANT	0%	\$6.10
Janitorial Supplies	\$16,392	PARK ACRES	1.00	CONSTANT	0%	\$13.58
Maintenance Supplies	\$36,761	PARK ACRES	1.00	CONSTANT	0%	\$30.46
Splash Park Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Supplies / Repair Parts	\$30,328	PARK ACRES	1.00	CONSTANT	0%	\$25.13
Supplies / Tires	\$3,443	PARK ACRES	1.00	CONSTANT	0%	\$2.85
Fuel & Lube	\$59,903	PARK ACRES	1.00	CONSTANT	0%	\$49.63
TOTAL	\$321,967					

COMMODITIES - CIP

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Operating Equipment (Inventory)	\$38,261	PARK ACRES	1.00	CONSTANT	0%	\$31.70
Office Equipment (Inventory)	\$5,877	PARK ACRES	1.00	CONSTANT	0%	\$4.87
TOTAL	\$44,138					

Figure 21. Parks and Recreation: Recreation Administration Division

PARKS AND RECREATION: Recreation Administration Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$416,175	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$186,005	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
Non-Exempt - Part Time	\$11,028	FIXED	1.00	CONSTANT	0%	\$0.00
Salaries-Temporary	\$18,472	FIXED	1.00	CONSTANT	0%	\$0.00
Cell Phone Allowance	\$4,540	FIXED	1.00	CONSTANT	0%	\$0.00
Moving Allowance	\$1,787	FIXED	1.00	CONSTANT	0%	\$0.00
Benefits-Vehicle Allowance	\$4,535	FIXED	1.00	CONSTANT	0%	\$0.00
INDOOR REC FACILITY OPERATING IMPACT	\$0	DIRECT ENTRY	1.00	CONSTANT	0%	\$235,000

Figure 22. Parks and Recreation: Recreation Programs Division

PARKS AND RECREATION: Recreation Programs Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Salaries-Seasonal	\$521,069	PARK POPULATION	1.00	CONSTANT	0%	\$8.82
Salaries-Temporary	\$0	FIXED	1.00	CONSTANT	0%	\$0.0000
TOTAL	\$521,069					

Contractual Service		FY 2018	Project Using	Demand Unit	Projection	Annual	LOS Std
Name	Budget Amount	Which Demand Base?	Multiplier	Methodology	Change (+/-)	\$ per Demand Unit	
Misc / New Programs	\$3,990	PARK POPULATION	1.00	CONSTANT	0%	\$0.07	
Facilities	\$6,004	PARK POPULATION	1.00	CONSTANT	0%	\$0.10	
Ice Rink	\$3,397	PARK POPULATION	1.00	CONSTANT	0%	\$0.06	
Tennis	\$2,128	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Intramurals	\$92	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Adult Basketball	\$964	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Adult Softball	\$5,608	PARK POPULATION	1.00	CONSTANT	0%	\$0.09	
Twin Oaks	\$5,729	PARK POPULATION	1.00	CONSTANT	0%	\$0.10	
Adult Volleyball	\$2,134	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Adult Soccer	\$198	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Pickleball	\$0	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Dodgeball	\$0	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Adult Kickball	\$138	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Adult Crafts *	\$1,179	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Seniors	\$20,062	PARK POPULATION	1.00	CONSTANT	0%	\$0.34	
Special Populations	\$13,618	PARK POPULATION	1.00	CONSTANT	0%	\$0.23	
Special Bookings	-\$305	PARK POPULATION	1.00	CONSTANT	0%	(\$0.01)	
Arts in the Park	\$48,192	PARK POPULATION	1.00	CONSTANT	0%	\$0.82	
Municipal Band	\$23,434	PARK POPULATION	1.00	CONSTANT	0%	\$0.40	
Arts and Pottery	\$2,116	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Early Childhood Classes	\$0	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Dance	\$2,124	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Children's Theatre	\$18,141	PARK POPULATION	1.00	CONSTANT	0%	\$0.31	
Day Camp	\$46,937	PARK POPULATION	1.00	CONSTANT	0%	\$0.79	
Special Events	\$20,868	PARK POPULATION	1.00	CONSTANT	0%	\$0.35	
Homeschool PE	\$429	PARK POPULATION	1.00	CONSTANT	0%	\$0.01	
Soccer	\$250	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Micro Soccer	\$3,296	PARK POPULATION	1.00	CONSTANT	0%	\$0.06	
Youth Soccer	\$4,662	PARK POPULATION	1.00	CONSTANT	0%	\$0.08	
Wildcat Soccer	\$399	PARK POPULATION	1.00	CONSTANT	0%	\$0.01	
Youth Soccer Camp	\$2,511	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Youth Baseball	\$9,850	PARK POPULATION	1.00	CONSTANT	0%	\$0.17	
Wildcat Baseball	\$1,011	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Youth Softball	\$6,679	PARK POPULATION	1.00	CONSTANT	0%	\$0.11	
Wildcat Softball	\$0	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Summer Optimist	\$1,387	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Youth Basketball	\$4,583	PARK POPULATION	1.00	CONSTANT	0%	\$0.08	
Wildcat Basketball	\$130	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Basketball Camp	\$270	PARK POPULATION	1.00	CONSTANT	0%	\$0.00	
Youth Volleyball	\$1,424	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Summer Youth Volleyball	\$2,421	PARK POPULATION	1.00	CONSTANT	0%	\$0.04	
Volleyball Camp	\$3,399	PARK POPULATION	1.00	CONSTANT	0%	\$0.06	
Youth Flag Football	\$3,589	PARK POPULATION	1.00	CONSTANT	0%	\$0.06	
Youth Cheerleading	\$490	PARK POPULATION	1.00	CONSTANT	0%	\$0.01	
Just Tri It Triathlon	-\$1,258	FIXED	1.00	CONSTANT	0%	\$0.00	
My First Sports	-\$4,070	FIXED	1.00	CONSTANT	0%	\$0.00	
Admissions-Tournaments	\$9,624	PARK POPULATION	1.00	CONSTANT	0%	\$0.16	
Ice Rink-Concessions / Rental / Other Services	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Concessions-Contracted	\$1,090	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Youth Gymnastics	\$1,054	PARK POPULATION	1.00	CONSTANT	0%	\$0.02	
Youth Choir	\$603	PARK POPULATION	1.00	CONSTANT	0%	\$0.01	
TOTAL	\$280,571						

For the Building Services Division, because additional square footage has been built and is now being maintained by the City, an adjustment to current (FY21) costs is recommended. This cost per square foot (FY21 budget of approximately \$460,000 to maintain approximately 210,000 square feet of City facility space) recognizes the most recent level of service provided by the City for Building Services, which is assumed to continue as additional square footage is built and maintained.

Figure 23. Parks and Recreation: Building Services Division

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
FY18 Personnel	\$150,138	FIXED	1.00	CONSTANT	0%	\$0.00
FY18 Contractual	\$157,372	FIXED	1.00	CONSTANT	0%	\$0.00
FY18 Commodities	\$17,956	FIXED	1.00	CONSTANT	0%	\$0.00
FY18 Commodities-CIP	\$673	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL COST PER SQ FT	\$0	FACILITY SF	1.00	CONSTANT	0%	\$2.19
TOTAL	\$326,139					

Figure 24. Parks and Recreation: Animal Shelter Division

PARKS AND RECREATION: Animal Shelter Division

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$18,850	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$323,704	SEE BELOW	1.00	CONSTANT	0%	\$0.0000
Non-Exempt-Part Time	\$20,068	SEE BELOW	1.00	CONSTANT	0%	\$0.00
blank	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
blank	\$2,713	FIXED	1.00	CONSTANT	0%	\$0.00
Cell Phone Allowance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allowance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$365,335					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
ANIMAL CONTROL OFFICER	3.0	POPULATION	18,320	0%	9	13,742
ANIMAL SERVICES DIRECTOR	1.0	FIXED	0	0%	0	0
ANIMAL SHELTER ASST (PT)	4.0	FIXED	0	0%	0	0
ANIMAL SHELTER TECHNICIAN I		FIXED	0	0%	0	0
ANIMAL SHELTER TECHNICIAN II		FIXED	0	0%	0	0
ANIMAL SHELTER TECHNICIAN I AND II	6.0	POPULATION	9,160	0%	5	7,852
	14.0					

SALARIES

Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost
ANIMAL CONTROL OFFICER	\$39,300	0%	0%	\$39,300	\$18.88
ANIMAL SERVICES DIRECTOR	\$73,200	0%	0%	\$73,200	\$35.17
ANIMAL SHELTER ASST (PT)	\$21,800	0%	0%	\$21,800	\$10.50
ANIMAL SHELTER TECHNICIAN I	\$31,300	0%	0%	\$31,300	\$15.05
ANIMAL SHELTER TECHNICIAN II	\$43,200	0%	0%	\$43,200	\$20.77
ANIMAL SHELTER TECHNICIAN I AND II	\$37,250	0%	0%	\$37,250	<< MERGED

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City of Manhattan, Kansas*

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$2,827	POPULATION	1.00	CONSTANT	0%	\$0.05
Animal Shelter Contract	\$1,800	POPULATION	1.00	CONSTANT	0%	\$0.03
Veterinary Services	\$49,137	POPULATION	1.00	CONSTANT	0%	\$0.89
Credit Card Process Fee	\$1,347	POPULATION	1.00	CONSTANT	0%	\$0.02
Restricted Exp./Donations	\$625	POPULATION	1.00	CONSTANT	0%	\$0.01
Trash Service	\$676	POPULATION	1.00	CONSTANT	0%	\$0.01
Gas & Electricity	\$21,050	POPULATION	1.00	CONSTANT	0%	\$0.38
Ground Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Building Maintenance	\$1,189	POPULATION	1.00	CONSTANT	0%	\$0.02
Equipment Maintenance	\$3,726	POPULATION	1.00	CONSTANT	0%	\$0.07
Copy Machine	\$1,694	POPULATION	1.00	CONSTANT	0%	\$0.03
Telecommunications	\$2,788	POPULATION	1.00	CONSTANT	0%	\$0.05
Postage	\$28	POPULATION	1.00	CONSTANT	0%	\$0.00
Other Advertising	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Marketing / Public Relation	\$1,630	POPULATION	1.00	CONSTANT	0%	\$0.03
Copy / Image / Scan	\$538	POPULATION	1.00	CONSTANT	0%	\$0.01
Printing / Binding	\$4,157	POPULATION	1.00	CONSTANT	0%	\$0.08
Dues & Memberships	\$300	POPULATION	1.00	CONSTANT	0%	\$0.01
Seminar & Conference Registrations	\$1,829	POPULATION	1.00	CONSTANT	0%	\$0.03
In-House Training	\$512	POPULATION	1.00	CONSTANT	0%	\$0.01
Travel-Meals	\$219	POPULATION	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$402	POPULATION	1.00	CONSTANT	0%	\$0.01
Travel-Mileage	\$701	POPULATION	1.00	CONSTANT	0%	\$0.01
TOTAL	\$97,175					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Office Supplies	\$2,363	POPULATION	1.00	CONSTANT	0%	\$0.04
Paper Supplies	\$110	FIXED	1.00	CONSTANT	0%	\$0.00
Books, Maps, Subscriptions	\$132	FIXED	1.00	CONSTANT	0%	\$0.00
Subscriptions	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Uniforms	\$2,092	FIXED	1.00	CONSTANT	0%	\$0.00
Operating Supplies	\$10,732	POPULATION	1.00	CONSTANT	0%	\$0.20
Chemicals	\$4,266	FIXED	1.00	CONSTANT	0%	\$0.00
Animal Food-Meat	\$6,761	POPULATION	1.00	CONSTANT	0%	\$0.12
First Aid	\$19	FIXED	1.00	CONSTANT	0%	\$0.00
Veterinary Supplies	\$18,943	POPULATION	1.00	CONSTANT	0%	\$0.34
Food	\$224	POPULATION	1.00	CONSTANT	0%	\$0.00
Building Material	\$625	POPULATION	1.00	CONSTANT	0%	\$0.01
Janitorial Supplies	\$918	POPULATION	1.00	CONSTANT	0%	\$0.02
Maintenance Supplies	\$1,224	POPULATION	1.00	CONSTANT	0%	\$0.02
Motor Vehicle Supplies / Repair Parts	\$2,903	POPULATION	1.00	CONSTANT	0%	\$0.05
Fuel & Lube	\$6,234	POPULATION	1.00	CONSTANT	0%	\$0.11
TOTAL	\$57,546					

Community Development

The City recently added a Planner III position (after the 2018 Fiscal Year) to support activities in the City and Green Valley. This was an internal promotion but a new position category. The fiscal model adds this position in Year 1 to capture the impact from the study area.

Other positions anticipated to be affected by potential annexation are: Planner and Planner II. Planner II is triggered if annexation of FAZ 4 occurs (shown as “Direct Entry” below).

Figure 25. Community Development Department

COMMUNITY DEVELOPMENT DEPARTMENT

Personnel Expenses							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Administrative-Full Time	\$100,930	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
Exempt-Full Time	\$340,544	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
Non-Exempt-Full Time	\$50,064	SEE BELOW	1.00	CONSTANT	0%	\$0.00	
Salaries-Temporary	\$9,999	FIXED	1.00	CONSTANT	0%	\$0.00	
Moving Allow	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Benefits-Vehicle Allow	\$2,795	FIXED	1.00	CONSTANT	0%	\$0.00	
TOTAL	\$504,332						

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
ASST DIR OF COMMUNITY DEV	1.0	FIXED	0	0%	0	0
DIRECTOR OF COMMUNITY DEVEL	1.0	FIXED	0	0%	0	0
EXECUTIVE SECRETARY	1.0	FIXED	0	0%	0	0
INTERN (T)	1.0	FIXED	0	0%	0	0
PLANNER	2.0	POP AND JOBS	42,249	0%	4	28,167
PLANNER III	1.0	POP AND JOBS	84,497	0%	8	42,253
SENIOR PLANNER	2.0	FIXED	0	0%	0	0
PLANNER II	0.0	DIRECT ENTRY		0%		
GRANT ADMINISTRATOR (CDBG)	1.0	FIXED	0	0%	0	0
HOUSING REHAB INSPECTOR (CDBG)	1.0	FIXED	0	0%	0	0
	11.0					

SALARIES

Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost
ASST DIR OF COMMUNITY DEV	\$0	0%	0%	\$0
DIRECTOR OF COMMUNITY DEVEL	\$0	0%	0%	\$0
EXECUTIVE SECRETARY	\$0	0%	0%	\$0
INTERN (T)	\$0	0%	0%	\$0
PLANNER	\$44,408	0%	0%	\$44,408
PLANNER III	\$52,322	0%	0%	\$52,322
SENIOR PLANNER	\$0	0%	0%	\$0
PLANNER II	\$51,958	0%	0%	\$51,958
GRANT ADMINISTRATOR (CDBG)	\$0	0%	0%	\$0
HOUSING REHAB INSPECTOR (CDBG)	\$0	0%	0%	\$0

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Office Supplies	\$2,297	POP AND JOBS	1.00	CONSTANT	0%	\$0.03
Subscriptions	\$39	POP AND JOBS	1.00	CONSTANT	0%	\$0.00
Uniforms	\$54	POP AND JOBS	1.00	CONSTANT	0%	\$0.00
Operating Supplies	\$46	POP AND JOBS	1.00	CONSTANT	0%	\$0.00
Food	\$458	POP AND JOBS	1.00	CONSTANT	0%	\$0.01
Computer Supplies	\$1,114	POP AND JOBS	1.00	CONSTANT	0%	\$0.01
Motor Vehicle Supplies / Repair Parts	\$68	POP AND JOBS	1.00	CONSTANT	0%	\$0.00
Fuel & Lube	\$584	POP AND JOBS	1.00	CONSTANT	0%	\$0.01
TOTAL	\$4,660					

Legal Department

Legal Services and the Municipal Court will be affected by annexation and growth in the Green Valley area. Detail is provided below.

Figure 26. Legal Department: Legal Services Division

LEGAL DEPARTMENT: Legal Services Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)
Administrative-Full Time	\$125,129	SEE BELOW	1.00	CONSTANT	0%
Exempt-Full Time	\$75,253	SEE BELOW	1.00	CONSTANT	0%
Part Time	\$21,344	SEE BELOW	1.00	CONSTANT	0%
Non-Exempt-Full Time	\$10,031	SEE BELOW	1.00	CONSTANT	0%
Benefits-Vehicle Allow	\$3,000	FIXED	1.00	CONSTANT	0%
TOTAL	\$234,757				

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold
ASSISTANT CITY ATTORNEY	2.0	DIRECT ENTRY		0%	
CITY ATTORNEY	1.0	FIXED	0	0%	0
LEGAL ANALYST	1.0	POP AND JOBS	84,497	0%	42
	4.0				

SALARIES

Category	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost
ASSISTANT CITY ATTORNEY	\$77,200	0%	0%	\$77,200	\$37.13
CITY ATTORNEY	\$129,800	0%	0%	\$129,800	\$62.42
LEGAL ANALYST	\$54,800	0%	0%	\$54,800	\$26.34

Assistant City Attorney: Per the Legal Department, annexation of FAZ 4 is likely to require an additional .5 FTE. This is shown as a “Direct Entry” item with the modeling triggering an additional .5 FTE in year 10 to serve FAZ 4.

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Legal Services	\$120,000	POP AND JOBS	1.00	CONSTANT	0%	\$1.42
Telecommunications	\$1,401	FIXED	1.00	CONSTANT	0%	\$0.00
Copy / Image / Scan	\$2,652	FIXED	1.00	CONSTANT	0%	\$0.00
Dues & Memberships	\$1,560	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$426	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Airfare	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$126,039					

Figure 27. Legal Department: Municipal Court Division

LEGAL DEPARTMENT: Municipal Court Division

Personnel Expenses

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Exempt-Full Time	\$369,096	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Exempt-Part Time	\$74,433	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Full Time	\$177,550	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Non-Exempt-Part Time	\$3,630	SEE BELOW	1.00	CONSTANT	0%	\$0.00
Salaries-Temporary	\$23,337	FIXED	1.00	CONSTANT	0%	\$0.00
Cell Phone Allow	\$38	FIXED	1.00	CONSTANT	0%	\$0.00
Clothing Allow	\$286	FIXED	1.00	CONSTANT	0%	\$0.00
Benefits-Vehicle Allow	\$3,011	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$651,381					

Personnel Expenses STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
ASSISTANT COURT SERVICES OFF.	1.0	FIXED	0	0%	0	0
CHIEF CITY PROSECUTOR/ASST ATT	1.0	FIXED	0	0%	0	0
CITY PROSECUTOR	1.0	FIXED	0	0%	0	0
COURT ADMINISTRATOR	1.0	FIXED	0	0%	0	0
COURT CLERK I		FIXED	0	0%	0	0
COURT CLERK I AND II	3.0	TOTAL POLICE CALLS	17,400	60%	10,440	15,660
COURT SERVICES OFFICER	1.0	FIXED	0	0%	0	0
LEGAL SECRETARY	1.0	FIXED	0	0%	0	0
MUNICIPAL JUDGE	1.0	FIXED	0	0%	0	0
PARKING CONTROL OFFICER	1.0	FIXED	0	0%	0	0
	11.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	LOS Std Hrly Cost
ASSISTANT COURT SERVICES OFF.	\$58,200	0%	0%	\$58,200	\$27.99
CHIEF CITY PROSECUTOR/ASST ATT	\$94,300	0%	0%	\$94,300	\$45.36
CITY PROSECUTOR	\$76,800	0%	0%	\$76,800	\$36.90
COURT ADMINISTRATOR	\$67,600	0%	0%	\$67,600	\$32.50
COURT CLERK I	\$30,500	0%	0%	\$30,500	\$14.68
COURT CLERK I AND II	\$37,500	0%	0%	\$37,500	\$18.02
COURT SERVICES OFFICER	\$81,100	0%	0%	\$81,100	\$38.98
LEGAL SECRETARY	\$46,500	0%	0%	\$46,500	\$22.34
MUNICIPAL JUDGE	\$151,300	0%	0%	\$151,300	\$72.72
PARKING CONTROL OFFICER	\$38,700	0%	0%	\$38,700	\$18.59

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City of Manhattan, Kansas

Contractual Service

Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Legal Services	\$66,779	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$1.28
Interpreter Fees	\$3,750	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.07
Witness Fees	\$3,162	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.06
Credit Card Process Fee	\$10,291	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.20
Drug Testing	\$1,440	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.03
Trash Service	\$489	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.01
Building Maintenance	\$502	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.01
Equipment Maintenance	\$473	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.01
Software Maintenance	\$2,611	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.05
Telecommunications	\$3,668	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.07
Copy / Image / Scan	\$6,071	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.12
Printing / Binding	\$3,618	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.07
Dues & Memberships	\$870	FIXED	1.00	CONSTANT	0%	\$0.00
Seminar & Conference Registrations	\$645	FIXED	1.00	CONSTANT	0%	\$0.00
Training	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Meals	\$16	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Lodging	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel - Airfare	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Travel-Mileage	\$136	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$104,521					

COMMODITIES

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Copying Supplies	\$17	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.00
Office Supplies	\$6,044	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.12
Books	\$85	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.00
Subscriptions	\$2,547	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.05
Uniforms	\$735	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.01
Food	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$9,428					

COMMODITIES - CIP

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Office Equipment (Inventory)	\$2,897	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.06
Security Equipment	\$2,145	TOTAL POLICE CALLS	1.00	CONSTANT	0%	\$0.04
TOTAL	\$5,042					

General Services

The General Fund portion of General Services is shown below. Impacts are due to additional City infrastructure and staff. Utilities costs are discussed separately.

Figure 28. General Services Department

<i>Contractual Service</i>							
Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Professional Services	\$37,019	FIXED	1.00	CONSTANT	0%	\$0.00	
Banking Services	\$31,440	FIXED	1.00	CONSTANT	0%	\$0.00	
Networking Services	\$13,869	FIXED	1.00	CONSTANT	0%	\$0.00	
File Fees / Registration	\$8,912	FIXED	1.00	CONSTANT	0%	\$0.00	
Election Expense	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Credit Card Process Fee	\$563	FIXED	1.00	CONSTANT	0%	\$0.00	
Other Services	\$787	FIXED	1.00	CONSTANT	0%	\$0.00	
Programs	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Gas & Electricity	\$9,141	FIXED	1.00	CONSTANT	0%	\$0.00	
Street Lighting	\$515,911	LANE MILES	1.00	CONSTANT	0%	\$1,071.69	
Building Maintenance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Equipment Maintenance	\$1,912	FIXED	1.00	CONSTANT	0%	\$0.00	
Software Maintenance Agreements	\$130,953	CITY FT STAFF	1.00	CONSTANT	0%	\$327.38	
Office Equipment Lease	\$5,260	CITY FT STAFF	1.00	CONSTANT	0%	\$13.15	
Property Insurance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Liability Insurance	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Telecommunications	\$29,858	FIXED	1.00	CONSTANT	0%	\$0.00	
Postage	\$98,993	FIXED	1.00	CONSTANT	0%	\$0.00	
Legal Publications	\$10,003	FIXED	1.00	CONSTANT	0%	\$0.00	
Marketing / Public Relation	\$942	FIXED	1.00	CONSTANT	0%	\$0.00	
Printing / Binding	\$4,716	FIXED	1.00	CONSTANT	0%	\$0.00	
Dues & Memberships	\$17,643	CITY FT STAFF	1.00	CONSTANT	0%	\$44.11	
Seminar & Conference Registrations	\$0	FIXED	1.00	CONSTANT	0%	\$0.00	
Training	\$16,087	CITY FT STAFF	1.00	CONSTANT	0%	\$40.22	
Reimbursement	\$32,449	FIXED	1.00	CONSTANT	0%	\$0.00	
TOTAL	\$966,459						
 <i>COMMODITIES - CIP</i>							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Office Equipment (Inventory)	\$52,315	CITY FT STAFF	1.00	CONSTANT	0%	\$130.79	
TOTAL	\$52,315						

Other Services

Other Services includes grants and Social Service assistance. Grants are assumed to remain at the base year level as those expenditures are a function of available resources. Social Service costs are projected based on annexed and future population.

Figure 29. Other Services Department

Grants		FY 2018	Project Using	Demand Unit	Projection	Annual	LOS Std
	Name	Budget Amount	Which Demand Base?	Multiplier	Methodology	Change (+/-)	\$ per Demand Unit
	Good Neighbors Program	\$4,000	FIXED	1.00	CONSTANT	0%	\$0.00
	Other Grants Awarded*	\$26,867	FIXED	1.00	CONSTANT	0%	\$0.00
	Social Services Contracts	\$423,536	POPULATION	1.00	CONSTANT	0%	\$7.71
	Flint Hills Area Transportation	\$129,882	FIXED	1.00	CONSTANT	0%	\$0.00
	TOTAL	\$584,285					

SPECIAL REVENUE FUNDS: REVENUES AND EXPENDITURES

A summary of Special Revenue Funds included in the analysis and their accompanying *main* revenue sources and rates are shown below. (It should be noted that other *minor* revenue sources in these Special Revenue Funds are included in the analysis as well (not shown below).) Special Revenue Fund figures showing revenue projection methodologies are included below; expenditure figures are included in a subsequent section.

Figure 30. Special Revenue Funds Summary

Fund #	Fund Name	Include?	Prop Tax	Tax rate (FY18)	Sales Tax	Notes
			Levy	per \$1000	Rate	
102	City University	NO				
103	Aggieville BID	NO				
104	DowntownBID	NO				
105	Economic Development	NO				
106	Employee Benefits	YES	x	\$2.830		
107	Fire Equipment Reserve	YES	x	\$0.454		
108	Fire Pension KP&F	YES	x	\$1.573		
109	General Improvement	NO				
110	Industrial Promotion Fund	NO				
111	Library	YES	x	\$4.291		
112	Library Employee Benefits	YES	x	\$0.999		
113	Park Development Fund	NO				Not a separate rev source
	Recreation and Trails Fund	YES			0.250%	Sales tax (2017); 10-year sunset (last year modeled 2027)
115	Sales Tax Fund	YES			1.000%	Sales tax
116	Special Alcohol Programs	NO				This portion of liquor tax is for grants
117	Special Parks and Recreation	YES				
118	Special Street and Highway Maintenance	YES				
119	Special Sunset Zoo	NO				
121	Tourism and Convention Promotion	NO				Transient tax for tourism; No lodging uses projected
124	Riley County Police Dept	YES	x	\$27.705		
126	Capital Improvement Reserve	NO				
127	Downtown Redevelopment TIF	NO				
129	Special Street Maintenance Fund	YES			0.200%	Sales tax (2016); 10-year sunset (last year modeled 2026)
301	Bond and Interest	YES	x	\$4.688		Output as capital revenue
Subtotal Special Revenue Funds				\$42.540		
General Fund				\$5.817		
GRAND TOTAL				\$48.357		

Special Fund Revenues

This section provides detail on the revenues within the City’s Special Revenue Funds that will be affected by annexation and growth in Green Valley. Only those sources that are included in the model (see Figure 30) are included below.

Figure 31. Special Revenue Funds: Revenue Methodologies

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
106-Employee Benefit Contribution Taxes and Assessments	Beginning Fund Balance	\$401,452	FIXED	\$0.00
	Ad Valorem	\$1,556,808	CUMUL TAXABLE VALUE	\$2.830
	Delinquent / Ad Valorem	\$17,897	FIXED	\$0.00
	Motor Vehicle Tax	\$136,771	MOTOR VEHICLES	\$3.74
	Transfers	\$3,585,000	FIXED	\$0.00
	TOTAL	\$5,697,928		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
107-Fire Equipment Reserve Taxes and Assessments	Beginning Fund Balance	\$55,166	FIXED	\$0.00
	Ad Valorem	\$249,711	CUMUL TAXABLE VALUE	\$0.454
	Delinquent / Ad Valorem	\$3,153	FIXED	\$0.00
	Motor Vehicle Tax	\$28,556	MOTOR VEHICLES	\$0.78
	Use of Money and Property	Investment Interest	\$36	FIXED
	TOTAL	\$336,622		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
107-Fire Pension K. P. & F. Taxes and Assessments	Beginning Fund Balance	\$351,921	FIXED	\$0.00
	Ad Valorem	\$865,344	CUMUL TAXABLE VALUE	\$1.573
	Delinquent / Ad Valorem	\$9,089	FIXED	\$0.00
	Motor Vehicle Tax	\$69,458	MOTOR VEHICLES	\$1.90
	Transfers	\$180,000	FIXED	\$0.00
	TOTAL	\$1,475,812		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
111-Library Taxes and Assessments	Beginning Fund Balance	\$3,372	FIXED	\$0.00
	Ad Valorem	\$2,360,609	CUMUL TAXABLE VALUE	\$4.291
	Delinquent / Ad Valorem	\$26,535	FIXED	\$0.00
	Motor Vehicle Tax	\$187,735	MOTOR VEHICLES	\$5.13
	Use of Money and Property	Investment Income	\$2,469	FIXED
112-Library Employee Benefit Contribution Taxes and Assessments	Beginning Fund Balance	\$2	FIXED	\$0.00
	Ad Valorem	\$549,565	CUMUL TAXABLE VALUE	\$0.999
	Delinquent / Ad Valorem	\$6,570	FIXED	\$0.00
	Motor Vehicle Tax	\$47,750	MOTOR VEHICLES	\$1.31
	Use of Money and Property	Investment Income	\$364	FIXED
	TOTAL	\$3,184,971		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
xxx-Recreation and Trails Fund Taxes and Assessments	Beginning Fund Balance	\$0	FIXED	\$0.00
	Recreation and Trails Sales Tax	\$1,669,618	RETAIL SALES	\$0.0025
	Recreation and Trails Use Tax	\$174,093	POPULATION	\$3.17
	TOTAL	\$1,843,711		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
115-Sales Tax Fund	Beginning Fund Balance	\$11,099	FIXED	\$0.00
Taxes and Assessments	City Sales Tax	\$5,244,948	RETAIL SALES	\$0.0100
	City Use Tax	\$590,455	POPULATION	\$10.74
	TOTAL	\$5,846,502		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
117-Special Parks and Recreation Fund	Beginning Fund Balance	\$1,481,292	FIXED	\$0.00
Taxes and Assessments	Special Liquor Tax	\$484,028	FIXED	\$0.00
Use of Money and Property	Investment Interest	\$10,992	FIXED	\$0.00
Contributions and Other Revenue	Contributions & Other / Misc	\$6,605	FIXED	\$0.00
	Cancel PY Encumbrance	\$1,499	FIXED	\$0.00
Transfers	Transfer from Special Revenue	\$2,183	FIXED	\$0.00
	TOTAL	\$1,986,599		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
118-Special Street and Highway	Beginning Fund Balance	\$307,460	FIXED	\$0.00
From Other Agencies	Highway Maintenance	\$33,204	FIXED	\$0.00
	Gasoline Tax Refund	\$1,634,508	POPULATION	\$29.74
Use of Money and Property	Investment Interest	\$9,868	FIXED	\$0.00
Contributions and Other Revenue	Contributions & Other / Misc	\$440,627	FIXED	\$0.00
	Cancel PY Encumbrance	\$44,719	FIXED	\$0.00
	TOTAL	\$2,470,386		

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
124-Riley County Police Department	Beginning Fund Balance	\$290,917	FIXED	\$0.00
Taxes and Assessments	Ad Valorem	\$15,241,057	CUMUL TAXABLE VALUE	\$27.705
	Delinquent / Ad Valorem	\$178,984	FIXED	\$0.00
	Motor Vehicle Tax	\$1,290,523	MOTOR VEHICLES	\$35.30
Fines	Court Costs / Crime Stopper	\$4,767	FIXED	\$0.00
	TOTAL	\$17,006,248		

Note: 301 Bond and Interest Fund is reported as "Capital Revenue."

Revenue Category	Revenue Name	Base Year Budget Amount	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
301 Bond and Interest	Beginning Fund Balance	\$7,736,294	FIXED	\$0.00
	Taxes and Assessments	\$10,363,306	CUMUL TAXABLE VALUE	\$4.688
	Services and Sales	\$362,345	FIXED	\$0.00
	Contributions and Other Revenue	\$337,668	FIXED	\$0.00
	Other Financing Sources	\$3,126,516	FIXED	\$0.00
	TOTAL	\$21,926,129		

Sales Tax

- Retail sales per square foot is projected at **\$325 per square foot**. This is based on current retail sales tax revenues generated from retail square footage in the City.

Motor Vehicle Tax

- Motor Vehicle Tax is projected based on revenue per current vehicle in Manhattan applied to current and future vehicles in the Green Valley Area.

Special Revenue Fund Expenditures

A summary of Special Revenue Fund expenditure methodologies is provided in Figure 32. For those expenditures that are marked as other than fixed, further detail is provided in this section through a series of figures excerpted from the model. Figures for fixed expenditures are not included.

Figure 32. Summary of Special Revenue Fund Operating Expenditure Methodologies

Department and Division	Expenditure Category	FY18 Actuals	% of Fund	Allocation Methodology				
				Population	Population & Jobs	Jobs	Custom Analysis	Fixed
SPECIAL REVENUE FUNDS								
Employee Benefits	Total	\$5,415,449					CITY FT STAFF	
Fire Equipment Reserve	Total	\$335,385					Captured in Capital Section	
Fire Pension KP&F	Total	\$996,231					Captured in Fire Oper.	
Library	Total	\$2,580,213					LIBRARY POPULATION	
Library Employee Benefits	Total	\$603,736						◆
Recreation and Trails Fund	Total	\$26,663					Captured in Capital Section	
Sales Tax Fund	Total	\$5,846,502					Transfers; Captured in other exps.	
Special Parks and Recreation	Total	\$1,227,625					Transfers; Captured in Capital Section	
Special Street and Highway Maintenance	Total	\$1,430,617					LANE MILES	
Riley County Police Dept	Total	\$16,536,000					DIRECT ENTRY	
Special Street Maintenance Fund	Total	\$2,986,669					Captured in Other Exps.	
Bond and Interest	Total	\$15,563,375					Captured in Capital Section	

Expenditure methodology detail is provided below with narrative as necessary.

Figure 33. Special Revenue Funds: Library Expenditures

111-Library							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Library Appropriation	\$2,449,224	DIRECT ENTRY	1.00	CONSTANT	0%	\$30.22	
Telecommunications	\$783	FIXED	1.00	CONSTANT	0%	\$0	
Transfer to Debt Service	\$130,206	FIXED	1.00	CONSTANT	0%	\$0	
TOTAL	\$2,580,213						
112-Library Employee Benefit Contribution							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	
Library Appropriation	\$603,736	DIRECT ENTRY	1.00	CONSTANT	0%	\$7.45	
TOTAL	\$603,736						

Figure 34. Special Revenue Funds: Special Street and Highway Fund Expenditures

SPECIAL STREET AND HIGHWAY FUND

Personnel

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Non-Exempt-Full Time	\$23,715	FIXED	1.00	CONSTANT	0%	\$0.00
Other Pay / Clothing Allow	\$473	FIXED	1.00	CONSTANT	0%	\$0
TOTAL	\$24,188					

Contractual Services

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Professional Services	\$1,327	FIXED	1.00	CONSTANT	0%	\$0.00
Engineering Fees	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
File Fees / Registration	\$144	FIXED	1.00	CONSTANT	0%	\$0.00
Construction Projects	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Street Repairs & Rehabilitations	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Unexpended Program Budget	\$6,700	FIXED	1.00	CONSTANT	0%	\$0.00
Legal Publications	\$269	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$8,440					

Commodities

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Snow & Ice Control-Salt	\$132,057	LANE MILES	1.00	CONSTANT	0%	\$274.32
Snow & Ice Control-Deicer	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Road Material-Asphalt	\$51,685	LANE MILES	1.00	CONSTANT	0%	\$107.36
Road Material-Concrete	\$335,264	LANE MILES	1.00	CONSTANT	0%	\$696.44
Road Material-Other	\$103,037	LANE MILES	1.00	CONSTANT	0%	\$214.04
TOTAL	\$622,043					

Capital Outlay

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Acquisitions	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Infrastructure	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Project Payoff	\$8,276	FIXED	1.00	CONSTANT	0%	\$0.00
Operating & Maintenance Equipment	\$65,971	FIXED	1.00	CONSTANT	0%	\$0.00
Office Equipment	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
Infrastructure (Maintenance)	\$592,288	LANE MILES	1.00	CONSTANT	0%	\$1,230.34
Planning Studies	\$0	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$666,535					

Transfers

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Transfer to Debt Service	\$41,750	FIXED	1.00	CONSTANT	0%	\$0.00
Transfer to Capital Project	\$27,661	FIXED	1.00	CONSTANT	0%	\$0.00
Transfer to Trust and Agency	\$40,000	FIXED	1.00	CONSTANT	0%	\$0.00
TOTAL	\$109,411					

Street maintenance costs are projected based on current and future lane miles to be maintained by the City. See the Public Works section for additional detail.

Police

The City of Manhattan contracts with the Riley County Police Department (RCPD) for law enforcement services. The City’s expenditure in FY18 was \$16.5 million. The assumption for this analysis is that Green Valley would receive the same level of service from RCPD if it were annexed into the City. Based on conversations with RCPD for this study, it is estimated that 1 patrol officer would be needed to serve the area on a 24 hour/7 day schedule (therefore requiring 5 police officer positions) . These positions are pro-rated to reflect the share of impact by subarea and are modeled in the first year of the analysis to reflect the immediate and maximum cost to maintain City levels of service.

RCPD annual non-personnel operating costs are projected based on discussions with RCPD at a total of \$20,000 for ongoing operating costs (e.g., uniforms, training, gear, evidence collection, repair of equipment, etc.). This cost is also pro-rated to reflect the demand for services by subarea using Police calls for service. It should be noted that the fiscal findings reflect the City’s current contractual arrangement with RCPD at 80 percent of the costs.

Figure 35. Special Revenue Funds: Riley County Police Department Expenditures

RILEY COUNTY POLICE DEPARTMENT							
Contractual Services							
Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit	Adj. LOS Std \$ per Demand Unit
Consolidated Law	\$16,536,000	SEE BELOW	1.00	CONSTANT	0%	\$0.00	\$0.00
Non-Personnel Costs	\$4,960,800	FIXED	1.00	CONSTANT	0%	\$0.00	\$0.00
Annual Non-Personnel Operating Costs	\$0	DIRECT ENTRY	1.00	CONSTANT	0%	\$20,000	\$20,000
TOTAL	\$16,536,000						

Contractual Services STAFFING INPUT							
Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position	
Police Officer (Base Year)	110.0	FIXED	0	0%	0	0	
Police Officer	0.0	DIRECT ENTRY		0%			
Dispatcher	0.0	FIXED	0	0%	0	0	
	110.0						

SALARIES				
	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost
Police Officer (Base Year)	\$81,000	0%	0%	\$81,000
Police Officer	\$81,000	0%	0%	\$81,000
Dispatcher	\$52,300	0%	0%	\$52,300

Police Calls for Service Methodology

Police costs are allocated based on calls for service factors. Pottawatomie County Sheriff calls for service data from 2017 and 2018 were provided for the Green Valley Area. The calls for service factors were then allocated to residential (per capita) at 80 percent and nonresidential (per nonresidential trip) at 20 percent using a functional population/proportionate share analysis. (Detail is provided in the Appendix to this memo.)

Figure 36. Police Calls for Service Factors

POLICE DATA INPUT AREA

Green Valley Calls

Police Calls for Service (911 Calls [Non-Officer Initiated])

<i>Calls for Service</i>				
Total 2017		1,948		
Total 2018		1,429		
Average		1,689		
 <i>Functional Population</i>				
Residential	80%	1,350.80		
Nonresidential	20%	337.70		
 <i>Demand Unit</i>				
		<i>Base Year</i>	<i>Allocated</i>	<i>Call for Service per</i>
		<i>Demand Units</i>	<i>Calls for Service</i>	<i>Demand Unit</i>
Residential	GREEN VALLEY POPULATION	4,087	1,351	0.331
Nonresidential	GREEN VALLEY NONRES TRIPS	2,968	338	0.114
 TOTAL		1,689		

Source: City of Manhattan, Pottawatomie County Sheriff Calls for Service, 2017-2018

	Pop	NonresTrips	Police Calls Est	Police Demand %
FAZ1	9	309	38	2%
FAZ2	45	1,197	151	9%
FAZ3	341	903	215	13%
FAZ4	3,692	558	1,284	76%
	4,087	2,968	1,689	100%

For base year allocation by subarea, Police calls were estimated using current residential and nonresidential factors consistent with the above methodology.

The call factors shown in the grey-shaded column are then applied to projected population and nonresidential vehicle trips from new growth in the annexed area project Police calls for service.

CAPITAL COSTS

For capital facilities (non-utilities), our suggested methodology is to use the City’s current levels of service to project the need for future facilities and/or planned projects where available. Further discussion by infrastructure category is provided below.

Transportation

Per direction from City staff, assumptions on road capacity improvements in the Green Valley Area are based on the U.S. 24 Corridor Management Study and updated by City staff for projects yet to be completed in the study area. Costs are in 2019 dollars. A summary of road improvement projects is shown in Figure 37 with an identification of timing and location within the Green Valley Annexation Area fiscal analysis zones (FAZ).

Figure 37. Road Improvement Projects in Green Valley

Route	Segment	Improvement	Timing	FAZ	Cost 2009 (US-24 Report)	Cost 2019 \$\$	FED Share	State Share	Local Share	FED \$\$\$	State \$\$\$	Local \$\$\$
US-24	McCall Road to Green Valley Road	Close Median Opening 650' West of Hofman	< 5 years	1	\$20,000	\$22,964	0%	80%	20%	\$0	\$18,371	\$4,593
US-24	McCall Road to Green Valley Road	Add WB left turn lane at median opening 1200' west of Hofman Lane	< 5 years	1	\$150,000	\$172,230	0%	80%	20%	\$0	\$137,784	\$34,446
US-24	McCall Road to Green Valley Road	Add EB and WB left turn lanes at Hofman Lane	< 5 years	1	\$300,000	\$344,460	0%	80%	20%	\$0	\$275,568	\$68,892
US-24	McCall Road to Green Valley Road	Close median opening 575' west of Powers Lane/Scottie Lane	< 5 years	2&3	\$20,000	\$22,964	0%	80%	20%	\$0	\$18,371	\$4,593
US-24	McCall Road to Green Valley Road	Correct Align Powers Lane and Scottie	< 5 years	2&3	\$350,000	\$401,870	0%	80%	20%	\$0	\$321,496	\$80,374
US-24	McCall Road to Green Valley Road	Extend north frontage road (Kearby to Frontage)	5 to 10 years	2	\$800,000	\$918,560	0%	80%	20%	\$0	\$734,848	\$183,712
US-24	McCall Road to Green Valley Road	Extend South Frontage Road (Crown C to	5 to 10 years	3	\$1,800,000	\$2,066,760	0%	80%	20%	\$0	\$1,653,408	\$413,352
US-24	McCall Road to Green Valley Road	Widen to six lanes including wider bridges over Big Blue River (Green Valley to McCall)	10 to 20 years	1	\$7,000,000	\$8,037,400	0%	80%	20%	\$0	\$6,429,920	\$1,607,480
US-24	Green Valley Road to Excel Road	Close two midblock median openings; convert Green Valley Parkway to right in right out left in	< 5 years	2	\$800,000	\$918,560	0%	80%	20%	\$0	\$734,848	\$183,712
Excel Road	US-24 to Harvest Road	Pave road and connect Excel Lane to Harvest Road	< 5 years	4	\$2,300,000	\$2,640,860	0%	0%	100%	\$0	\$0	\$2,640,860
US-24	Excel Road	Add turn lanes	5 to 10 years	2&3	\$250,000	\$287,050	0%	80%	20%	\$0	\$229,640	\$57,410
US-24	Excel Road	Add traffic signal	5 to 10 years	2&3	\$150,000	\$172,230	0%	80%	20%	\$0	\$137,784	\$34,446
US-24	Excel Road to Lake Elbo Road	Extend Blue Valley Drive to Lake Elbo as frontage	10 to 15 years	2	\$2,500,000	\$2,870,500	0%	80%	20%	\$0	\$2,296,400	\$574,100
US-24	Excel Road to Lake Elbo Road	Extend Limerick lane to Excel Road as frontage road	10 to 15 years	3	\$1,800,000	\$2,066,760	0%	80%	20%	\$0	\$1,653,408	\$413,352
US-24	At Lake Elbo Road/ Military Trail	Add SB to WB right turn acceleration lane and NB to WB left turn acceleration lane	< 5 years	3	\$500,000	\$574,100	0%	80%	20%	\$0	\$459,280	\$114,820
Harvest Road	Excel Road to Lake Elbo Road	Widen and Pave to 3 Lanes	5 to 10 years	4	\$0	\$5,280,000	0%	0%	100%	\$0	\$5,280,000	\$0
Moody Road	Junietta Road to Mt. Zion Road	Widen and Pave to 3 Lanes	5 to 10 years	4	\$0	\$2,798,400	0%	0%	100%	\$0	\$2,798,400	\$0
					Total	\$29,595,668				\$0	\$15,101,126	\$14,494,542

Source: City of Manhattan; US 24 Corridor Management Study (2009).

The above list is summarized by FAZ and shown in Figure 38 for use in the Fiscal Model

Figure 38. Road Improvement Projects Modeled by Fiscal Analysis Zone and Timing

FAZ	Years 1-5	Years 6-10	Years 11-20	Total
1	\$107,931	\$0	\$1,607,480	\$1,715,411
2	\$226,195	\$229,640	\$574,100	\$1,029,935
3	\$157,303	\$459,280	\$413,352	\$1,029,935
4	\$2,640,860	\$8,078,400	\$0	\$10,719,260
Total	\$3,132,290	\$8,767,320	\$2,594,932	\$14,494,542

Parks

Park amenities are projected to serve Green Valley. Future facilities are projected based on current City infrastructure, levels of service, and costs factors as shown in Figure 39. Levels of service are calculated based on current City facilities serving current City and Green Valley population (i.e., “Park Population”). For example, the approach for neighborhood parks is to have the model “build” 2.5 acres of neighborhood parks for every 1,000 annexed or new residents. Some park facilities are not assumed to be projected by annexation of Green Valley.

- Mini parks are assumed to be provided by private development.
- Recently built Recreation Facilities in the City have excess capacity to serve future population.
- Natural areas are types of facilities that are opportunistic—that is, purchases occur when open space/natural areas become available through donations or strategic purchases.
- The remaining facilities—Neighborhood Parks, Community Parks/Sports Complexes, and Trails—are projected in Green Valley to maintain current levels of service.

Figure 39. Parks and Recreation Facilities Level of Service and Approach

CITY INVENTORY	<i>Unit of Measure</i>	<i>Infrastructure</i>	<i># OF PARKS</i>	<i>LOS (Unit/1000 persons)</i>	<i>Model Appr</i>	<i>Cost/Unit</i>
Mini Park	Acre	2.24	5	0.0	FIXED	n/a
Neighborhood Park	Acre	145.78	14	2.5	PARK POPULATION	\$80,000 per acre
Community Park/Sports Complex	Acre	471.25	10	8.0	PARK POPULATION	\$80,000 per acre
Trails	Mile	41.14		0.7	PARK POPULATION	\$375,000 per mile
Indoor Recreation Facilities	Sq. Ft.	132,769	<<current + planned	1.3	FIXED	n/a
Natural Areas	Acre	230	2	3.9	FIXED	n/a

Source: City of Manhattan

Fire

The Fire Department indicates that if the entire area were annexed, one new Fire Station would be needed. However, if only subareas are annexed, Fire Station needs vary.

- FAZ 1 alone would not require a new station.
- FAZ 2 and 3 alone would not require a new Station.
- FAZ 4 would require a new station, and any combination with FAZ 4 would require a new station.
- If both FAZs 2 and 3 were annexed, then a new Station would be necessary.

A new Fire Station is estimated at \$2.5 million with an apparatus estimated at \$1.3 million.

Police

Per RCPD, no new Police Station space will be needed to serve the area; however, Fire Stations in the area may provide space/office for use by law enforcement. Two patrol vehicles are modeled based on the addition of one Police Officer position (5 employees) at a cost of \$45,000 per vehicle and a useful life of 4 years (i.e., the model repurchases the vehicle after year 4).

General Government

The need for additional general government office space is analyzed using projected new City staff. The majority of projected City staff identified to be needed to serve Green Valley annexation areas are service providers outside of general office space (e.g., Fire personnel, Road crews). Therefore, the need for additional general government office space is not triggered in the analysis.

Also included are general government vehicles, with a level of service at .1 vehicle per General Government staff at a cost of \$20,000 per vehicle (from current City fleet inventory).

UTILITIES

For the analysis of Green Valley Annexation, projected utility costs are included for water, wastewater, and stormwater. As Enterprise Funds, it is expected that rates will be adjusted to cover costs. A summary of projected cost factors is provided below. The study’s approach is to model **costs only** given that as an enterprise fund, it is assumed that rates/fees (and revenues collected) will be set to cover the resulting costs. Therefore, utility costs will not be included in the summary of fiscal impacts.

Water usage is projected based on current consumption factors, calibrated to existing consumption in the study area, at approximately 23 gallons per day per person and job. This factor is then applied to the study’s growth scenarios to project water usage and related costs.

The cost factors shown below are from City of Manhattan Public Works projections on cost components to serve the area. Capital improvements are directly entered based on data provided by the City at approximately \$195,000 per year. It is assumed that additional capacity needs in the area will be constructed and paid for by developers.

Figure 40. Water Cost Factors

ENTERPRISE: WATER

Water Operating and Capital Expenditures

Expenditure Name	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
City WTP Upgrade and Expansion (Blue Township Share)	WATER USAGE	\$0.380
City WTP O & M (Blue Township Share)	WATER USAGE	\$1.020
Blue Township Capital Improvements (One Time)	DIRECT ENTRY	
Blue Township Direct Maintenance Expenses	WATER USAGE	\$0.280
Admin Expenses	WATER USAGE	\$0.320

Specialized positions are projected per City of Manhattan staff.

Water Operating and Capital Expenditures STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold
ENVIRONMENTAL SPECIALIST-WATER	1.0	WATER USAGE	3,389,649	15%	508,447
UTILITY LOCATION SPECIALIST	2.0	POP AND JOBS	42,249	15%	6,337
	3.0				
SALARIES					
	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost	
ENVIRONMENTAL SPECIALIST-WATER	\$40,300	0%	0%	\$40,300	\$19.39
UTILITY LOCATION SPECIALIST	\$46,600	0%	0%	\$46,600	\$22.39

A similar approach is taken for **Wastewater** expenditures. Wastewater flow is projected based on current average flow calibrated to existing use in the study area at approximately 17.2 gallons per day per person and job. This factor is then applied to the study’s growth scenarios to project wastewater flow and related costs.

The cost factors shown below are from City of Manhattan Public Works projections on cost components to serve the area. Capital improvements are direct entered based on data provided by the City at approximately \$90,000 per year. It is assumed that additional capacity needs in the area will be constructed and paid for by developers.

Figure 41. Wastewater Cost Factors

ENTERPRISE: WASTEWATER		
Wastewater Operating and Capital Expenditures		
Expenditure Name	Project Using Which Demand Base?	LOS Std \$ per Demand Unit
City WWTP & Biosolids Farm Imp. Project (Blue Township Share)	WASTEWATER USAGE	\$0.970
City WWTP O & M (Blue Township Share)	WASTEWATER USAGE	\$1.020
Blue Township Capital Improvements (One Time)	DIRECT ENTRY	
Admin Expenses	WASTEWATER USAGE	\$0.370

For **Stormwater**, additional Stormwater Crews are modeled based on existing and projected equivalent residential units (ERU). ERU factors were derived based on residential and nonresidential development and growth using population and jobs, respectively. The City currently has one Stormwater Crew serving the City. With annexation, an additional crew will be needed to serve the areas, dependent on FAZ.

Figure 42. Stormwater ERUs

	2017	2018
Residential ERUs	14,375	14,408
Population	54,832	54,959
ERUs per Person	0.26	0.26
Nonres ERUs	15,336	15,489
Jobs	29,246	29,538
ERUs per Job	0.52	0.52
Total ERUs	29,711	29,898

Sources: City of Manhattan Cost Services Study, 2017; City of Manhattan Planning; U.S. Census; TischlerBise

Figure 43. Stormwater Cost Factors

ENTERPRISE: STORMWATER

Stormwater Operating and Capital Expenditures

Expenditure Name	FY 2018 Budget Amount	Project Using Which Demand Base?	Demand Unit Multiplier	Projection Methodology	Annual Change (+/-)	LOS Std \$ per Demand Unit
Stormwater Crew	\$0	SEE BELOW	1.00	CONSTANT	0%	\$0.000
Blue Township Capital Improvements (One Time)	\$0	DIRECT ENTRY	1.00	CONSTANT	0%	
Stormwater Crew Vehicles and Equipment	\$0	DIRECT ENTRY	1.00	CONSTANT	0%	\$872,200
TOTAL	\$0					

Stormwater Operating and Capital Expenditures STAFFING INPUT

Category	FY 2018 FTE Positions	Project Using Which Demand Base?	Current Demand Units Served Per Position	% Estimate of Available Capacity	Remaining Capacity/ Initial Hire Threshold	Estimated Service Capacity Per Position
Crew Leader	1.0	FIXED	0	0%	0	0
Equipment Operator	1.0	FIXED	0	0%	0	0
Maintenance Technician	2.0	FIXED	0	0%	0	0
STORMWATER CREW	1.0	STORMWATER TOTAL ERU	29,898	1%	359	15,128
	5.0					

SALARIES

	Avg Salary / Staff Member	Benefits Multiplier	Inflation Adj (+/- Base)	LOS Std Total Cost
Crew Leader	\$51,300	0%	0%	\$51,300
Equipment Operator	\$45,200	0%	0%	\$45,200
Maintenance Technician	\$36,400	0%	0%	\$36,400
STORMWATER CREW	\$169,300	0%	0%	\$169,300

Capital costs are from the study, *Pottawatomie County, Elbo Creek Stormwater Management and Capital Improvements*, 2016. The study identified capacity projects needed to mitigate stormwater issues in the Elbo Creek Watershed in Blue Township, generally following the Green Valley area. A summary of capital costs is provided below.

Figure 44. Stormwater Capital Costs

<i>Type</i>	<i>Name</i>	<i>Cost (2016)</i>	<i>Cost (2018)[^]</i>
Culvert Structures	Elbo Creek #1-#11*	\$12,700,000	\$13,525,500
Stream Erosion Countermeasures	Elbo Creek #1-#8	\$3,852,000	\$4,102,380
Regional Detention	Regional Detention Pond**	\$7,530,000	\$8,019,450
TOTAL		\$24,082,000	\$25,647,330

* While some of the structures are physically outside of the study area, it is assumed that the improvement will be needed due to downstream issues.

** Alternative #1

[^] ENR adjustment of 6.5%

Source: Benesch, "Pottawatomie County, Elbo Creek Stormwater Management & Capital Improvements," Nov. 14, 2016

SUPPORTING DOCUMENTATION

Functional Population

Both residential and nonresidential developments will increase the demand on City services and facilities. To calculate the proportional share between residential and nonresidential demand on service and facilities, a functional population approach is used. The functional population approach allocates the cost of the facilities to residential and nonresidential development based on the activity of residents and workers through the 24 hours in a day. The analysis is based on demand in Blue Township currently.

Residents that do not work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages). Residents that work in the township are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside the township are assigned 14 hours to residential development, the remaining hours in the day are assumed to be spent outside of the township working. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2017 functional population data, residential development accounts for 80 percent of the functional population, while nonresidential development accounts for 20 percent, see Figure 45.

Figure 45. Blue Township Functional Population

FUNCTIONAL POPULATION/PROPORTIONATE SHARE

Blue Township, KS

		Demand Units in 2017	Demand Hours/Day	Person Hours	Proportionate Share
Residential					
Population	Blue Township, KS	3,504			
Residents Not Working		1,724	20	34,480	
Workers Living in	Blue Township, KS	1,780			
Residents Working in	Blue Township, KS	55	14	770	
Residents Working outside of	Blue Township, KS	1,725	14	24,150	
		Residential Subtotal		59,400	80%
Nonresidential					
Residents Not Working		1,724	4	6,896	
Jobs Located in	Blue Township, KS	803			
Residents Working in	Blue Township, KS	55	10	550	
Non-Resident Workers	Blue Township, KS	748	10	7,480	
		Nonresidential Subtotal		14,926	20%
		TOTAL		74,326	100%

Source: U.S. Census for population estimate; US Census, OnTheMap Application and LEHD Origin-Destination Empl. Statistics



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