

**City of Grinnell Sapphire Lake  
Destination Iowa Grant Application  
Support  
April 2023**

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*Prepared For:*



*Prepared By:*



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Table 1. Acronyms

Acronym	Description
FF&E	Furniture, furnishings, and equipment
LMI	Low and Moderate Income
LOST	Local Option Sales Tax
TIF	Tax Increment Financing
U.S.	United States

# 1 Executive Summary

Sapphire Lake is a proposed public access lake and accompanying housing development located in Poweshiek County. A variety of economic activities are associated with the Sapphire Lake development. This analysis seeks to quantify the total economic impact of the lake for all major aspects of the development. Also, due to the size and scope of the proposed project, public financing will be required to ensure its success. Because Tax Increment Financing (TIF) has been identified as the best option for financing the project, a significant portion of the analysis included a base case scenario for stakeholder consideration.

## 1.1 Economic Impact

Estimates of the total economic impact of these activities on the local area are summarized in the table below. Construction of the lake, lakeside facilities, and homes would result in a total value added impact of around \$291 million in value added to the local community over a period of many years. Spending of new residents and operations of businesses associated with the lake would result in a total value added impact of around \$7.6 million in value added annually once all homes and businesses are constructed.

Sapphire Lake Development Total Impacts Summary					
Impact	Time Period	Employment	Labor Income	Value Added	Output
Lake Construction	1 year	258	\$ 13,285,649	\$ 17,077,462	\$ 38,017,166
Home Construction	Spread over 10 years	3,681	\$ 208,590,423	\$ 273,726,862	\$ 501,884,959
New Resident Spending	Annual, phase-in as homes are constructed	90	\$ 3,442,206	\$ 7,196,270	\$ 12,750,948
Lake Business Construction	1 year	8	\$ 486,970	\$ 601,102	\$ 1,220,479
Lake Business Operations	Annual after construction	9	\$ 243,779	\$ 387,446	\$ 785,652

New resident spending in particular will begin generating a permanent, annually reoccurring economic impact within the community as soon as residents begin to move into the new housing development. Assuming a 10-year buildout period for the development, the economic impact from this activity is projected to grow according to the following table. The Sapphire Lake development is estimated to result in a population increase of 288 primary residents as well as hundreds more part-time residents. The jobs created by this spending within the community could result in as many as 74 new households moving to the community in addition to the new lake residents. As many as 81 additional children may be enrolled in the local school system once all homes are constructed and occupied.

Impact Summary by Year - New Resident Spending					
Year	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
2026	5	\$ 0.2	\$ 0.4	\$ 0.7	
2027	14	\$ 0.5	\$ 1.1	\$ 2.0	
2028	24	\$ 0.9	\$ 1.9	\$ 3.3	
2029	33	\$ 1.3	\$ 2.6	\$ 4.7	
2030	43	\$ 1.7	\$ 3.5	\$ 6.1	
2031	53	\$ 2.0	\$ 4.2	\$ 7.4	
2032	62	\$ 2.4	\$ 5.0	\$ 8.8	
2033	71	\$ 2.7	\$ 5.7	\$ 10.1	
2034	81	\$ 3.1	\$ 6.4	\$ 11.4	
2035	90	\$ 3.4	\$ 7.2	\$ 12.8	

These activities will also have significant tax impacts at the city, county, state, and federal level. The increased spending within the community is estimated to increase local option sales tax revenue by between \$11,000 and \$38,000 during the construction phase of the project and between \$23,000 and \$34,000 once new residents begin living in the development. Additionally, activities associated with the new homes are expected to increase city revenues through the hotel/motel tax, water (including sewer and storm water) and sanitation services, and the franchise fee on electricity and gas services as follows:

<b>Estimated Additional Revenue Summary</b>			
Revenue Source	Time Period	Lower Annual	Upper Annual
		Revenue Estimate	Revenue Estimate
Local Option Sales Tax	Construction of homes	\$ 10,896	\$ 37,613
Local Option Sales Tax	After all homes constructed	\$ 23,089	\$ 33,778
Hotel/Motel Tax	After all homes constructed	\$ 31,500	\$ 63,000
Water and Sanitation*	Year 10	\$ 184,570	\$ 461,426
Franchise Fee	Year 10	\$ 7,196	\$ 17,991

Values shown in constant 2022 dollars  
 \*: Includes all service revenue, not revenue net of operating costs

Water and sanitation revenue and the additional electricity and gas franchise fees were estimated using the same 10-year buildout as above (Buildout 1) as well as a more conservative 25-year buildout (Buildout 2). The projected revenue increases are shown in the following tables. Note that water and sanitation estimates are a gross value projection.

<b>Projected Annual Water and Sanitation Revenue, Buildout 1</b>					
Year	Water Revenue	Sewer and Storm Revenue	Sanitation Revenue	Total Revenue	Inflation-Adjusted Total
Year 5	\$ 87,719	\$ 86,946	\$ 46,820	\$ 221,484	\$ 239,742
Year 10	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 551,447
Year 15	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 608,842
Year 20	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 672,210
Year 25	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 742,175

<b>Projected Annual Water and Sanitation Revenue, Buildout 2</b>					
Year	Water Revenue	Sewer and Storm Revenue	Sanitation Revenue	Total Revenue	Inflation-Adjusted Total
Year 5	\$ 36,549	\$ 36,227	\$ 19,508	\$ 92,285	\$ 99,892
Year 10	\$ 73,099	\$ 72,455	\$ 39,017	\$ 184,570	\$ 220,579
Year 15	\$ 109,648	\$ 108,682	\$ 58,525	\$ 276,856	\$ 365,305
Year 20	\$ 146,198	\$ 144,910	\$ 78,034	\$ 369,141	\$ 537,768
Year 25	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 742,175



Projected Annual Franchise Fee Revenue, Buildout 1				
Year	Electricity Franchise Fee Revenue	Gas Franchise Fee Revenue	Total Revenue	Inflation-Adjusted Total
Year 5	\$ 7,020	\$ 1,616	\$ 8,635	\$ 9,347
Year 10	\$ 14,625	\$ 3,366	\$ 17,991	\$ 21,500
Year 15	\$ 14,625	\$ 3,366	\$ 17,991	\$ 23,738
Year 20	\$ 14,625	\$ 3,366	\$ 17,991	\$ 26,209
Year 25	\$ 14,625	\$ 3,366	\$ 17,991	\$ 28,937

Projected Annual Franchise Fee Revenue, Buildout 2				
Year	Electricity Franchise Fee Revenue	Gas Franchise Fee Revenue	Total Revenue	Inflation-Adjusted Total
Year 5	\$ 2,925	\$ 673	\$ 3,598	\$ 3,895
Year 10	\$ 5,850	\$ 1,346	\$ 7,196	\$ 8,600
Year 15	\$ 8,775	\$ 2,020	\$ 10,794	\$ 14,243
Year 20	\$ 11,700	\$ 2,693	\$ 14,392	\$ 20,967
Year 25	\$ 14,625	\$ 3,366	\$ 17,991	\$ 28,937

## 1.2 Tax Increment Financing (TIF)

A city based TIF analysis was conducted to estimate the effects of implementing ten, 15-year TIF districts from 2026-2044. Each of the ten districts is assumed to have sixty homes of two types and assumed values: lakefront and non-lakefront (i.e., 2<sup>nd</sup> tier). Assuming model inputs presented in this analysis come to fruition, that Low and Moderate Income (LMI) requirement set-aside is progressively factored in Years 1-20 and that an LMI maximum of \$6.5 million is imposed, we estimate the following non-inflation adjusted results from the TIF districts:

- Cumulative TIF receipts from 2026-2058 will be approximately \$59.8 million.
- LMI receipts from 2026-2043 would be approximately \$6.5 million.
- Cumulative net TIF receipts from 2026-2058 would be approximately \$53.3 million.
- Cumulative net non-TIF receipts from all districts upon expiration through 2058 would be approximately \$38.2 million.

A few items that would have measurable (positive) impact on the results include:

- We assume no value appreciation of homes built in the districts.
- We assume no inflation to the cost to build homes in the districts.
- We assume no increases to levy rates or decreases to rollback percentages.

## 2 Introduction

### 2.1 Background

Sapphire Lake is a proposed 400-acre public access lake and accompanying housing development located just south of Grinnell in Poweshiek County. Recreational opportunities available to the public are expected to include water sports, fishing, boating, biking, recreational trails, camping, and more. Located roughly halfway between Des Moines, and Iowa City/Cedar Rapids, the Sapphire Lake development is expected to be a large regional draw for both homeowners and recreational travel.

### 2.2 Overview

In recent discussion with the project team, we have been advised that there are two urgent items the City of Grinnell needs in order to submit an amendment for an optional state funding application for \$12 million by April 1, 2023:

1. A joint letter from the City of Grinnell and Poweshiek County describing their intentions for the joint ownership, care, and maintenance of the Sapphire Lake dam.
2. A joint letter from the City of Grinnell and Poweshiek County detailing the capacity of TIF, local option sales tax, and other funding sources to retire \$20.5 million in General Obligation debt to help advance this project. The letter will also broadly explain the mechanics of this financing and the obligations of each party.
3. A description of the land that will be set aside for public access for public boat launch, beach, camping, fishing, and other recreational activities. We will provide concept drawing for these types of uses, but at this time can only commit to setting the land aside for public access.
4. A request to amend the LMI set aside for the TIF financing. The TIF LMI set aside is currently 45% and that will prevent this project from advancing. We believe we can create a TIF LMI set aside schedule that allows the project to advance and over time create a significant TIF LMI set aside endowment.

Other needs expressed by the City of Grinnell and Poweshiek County which are needed but are not necessarily under the same timeline pressure as the above two items include:

1. Develop a method to calculate potential TIF revenue from the Sapphire Lake project over the next 20 years.
2. Impact on local option sales tax (LOST) revenue countywide.
3. Determine the impact of the project on the community workforce and how it might impact employee recruitment.
4. Impacts on critical community partners – school district, hospital, childcare, etc.
5. Population impacts – secondary and primary – impact on population-based revenues.
6. Absorption rate for housing and impacts on existing housing in the community.
7. Project impact on small businesses, particularly the downtown – restaurants specifically.
8. Estimation of the impacts on business with direct impact (Manatt's, lumber companies, building contractors, service companies, Absolute Infrastructure, etc.)
9. Impact of landowners selling land and significant influx of funds.
10. Assessment of the overall feasibility of the project and likelihood of success.
11. Consider and quantify, if possible, the negative consequences of the project as each of the above is assessed.

### 3 Economic Impact Analysis

The term “economic impact analysis” implies a change has taken place within a defined local economy. In this case, we are dealing with a variety of economic impacts associated with the construction of a new lake and lakeside housing development close to Grinnell in Poweshiek County, Iowa. All economic impacts in this report share the following methodological foundation:

- All events use the 2021 IMPLAN data year, the most recent year available.
- All results expressed in 2022 dollars.
- The impacts of all events were considered at two geographic levels:
  - The primary study area considered is a region consisting of Poweshiek and Jasper counties. These local level results are shown in the body of the report.
  - The secondary study area considered is the state of Iowa. State level results can be found in Appendix A.

Results are expressed using the following common economic terms:

- **Output:** The broadest measure of economic activity – often referred to as “sales”.
- **Value Added:** Sales (output) minus the cost of inputs.
- **Labor Income:** Sum of employee compensation and proprietor income; a sub-component of value added.
- **Employment (Jobs):** A measure of job positions without regard to whether they are full-time equivalents.

#### 3.1 Lake and Dam Construction

The following section shows the economic impact of activity associated with the construction of the Grinnell Sapphire Lake dam, lake basin, and associated infrastructure. This economic impact was analyzed using the following assumptions:

- Model inputs were obtained from a detailed construction budget provided by McClure Engineering.
- Budget line items were converted to IMPLAN industries, yielding the industry input values shown in Table 2.
  - Some industries were modified to better reflect associated activities as detailed in the construction budget.

**Table 2. Lake and Dam Construction Input Values**

IMPLAN Code	IMPLAN Description	Input Value
52	Construction of new power and communication structures	\$ 800,000
54	Construction of new highways and streets	\$ 990,000
56	Construction of other new nonresidential structures	\$ 19,600,432
60	Maintenance and repair construction of nonresidential structures	\$ 500,000
441	Monetary authorities and depository credit intermediation	\$ 237,783
455	Legal services	\$ 381,533
457	Architectural, engineering, and related services	\$ 1,783,373
465	Advertising, public relations, and related services	\$ 237,783
477	Landscape and horticultural services	\$ 3,599,000

Table 3 shows the estimated economic impact of the lake dam, basin, and associated infrastructure construction. The direct impact of this economic activity is \$12.0 million in value added, \$28.1 million in sales (output), and 197 jobs supported. When indirect and induced activities are added, the estimated total impact is \$17.1 in value added, \$38.0 million in sales, and 258 jobs supported.

**Table 3. Lake Construction Impact Summary**

Total Impact Summary - Lake Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	197	\$ 10.5	\$ 12.0	\$ 28.1	
Indirect	30	\$ 1.5	\$ 2.6	\$ 5.5	
Induced	31	\$ 1.2	\$ 2.5	\$ 4.4	
<b>Total</b>	<b>258</b>	<b>\$ 13.3</b>	<b>\$ 17.1</b>	<b>\$ 38.0</b>	

Table 4 shows the estimated tax impacts of this construction event. A total of \$3.2 million in taxes is expected to be paid. Of this amount, \$2.4 million is paid at the federal level, while \$0.8 million is paid at the state and local level.

**Table 4. Lake Construction Taxes Paid**

Taxes Paid - Lake Construction				
Impact Type	State and Local		Federal (\$M)	Total (\$M)
	(\$M)			
Direct	\$ 0.1	\$ 2.0	\$ 2.1	
Indirect	\$ 0.3	\$ 0.2	\$ 0.6	
Induced	\$ 0.4	\$ 0.2	\$ 0.5	
<b>Total</b>	<b>\$ 0.8</b>	<b>\$ 2.4</b>	<b>\$ 3.2</b>	

Table 5 shows the top ten industries that would be impacted by the construction of the lake in terms of value added. As shown, the industry with the largest impact is “construction of other new nonresidential structures” with a total estimated impact of \$8.1 million in value added.

**Table 5. Lake Construction Top Industries Impacted**

Top Ten Industries Impacted - Lake Construction	
Industry	Total Value Added (\$M)
Construction of other new nonresidential structures	\$ 8.1
Landscape and horticultural services	\$ 1.5
Architectural, engineering, and related services	\$ 0.9
Owner-occupied dwellings	\$ 0.7
Construction of new highways and streets	\$ 0.5
Construction of new power and communication structures	\$ 0.4
Retail - Building material and garden equipment and supplies stores	\$ 0.3
Monetary authorities and depository credit intermediation	\$ 0.3
Wholesale - Other durable goods merchant wholesalers	\$ 0.3
Legal services	\$ 0.2

### 3.2 Home Construction

The following section shows the estimated economic impact of activity of the home construction associated with the Grinnell Sapphire Lake development. This economic impact was analyzed using the following assumptions:

- Model inputs utilize home value and construction year estimates provided by McClure Engineering.
- A total of 500 homes will be built.
- Home construction will start in 2026 and take place over 10 years.
- Home values/cost of construction estimated to increase 3% annually.
  - Results brought back to 2022 dollars using IMPLAN’s built-in sector specific deflators.
- Construction values assigned to one of two IMPLAN sectors (“Construction of new single-family residential structures” or “Construction of new multifamily residential structures”) as appropriate.

Table 6 shows the total impact of home construction occurring on the lake. Note that this value is the combined impact of all 10 years of construction. The estimated total impact of this construction is \$273.7 million in value added, \$208.6 million in labor income, and \$501.9 million in output.

**Table 6. Home Construction Impact Summary**

Total Impact Summary - Home Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	2,834	\$ 172.0	\$ 204.1	\$ 373.7	
Indirect	354	\$ 17.8	\$ 30.6	\$ 59.0	
Induced	493	\$ 18.8	\$ 39.0	\$ 69.1	
<b>Total</b>	<b>3,681</b>	<b>\$ 208.6</b>	<b>\$ 273.7</b>	<b>\$ 501.9</b>	

Table 7 shows the estimated tax impact of the lake home construction. A total of \$49.1 million in taxes is expected to be paid. Of this amount, \$37.9 million is paid at the federal level, and \$11.2 million is paid at the state and local level.

**Table 7. Home Construction Taxes Paid**

Taxes Paid - Home Construction			
Impact Type	State and Local		
	(\$M)	Federal (\$M)	Total (\$M)
Direct	\$ 1.1	\$ 32.7	\$ 33.8
Indirect	\$ 4.6	\$ 2.5	\$ 7.0
Induced	\$ 5.5	\$ 2.7	\$ 8.2
<b>Total</b>	<b>\$ 11.2</b>	<b>\$ 37.9</b>	<b>\$ 49.1</b>

Table 8 shows the estimated impact of construction occurring in 2027, which is the first full year of construction. The construction activity taking place this year has a direct impact of \$18.8 million in value added, \$34.0 million in output, and 260 jobs supported. When indirect and induced effects are added, the total impact is \$25.1 million in value added, \$45.6 million in output, and 337 jobs supported.

**Table 8. Home Construction 2027 Impact**

2027 Impact Summary - Home Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	260	\$ 15.8	\$ 18.8	\$ 34.0	
Indirect	32	\$ 1.6	\$ 2.8	\$ 5.3	
Induced	45	\$ 1.7	\$ 3.6	\$ 6.3	
<b>Total</b>	<b>337</b>	<b>\$ 19.1</b>	<b>\$ 25.1</b>	<b>\$ 45.6</b>	

Table 9 shows the top ten industries impacted by lake home construction in terms of value added. As shown, one of the most highly affected industries is the “Building material and garden equipment and supplies stores” sector. Other highly impacted industries include “truck transportation” and “other durable goods merchant wholesalers”.

**Table 9. Home Construction Top Industries Impacted**

Top Ten Industries Impacted - Home Construction	
Industry	Total Value Added (\$M)
Construction of new single-family residential structures	\$ 199.7
Owner-occupied dwellings	\$ 11.1
Retail - Building material and garden equipment and supplies stores	\$ 11.1
Construction of new multifamily residential structures	\$ 4.5
Monetary authorities and depository credit intermediation	\$ 2.3
Wholesale - Other durable goods merchant wholesalers	\$ 2.2
Truck transportation	\$ 1.8
Insurance carriers, except direct life	\$ 1.8
Stone mining and quarrying	\$ 1.6
Retail - General merchandise stores	\$ 1.4

### 3.3 Construction of Likely Businesses Associated with Development

The construction activity and spending of new residents caused by the Sapphire Lake development has the potential to result in several new businesses developing within the area. Potential new businesses include: one or more restaurants, a marina, landscaping services, plumbing and/or HVAC contractors, auto and boat service providers, house cleaning services, and additional real estate agencies. However, at this time it is unknown how many and which of these potential businesses will eventually be developed.

The following section estimates the economic impact of two businesses that are very likely to be developed as a result of the lake: a lakeside restaurant and a convenience store/gas station. As there is no concrete data for these businesses this early in the development process, impact results in this section should be taken as preliminary estimates. This economic impact was analyzed using the following assumptions:

- Restaurant construction cost per square foot is \$145

- Average of multiple resources
- Total restaurant size is 3,200 square feet
- Restaurant FF&E expenses are 30% of total expenses
- Convenience store includes a small store and a four-pump gas station with a total construction cost of \$500,000
  - Individual component costs compiled from multiple sources

Table 10 shows the impact of constructing a lakeside restaurant according to the above assumptions. The estimated total impact of this construction is \$357,462 in value added, \$693,795 in output, and 5 jobs supported.

**Table 10. Restaurant Construction Impact Summary**

Total Impact Summary - Restaurant Construction				
Impact Type	Employment	Labor Income	Value Added	Output
Direct	4.0	\$ 243,269	\$ 266,379	\$ 518,417
Indirect	0.4	\$ 22,262	\$ 36,638	\$ 78,921
Induced	0.7	\$ 26,176	\$ 54,445	\$ 96,457
<b>Total</b>	<b>5.1</b>	<b>\$ 291,707</b>	<b>\$ 357,462</b>	<b>\$ 693,795</b>

Table 11 shows the estimated tax impact of this construction. A total of \$66,764 in taxes would be paid. Of this amount, around 20% would be paid at the state and local level, and around 80% would be paid at the federal level.

**Table 11. Restaurant Construction Taxes Paid**

Taxes Paid - Restaurant Construction			
Impact Type	State and Local	Federal	Total
Direct	\$ 2,727	\$ 45,253	\$ 47,980
Indirect	\$ 3,675	\$ 3,645	\$ 7,320
Induced	\$ 7,722	\$ 3,743	\$ 11,464
<b>Total</b>	<b>\$ 14,123</b>	<b>\$ 52,641</b>	<b>\$ 66,764</b>

Table 12 shows the top ten industries impacted by the restaurant’s construction in terms of value added. “Construction of new commercial structures, including farm structures” is the most impacted sector with a total value added impact of nearly \$240,000.



**Table 12. Restaurant Construction Top Industries Impacted**

<b>Top Ten Industries Impacted - Restaurant Construction</b>	
<b>Industry</b>	<b>Total Value Added</b>
Construction of new commercial structures, including farm structures	\$ 239,950
Wholesale - Other durable goods merchant wholesalers	\$ 20,418
Owner-occupied dwellings	\$ 15,531
Wholesale - Professional and commercial equipment and supplies	\$ 11,034
Monetary authorities and depository credit intermediation	\$ 3,523
Truck transportation	\$ 2,937
Insurance carriers, except direct life	\$ 2,851
Other concrete product manufacturing	\$ 2,252
Stone mining and quarrying	\$ 2,104
Hospitals	\$ 1,923

Table 13 shows the impact of constructing a convenience store according to the above assumptions. The estimated total impact of this construction is \$243,640 in value added, \$526,684 in output, and around 3 jobs supported.

**Table 13. Convenience Store Construction Impact Summary**

<b>Total Impact Summary - Convenience Store Construction</b>					
<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Value Added</b>	<b>Output</b>	
Direct	2.7	\$ 161,810	\$ 180,651	\$	404,920
Indirect	0.3	\$ 15,992	\$ 26,679	\$	57,429
Induced	0.5	\$ 17,460	\$ 36,311	\$	64,335
<b>Total</b>	<b>3.4</b>	<b>\$ 195,263</b>	<b>\$ 243,640</b>	<b>\$</b>	<b>526,684</b>

Table 14 shows the estimated tax impact of this construction. A total of \$44,673 in taxes would be paid. Of this amount, around 20% would be paid at the state and local level, and around 80% would be paid at the federal level.

**Table 14. Convenience Store Construction Taxes Paid**

<b>Taxes Paid - Convenience Store Construction</b>			
<b>Impact Type</b>	<b>State and Local</b>	<b>Federal</b>	<b>Total</b>
Direct	\$ 1,142	\$ 30,577	\$ 31,719
Indirect	\$ 2,688	\$ 2,619	\$ 5,307
Induced	\$ 5,151	\$ 2,496	\$ 7,647
<b>Total</b>	<b>\$ 8,981</b>	<b>\$ 35,692</b>	<b>\$ 44,673</b>

Table 15 shows the top ten industries impacted by the convenience store's construction in terms of value added. "Construction of new commercial structures, including farm structures" is the most impacted sector with a total value added impact of more than \$140,000.



**Table 15. Convenience Store Construction Top Industries Impacted**

<b>Top Ten Industries Impacted - Convenience Store Construction</b>	
<b>Industry</b>	<b>Total Value Added</b>
Construction of new commercial structures, including farm structures	\$ 141,868
Metal tank (heavy gauge) manufacturing	\$ 14,658
Prefabricated metal buildings and components manufacturing	\$ 11,452
Ready-mix concrete manufacturing	\$ 11,083
Owner-occupied dwellings	\$ 10,349
Wholesale - Other durable goods merchant wholesalers	\$ 4,094
Wholesale - Professional and commercial equipment and supplies	\$ 2,926
Monetary authorities and depository credit intermediation	\$ 2,544
Truck transportation	\$ 2,389
Insurance carriers, except direct life	\$ 1,839

### **3.4 Operations of Likely Businesses Associated with Development**

The following section analyzes the potential operations of a lakeside restaurant and a convenience store/gas station. As with the above section concerning the construction of these business facilities, there is no concrete data for these businesses this early in the development process. These estimates are intentionally conservative; it is likely that the restaurant particularly could have a much higher annual revenue than the estimate contained in this section.

Note that the previous impacts were construction impacts, whereas this impact is an operations impact. While construction impacts tend to be large, they are a one-time occurrence. Operations impacts occur annually for as long as the business is active. This economic impact was analyzed using the following assumptions:

- Household spending on industries representing restaurants and convenience stores by income group was obtained from IMPLAN for the study area (Poweshiek and Jasper counties)
  - Lake households were assigned to one of the following income groups based on house type: \$70k to \$100k, \$100k to \$150k, \$150k to \$200k, greater than \$200k
- 25% of all lake homes would belong to full time residents, while 75% would belong to part time residents
- 20% of full-time residents’ and 5% of part time residents’ overall restaurant spending would be spent on the lakeside restaurant
- 20% of the projected 2027 population within a 10-mile radius (14,159 people) would visit the restaurant once annually and spend an average of \$30 per person
- 25% of full-time residents’ and 6.25% of part time residents’ overall convenience store spending would be spent on the new store
- The projected 2027 households within a 10-mile radius (5,695 households) would spend an average of 3% of their annual household convenience store spending on the new store

Table 16 shows the estimated annual impact of the operations of a restaurant according to the above assumptions. As shown, the restaurant’s direct sales of more than \$425,000 results in a total impact of \$272,955 in value added, \$558,639 in output, and 7 jobs.

**Table 16. Restaurant Operations Impact Summary**

Total Impact Summary - Restaurant					
Impact Type	Employment	Labor Income	Value Added	Output	
Direct	6.2	\$ 138,977	\$ 207,244	\$ 425,391	
Indirect	0.5	\$ 20,941	\$ 33,747	\$ 76,589	
Induced	0.4	\$ 15,383	\$ 31,964	\$ 56,658	
<b>Total</b>	<b>7.0</b>	<b>\$ 175,300</b>	<b>\$ 272,955</b>	<b>\$ 558,639</b>	

Table 17 shows the estimated annual taxes paid resulting from the restaurant's operation. A total of \$46,175 in taxes is paid, with around 30% being paid at the state and local level and around 70% at the federal level.

**Table 17. Restaurant Operations Taxes Paid**

Taxes Paid - Restaurant			
Impact Type	State and Local	Federal	Total
Direct	\$ 4,045	\$ 28,068	\$ 32,113
Indirect	\$ 4,145	\$ 3,180	\$ 7,325
Induced	\$ 4,538	\$ 2,198	\$ 6,737
<b>Total</b>	<b>\$ 12,728</b>	<b>\$ 33,446</b>	<b>\$ 46,175</b>

Table 18 shows the top ten industries impacted by the restaurant's operations in terms of value added.

**Table 18. Restaurant Operations Top Industries Impacted**

Top Ten Industries Impacted - Restaurant	
Industry	Total Value Added
Full-service restaurants	\$ 208,331
Owner-occupied dwellings	\$ 9,068
Electric power transmission and distribution	\$ 3,778
Insurance carriers, except direct life	\$ 2,982
Other real estate	\$ 2,694
Postal service	\$ 2,448
Management of companies and enterprises	\$ 2,365
Advertising, public relations, and related services	\$ 2,199
Accounting, tax preparation, bookkeeping, and payroll services	\$ 1,868
Monetary authorities and depository credit intermediation	\$ 1,760

Table 19 shows the estimated annual impact of the operations of a convenience store according to the above assumptions. As shown, the restaurant's direct sales of \$157,754 results in a total impact of \$114,491 in value added, \$227,013 in output, and around 2 jobs. Note that, as the input industry is a retail industry, the direct output value shown is the retail margin on goods sold, not the full value of goods sold.

**Table 19. Convenience Store Operations Impact Summary**

Total Impact Summary - Convenience Store					
Impact Type	Employment	Labor Income	Value Added	Output	
Direct	1.6	\$ 46,220	\$ 78,771	\$ 157,754	
Indirect	0.3	\$ 16,239	\$ 23,211	\$ 47,086	
Induced	0.2	\$ 6,020	\$ 12,509	\$ 22,174	
<b>Total</b>	<b>2.1</b>	<b>\$ 68,479</b>	<b>\$ 114,491</b>	<b>\$ 227,013</b>	

Table 20 shows the estimated annual taxes paid resulting from the convenience store’s operation. A total of \$31,948 in taxes is paid, with around 75% being paid at the state and local level and around 30% at the federal level.

**Table 20. Convenience Store Operations Taxes Paid**

Taxes Paid - Convenience Store			
Impact Type	State and Local	Federal	Total
Direct	\$ 20,273	\$ 4,174	\$ 24,448
Indirect	\$ 2,165	\$ 2,698	\$ 4,863
Induced	\$ 1,776	\$ 860	\$ 2,636
<b>Total</b>	<b>\$ 24,215</b>	<b>\$ 7,733</b>	<b>\$ 31,948</b>

Table 21 shows the top ten industries impacted by the convenience store’s operations in terms of value added.

**Table 21. Convenience Store Operations Top Industries Impacted**

Top Ten Industries Impacted - Convenience Store	
Industry	Total Value Added
Retail - Gasoline stores	\$ 42,224
Retail - Food and beverage stores	\$ 37,026
Warehousing and storage	\$ 6,911
Owner-occupied dwellings	\$ 3,547
Electric power transmission and distribution	\$ 2,486
Monetary authorities and depository credit intermediation	\$ 1,623
Insurance carriers, except direct life	\$ 1,403
Junior colleges, colleges, universities, and professional schools	\$ 1,319
Other real estate	\$ 1,261
All other food and drinking places	\$ 710

### 3.5 Community Spending of New Residents

The following section shows the estimated economic impact of the additional residents caused by the lakeside housing development spending their incomes throughout the local community. This analysis assumes that each new home results in an additional new household living in the community, either

part- or full-time<sup>1</sup>. Demographic and income data used in this section is primarily sourced from a survey of more than 4,000 Wisconsin lake residents conducted in 2012<sup>2</sup>. This economic impact was analyzed using the following assumptions:

- 24% of lake homes would be used as a primary residence, while 76% would be used as a secondary residence.
  - This ratio closely matches that of the other lakes in Poweshiek County.
- Among homes used as a primary residence, 30% would be occupied by households with at least one person fully employed, while the remaining homes would be occupied by retirees.
- Household income values for employed primary residents, retired primary residents, and secondary residents were determined by the median income for these groups in the mentioned survey and brought forward to current dollars according to the growth in median household income. Following this methodology, the average household incomes used are:
  - Employed primary residents: \$187,000.
  - Retired primary residents: \$105,000.
  - Secondary residents: \$189,000.
- Primary residents are assumed to spend their income as a normal resident of the local area would. Secondary residents are assumed to use their home 50 days annually and spend a proportional amount of their annual income within the local community.
- Homes are occupied by non-residents at an average rate of 6.8 days per home annually, and non-residents spend an average of \$212 per visiting household daily.
  - Note that these visitors are assumed to be guests of the homeowner, and this amount does not include any rent or lodging fee.
- Total residence spending is allocated to several household income groups in IMPLAN (ranging from \$50,000 to more than \$200,000) to reflect a variety of spending patterns.

Table 22 shows the estimated annual impact of the lake residents’ household spending within the local economy. As shown, this additional spending results in a total impact of \$12.8 million in sales, \$7.2 million in value added, \$3.4 million in labor income, and 90 jobs. Note that this is the full impact value, representing the impact once all homes are constructed and occupied.

**Table 22. Household Spending Impact Summary**

Total Impact Summary - Household Spending						
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)		
Direct	-	\$ -	\$ -	\$ -	\$ -	-
Indirect	-	\$ -	\$ -	\$ -	\$ -	-
Induced	90	\$ 3.4	\$ 7.2	\$ 12.8		
<b>Total</b>	<b>90</b>	<b>\$ 3.4</b>	<b>\$ 7.2</b>	<b>\$ 12.8</b>		

<sup>1</sup> This can occur either through a new household moving to the lake from outside the community, or from a local resident moving to a lake house and being replaced by an equivalent household from outside the community. Notably, this assumes that local residents do not purchase a lake house to reside in part-time while maintaining a primary residence at their current home.

<sup>2</sup> <https://portal.edirepository.org/nis/metadataviewer?packageid=knb-lter-ntl.275.3>

Table 23 shows the estimated taxes paid as a result of this additional spending. A total of \$1.5 million in taxes would be paid. Around two thirds of this amount would be paid at the state and local level, and around one third would be paid at the federal level.

**Table 23. Household Spending Taxes Paid**

<b>Taxes Paid - Household Spending</b>				
<b>State and Local</b>				
<b>Impact Type</b>	<b>(\$M)</b>	<b>Federal (\$M)</b>	<b>Total (\$M)</b>	
Direct	\$ -	\$ -	\$ -	
Indirect	\$ -	\$ -	\$ -	
Induced	\$ 1.0	\$ 0.5	\$ 1.5	
<b>Total</b>	<b>\$ 1.0</b>	<b>\$ 0.5</b>	<b>\$ 1.5</b>	

Table 24 shows the top fifteen industries impacted by the additional community spending in terms of output. Sectors of the economy most impacted include restaurants, retailers, and healthcare providers. Note that the “owner-occupied dwellings” industry represents the spending of homeowners on their homes. It includes property taxes, the interest portion of mortgage payments<sup>3</sup>, and home improvements and maintenance.

**Table 24. Household Spending Top Industries Impacted**

<b>Top 15 Industries Impacted - Household Spending</b>	
<b>Industry</b>	<b>Total Output (\$M)</b>
Owner-occupied dwellings	\$ 2.7
Limited-service restaurants	\$ 0.6
Hospitals	\$ 0.5
Insurance carriers, except direct life	\$ 0.5
Retail - Nonstore retailers	\$ 0.4
Retail - Food and beverage stores	\$ 0.3
Monetary authorities and depository credit intermediation	\$ 0.3
Offices of physicians	\$ 0.3
Retail - General merchandise stores	\$ 0.3
Religious organizations	\$ 0.3
Full-service restaurants	\$ 0.3
Electric power transmission and distribution	\$ 0.3
Junior colleges, colleges, universities, and professional schools	\$ 0.3
Automotive repair and maintenance, except car washes	\$ 0.2
Other real estate	\$ 0.2

Table 25, Table 26, and Table 27 show the portion of the total impact that is due to primary residents, secondary residents, and visitors, respectively. Despite being a minority of expected owners, primary residents make up a majority of the total impact due to the larger portion of their income that they are expected to spend within the local economy.

<sup>3</sup> The principal portion of mortgage payments is considered an exchange of assets, so it does not have an economic impact in IMPLAN.

Table 25. Primary Residents Household Spending Impact

Household Spending Impact - Primary Residents						
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)		
Direct	-	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect	-	\$ -	\$ -	\$ -	\$ -	\$ -
Induced	54	\$ 2.1	\$ 4.3	\$ 7.7		
<b>Total</b>	<b>54</b>	<b>\$ 2.1</b>	<b>\$ 4.3</b>	<b>\$ 7.7</b>		

Table 26. Secondary Residents Household Spending Impact

Household Spending Impact - Secondary Residents						
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)		
Direct	-	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect	-	\$ -	\$ -	\$ -	\$ -	\$ -
Induced	33	\$ 1.3	\$ 2.6	\$ 4.7		
<b>Total</b>	<b>33</b>	<b>\$ 1.3</b>	<b>\$ 2.6</b>	<b>\$ 4.7</b>		

Table 27. Visitors Spending Impact

Household Spending Impact - Visitors						
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)		
Direct	-	\$ -	\$ -	\$ -	\$ -	\$ -
Indirect	-	\$ -	\$ -	\$ -	\$ -	\$ -
Induced	3	\$ 0.1	\$ 0.2	\$ 0.4		
<b>Total</b>	<b>3</b>	<b>\$ 0.1</b>	<b>\$ 0.2</b>	<b>\$ 0.4</b>		

Table 28 shows the total impact by year. The estimated annual impact grows slowly over time as more houses are built and more residents spend their dollars throughout the local economy, eventually reaching the full impact values shown in Table 22.

Table 28. Household Spending Impact Annual Breakout

Impact Summary by Year - Household Spending						
Year	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)		
2026	5	\$ 0.2	\$ 0.4	\$ 0.7		
2027	14	\$ 0.5	\$ 1.1	\$ 2.0		
2028	24	\$ 0.9	\$ 1.9	\$ 3.3		
2029	33	\$ 1.3	\$ 2.6	\$ 4.7		
2030	43	\$ 1.7	\$ 3.5	\$ 6.1		
2031	53	\$ 2.0	\$ 4.2	\$ 7.4		
2032	62	\$ 2.4	\$ 5.0	\$ 8.8		
2033	71	\$ 2.7	\$ 5.7	\$ 10.1		
2034	81	\$ 3.1	\$ 6.4	\$ 11.4		
2035	90	\$ 3.4	\$ 7.2	\$ 12.8		

### 3.6 Land Sale Impact

In general, the sale of land is considered an exchange of assets and therefore does not have an economic impact. However, in the case of the land required to build Sapphire Lake and the surrounding housing development, it is likely that the land will be bought for a premium over the “true” value in order to incentivize all landowners to sell. Some portion of this premium will be used for local consumption and have an impact throughout the local economy. While the final value of this impact will vary widely based on several factors (amount of land purchased, land price and premium, number and location of landowners), IMPLAN estimates that for every \$100,000 in surplus local income between \$49,200 and \$57,800 is spent within the study area.

## 4 Other Tax and Revenue Impacts

### 4.1 Local Option Sales Tax Impact

The local option sales tax (LOST) is a significant source of revenue for both the city of Grinnell and Poweshiek County. The expected increase in LOST revenue due to the additional economic activity caused by the Sapphire Lake development is estimated by building upon the previous economic impact analyses.

A list of IMPLAN industries representing activities likely to be subject to sales tax is shown in Table 29. In addition to retail industries, the list also includes industries of services subject to sales tax according to the Iowa Department of Revenue<sup>4</sup>. In order to estimate the increase in LOST revenue, impacts from the analyses in Sections 3.1, 3.2, and 3.5 on the sales (output) of these industries were summed and multiplied by the LOST rate of one percent.

**Table 29. IMPLAN Industries Subject to Sales Tax**

IMPLAN Industries Subject to Sales Tax	
Retail - Motor vehicle and parts dealers	Electric power transmission and distribution
Retail - Furniture and home furnishings stores	Services to buildings
Retail - Electronics and appliance stores	Landscape and horticultural services
Retail - Building material and garden equipment and supplies stores	Other educational services
Retail - Health and personal care stores	Water, sewage and other systems
Retail - Clothing and clothing accessories stores	Other amusement and recreation industries
Retail - Sporting goods, hobby, musical instrument and book stores	Fitness and recreational sports centers
Retail - General merchandise stores	Hotels and motels, including casino hotels
Retail - Miscellaneous store retailers	Full-service restaurants
Retail - Nonstore retailers	Limited-service restaurants
Wired telecommunications carriers	All other food and drinking places
Wireless telecommunications carriers (except satellite)	Automotive repair and maintenance, except car washes
Automotive equipment rental and leasing	Car washes
General and consumer goods rental except video tapes and discs	Electronic and precision equipment repair and maintenance
Video tape and disc rental	Personal and household goods repair and maintenance
Machinery and equipment rental and leasing	Personal care services
Photographic services	Other personal services

Table 30 shows the estimated additional LOST revenue due to economic activity associated with the Sapphire Lake development. Impacts were considered at the Grinnell zip code and Poweshiek County level in addition to the 2-county study area in order to provide a range of estimates for the additional LOST revenue. The lake construction impact is estimated to increase revenue by a total of between \$42,782 and \$59,877. The home construction impact is estimated to increase revenue on average by between \$10,896 and \$37,613 annually during the years that homes are being built. The impact of lake resident spending is estimated to increase revenue by between \$23,089 and \$33,962 annually starting in 2035, after slowly growing to that level in the years prior.

<sup>4</sup> <https://tax.iowa.gov/iowa-sales-and-use-tax-taxable-services>



**Table 30. Estimated Additional Local Sales Tax Revenue**

Estimated Additional Local Sales Tax Revenue				
Area	Household Spending (annual)	Home Construction (annual until 2035)	Lake Construction (one time)	
Study Area	\$ 33,778	\$ 37,613	\$ 59,877	
Poweshiek County	\$ 33,962	\$ 33,091	\$ 55,537	
Zip Code 50112	\$ 23,089	\$ 10,896	\$ 42,782	

## 4.2 Hotel/Motel Tax Revenue

Some of the new lake residents (primarily those using their lake residence as a second home) will very likely rent out their home for some portion of the year. A precise estimate of the hotel/motel tax revenue associated with this activity is not possible due to the uncertainty surrounding many of the variables involved. However, a general idea of the amount of revenue this activity might generate can be estimated using the following assumptions:

- Homes are rented out at an average rate of \$300 per night<sup>5</sup>.
- The local portion of the hotel/motel tax is 7%.
- Around 400 homes (roughly the amount estimated to be used as secondary residences) are potentially available for rent for a portion of the year.
- A home that is rented out is booked an average of 5 times per year for an average of 3 nights per booking.
  - In addition to the lake itself, events at Grinnell College (such as commencement, graduation, and parents’ weekend) would potentially attract visitors to the community to rent out a lake home.

Using the above assumptions, if between one quarter and one half of all available homes are rented out for a portion of the year, then hotel/motel tax revenue is estimated to increase by between \$31,500 and \$63,000 annually once all homes are constructed.

It is also likely that stays at hotels would increase during the construction phase of the project. While projecting this impact is difficult, this could provide an additional significant source of revenue to the city.

## 4.3 Water and Sanitation Revenue

The newly constructed lake homes will, once occupied, cause an increase in the utilization of the city’s water, sewer, and sanitation services. The associated increase in city revenue is estimated below using the following assumptions:

- Water usage is estimated to be 70 gallons per person per day
  - Estimate provided by McClure Engineering
- 25% of homes are occupied by full time residents and 75% are occupied by part time residents
- Homes occupied by part time residents are treated as if they are occupied for three months and unoccupied for nine months each year

<sup>5</sup> Based on Airbnb and VRBO rates of lake houses within the region.

- Homes occupied by part time residents, when not in use, have minimal usage and incur the minimum monthly bill
- Using rates published by the City of Grinnell, the average monthly bill for a home in use is \$54.52 for water and \$54.73 for sewer
- All homes incur a fixed monthly charge of \$3.53 for storm water
- 75% of homes use 1 small bin (\$14.91 per month) for waste disposal, 20% use 1 medium bin (\$19.32 per month), and 5% use 1 large bin (\$24.21 per month)

Water and sanitation revenues are estimated using two housing buildout rates. The first, shown in Table 31, is the same buildout rate used for the economic impact analysis in Section 3.2. In this buildout, all 500 homes are built within the first ten years. Using constant dollars, the estimated total additional utility revenue to the city is \$221,484 in year 5 and caps at \$461,426 in year 10. If monthly rates increase at a rate of 2% per year, then annual revenues are estimated at \$239,742 in year 5, \$551,447 in year 10, and \$742,175 in year 25.

**Table 31. Projected Annual Water and Sanitation Revenue, Buildout 1**

Projected Annual Water and Sanitation Revenue, Buildout 1					
Year	Water Revenue	Sewer and Storm Revenue	Sanitation Revenue	Total Revenue	Inflation-Adjusted Total
Year 1	\$ 9,868	\$ 9,781	\$ 5,267	\$ 24,917	\$ 24,917
Year 2	\$ 28,874	\$ 28,620	\$ 15,412	\$ 72,905	\$ 74,363
Year 3	\$ 47,880	\$ 47,458	\$ 25,556	\$ 120,894	\$ 125,778
Year 4	\$ 66,885	\$ 66,296	\$ 35,700	\$ 168,882	\$ 179,219
Year 5	\$ 87,719	\$ 86,946	\$ 46,820	\$ 221,484	\$ 239,742
Year 6	\$ 106,724	\$ 105,784	\$ 56,965	\$ 269,473	\$ 297,520
Year 7	\$ 125,730	\$ 124,622	\$ 67,109	\$ 317,461	\$ 357,513
Year 8	\$ 144,736	\$ 143,461	\$ 77,253	\$ 365,449	\$ 419,786
Year 9	\$ 163,741	\$ 162,299	\$ 87,398	\$ 413,438	\$ 484,408
Year 10	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 551,447
Year 15	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 608,842
Year 20	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 672,210
Year 25	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 742,175

Table 32 shows the revenue projections using a more conservative buildout rate. In this buildout, 20 homes are built each year, with all 500 homes not being built until year 25. Using constant dollars, the estimated total additional revenue is \$92,285 in year 5, \$184,570 in year 10, and reaches its maximum of \$461,426 in year 25. If monthly rates increase at a rate of 2% per year, then annual revenues are estimated at \$99,892 in year 5, \$220,579 in year 10, and \$742,175 in year 25.

Table 32. Projected Annual Water and Sanitation Revenue, Buildout 2

Projected Annual Water and Sanitation Revenue, Buildout 2					
Year	Water Revenue	Sewer and Storm Revenue	Sanitation Revenue	Total Revenue	Inflation-Adjusted Total
Year 1	\$ 7,310	\$ 7,245	\$ 3,902	\$ 18,457	\$ 18,457
Year 2	\$ 14,620	\$ 14,491	\$ 7,803	\$ 36,914	\$ 37,652
Year 3	\$ 21,930	\$ 21,736	\$ 11,705	\$ 55,371	\$ 57,608
Year 4	\$ 29,240	\$ 28,982	\$ 15,607	\$ 73,828	\$ 78,347
Year 5	\$ 36,549	\$ 36,227	\$ 19,508	\$ 92,285	\$ 99,892
Year 6	\$ 43,859	\$ 43,473	\$ 23,410	\$ 110,742	\$ 122,268
Year 7	\$ 51,169	\$ 50,718	\$ 27,312	\$ 129,199	\$ 145,499
Year 8	\$ 58,479	\$ 57,964	\$ 31,213	\$ 147,656	\$ 169,611
Year 9	\$ 65,789	\$ 65,209	\$ 35,115	\$ 166,113	\$ 194,628
Year 10	\$ 73,099	\$ 72,455	\$ 39,017	\$ 184,570	\$ 220,579
Year 15	\$ 109,648	\$ 108,682	\$ 58,525	\$ 276,856	\$ 365,305
Year 20	\$ 146,198	\$ 144,910	\$ 78,034	\$ 369,141	\$ 537,768
Year 25	\$ 182,747	\$ 181,137	\$ 97,542	\$ 461,426	\$ 742,175

#### 4.4 Electricity and Gas Franchise Fee Revenue

Another significant source of revenue for the City of Grinnell is the collection of a franchise fee on gas and electricity revenues. The increase in revenue due to the collection of this fee is estimated using the following assumptions:

- The franchise fee is 3%
- 25% of homes are occupied by full time residents and 75% are occupied by part time residents
- Homes occupied by part time residents are treated as if they are occupied for three months and unoccupied for nine months each year
- The average monthly electricity bill is \$134 for an occupied home<sup>6</sup> and \$40 for an unoccupied home
- The average annual gas bill is \$680 for full time residents, based on an average of rates from the Energy Information Administration and the American Gas Association
  - The average annual gas bill for part time residents is \$272, or 40% of this amount
- 6 out of 10 homes use natural gas<sup>7</sup>

As with water and sanitation revenues, electricity and gas franchise fee revenues are estimated using two housing buildout rates. The first, shown in Table 33, is the same buildout rate used for the economic impact analysis in Section 3.2. In this buildout, all 500 homes are built within the first ten years. Using constant dollars, the estimated total additional revenue is \$8,635 in year 5 and caps at \$17,991 in year 10. If rates increase by 2% per year, then annual revenues are estimated at \$9,347 in year 5, \$21,500 in year 10, and \$28,937 in year 25.

<sup>6</sup> <https://findenergy.com/ia/poweshiek-county-electricity/>

<sup>7</sup> <https://www.eia.gov/state/analysis.php?sid=IA>

**Table 33. Projected Franchise Fee Revenue, Buildout 1**

<b>Projected Annual Franchise Fee Revenue, Buildout 1</b>				
<b>Year</b>	<b>Electricity Franchise Fee Revenue</b>	<b>Gas Franchise Fee Revenue</b>	<b>Total Revenue</b>	<b>Inflation-Adjusted Total</b>
Year 1	\$ 790	\$ 182	\$ 971	\$ 971
Year 2	\$ 2,311	\$ 532	\$ 2,843	\$ 2,899
Year 3	\$ 3,832	\$ 882	\$ 4,714	\$ 4,904
Year 4	\$ 5,353	\$ 1,232	\$ 6,585	\$ 6,988
Year 5	\$ 7,020	\$ 1,616	\$ 8,635	\$ 9,347
Year 6	\$ 8,541	\$ 1,966	\$ 10,506	\$ 11,600
Year 7	\$ 10,062	\$ 2,316	\$ 12,377	\$ 13,939
Year 8	\$ 11,583	\$ 2,666	\$ 14,249	\$ 16,367
Year 9	\$ 13,104	\$ 3,016	\$ 16,120	\$ 18,887
Year 10	\$ 14,625	\$ 3,366	\$ 17,991	\$ 21,500
Year 15	\$ 14,625	\$ 3,366	\$ 17,991	\$ 23,738
Year 20	\$ 14,625	\$ 3,366	\$ 17,991	\$ 26,209
Year 25	\$ 14,625	\$ 3,366	\$ 17,991	\$ 28,937

Table 34 shows the revenue projections using a more conservative buildout rate. In this buildout, 20 homes are built each year, with all 500 homes not being built until year 25. Using constant dollars, the estimated total additional revenue is \$3,598 in year 5, \$7,196 in year 10, and reaches its maximum of \$17,991 in year 25. If rates increase by 2% per year, then annual revenues are estimated at \$3,895 in year 5, \$8,600 in year 10, and \$28,937 in year 25.

**Table 34. Projected Franchise Fee Revenue, Buildout 2**

<b>Projected Annual Franchise Fee Revenue, Buildout 2</b>				
<b>Year</b>	<b>Electricity Franchise Fee Revenue</b>	<b>Gas Franchise Fee Revenue</b>	<b>Total Revenue</b>	<b>Inflation-Adjusted Total</b>
Year 1	\$ 585	\$ 135	\$ 720	\$ 720
Year 2	\$ 1,170	\$ 269	\$ 1,439	\$ 1,468
Year 3	\$ 1,755	\$ 404	\$ 2,159	\$ 2,246
Year 4	\$ 2,340	\$ 539	\$ 2,878	\$ 3,055
Year 5	\$ 2,925	\$ 673	\$ 3,598	\$ 3,895
Year 6	\$ 3,510	\$ 808	\$ 4,318	\$ 4,767
Year 7	\$ 4,095	\$ 942	\$ 5,037	\$ 5,673
Year 8	\$ 4,680	\$ 1,077	\$ 5,757	\$ 6,613
Year 9	\$ 5,265	\$ 1,212	\$ 6,477	\$ 7,588
Year 10	\$ 5,850	\$ 1,346	\$ 7,196	\$ 8,600
Year 15	\$ 8,775	\$ 2,020	\$ 10,794	\$ 14,243
Year 20	\$ 11,700	\$ 2,693	\$ 14,392	\$ 20,967
Year 25	\$ 14,625	\$ 3,366	\$ 17,991	\$ 28,937

## 5 Demographic Impact Analysis

In addition to economic impacts, the Sapphire Lake Development will affect the local community in other ways. The following section analyzes these broader effects in more detail. Of particular interest are potential impacts on the local workforce and on the utilization of community services.

### 5.1 Local Employment and Workforce Impacts

As stated in section 3.2, 500 new homes are expected to be built over a period of ten years as a part of the Sapphire Lake development. Of these new homes, around 118 are expected to be occupied by primary residents. The average household size within a 30-mile radius of Grinnell is 2.44, so the Sapphire Lake development is expected to result in a permanent population increase of around 288 people.

As shown in section 3.5, the spending within the local community by new lake residents is estimated to create around 90 new jobs. Table 35 shows the estimated employment impact by industry. As shown, the largest impacts are expected in the restaurant, retail, and healthcare sectors. Other notably impacted sectors include banks, automotive repair, and religious organizations.

**Table 35. Estimated Employment Impact, Top 20 Industries**

Estimated Employment Impact by Industry	
Industry	Number of Jobs
Limited-service restaurants	14
Full-service restaurants	10
Retail - Food and beverage stores	10
Hospitals	9
Retail - General merchandise stores	9
Individual and family services	8
Religious organizations	7
Offices of physicians	7
Retail - Nonstore retailers	6
Automotive repair and maintenance, except car washes	6
Nursing and community care facilities	6
All other food and drinking places	5
Junior colleges, colleges, universities, and professional schools	5
Child day care services	5
Retail - Miscellaneous store retailers	4
Other real estate	4
Monetary authorities and depository credit intermediation	3
Retail - Health and personal care stores	3
Offices of dentists	3
Car washes	3

According to U.S. census data, approximately 64 percent of households are family households while 36 percent are nonfamily households (assumed to be single-earner households). Of family households, around 54 percent are dual income. Applying these demographic assumptions to the above jobs impact results in an estimated 66 additional households within the local community.

However, in reality the number of additional households is likely to be lower due to several factors. First, a number of these additional jobs are likely to be part-time and may be filled by one of the following groups: 1) high school and college students already present within the community, 2) high school-aged children of the new lake residents, or 3) new lake residents who are retirees. Second, a number of these additional jobs that are full-time positions (particularly in the healthcare sector) may be filled by the new working-age lake residents themselves. Third, some of these positions are likely to be filled by people currently living in Grinnell or the surrounding communities.

Construction of the lake homes is also estimated to generate a sizable impact in terms of jobs. In general, construction jobs are supported rather than created<sup>8</sup>. However, due to the large value and long time frame that is expected for this construction event, it may be reasonable to say that some additional hiring will take place and/or that some additional construction workers may choose to move to the local community.

## 5.2 Community Services Utilization Impacts

As indicated in section 3.5, it is estimated that 118 of the expected 500 total new homes will be used as a household's primary residence. This results in an estimated number of children between 38 (using the average number of children per household of lake residents) and 52 (using the average household size in a 30-mile radius of Grinnell) once all homes are constructed and occupied. The actual number of children will vary significantly depending on the actual portion of primary residents that are retired vs. employed.

Additionally, it is estimated that the additional community spending from all new residents would result in 90 additional jobs in the local area. Assuming that all new jobs are filled by someone moving to the area (to estimate the maximum number of possible additional children), a national dual-income household rate of 53%, and using the average 30-mile radius household size, this results in 66 new households in the local area and 29 additional children.

In total, the estimated maximum number of additional children in the school system is 81. Since these additional children would be of varying ages and impacting teachers needed per cohort on the margin, it is difficult to say exactly how many additional teachers would be necessary. However, given an average class size in Iowa between 20 and 21 students, it is reasonable to estimate an additional four to five teachers would be needed on average.

The impact on utilization of daycare services is likely to be small. The maximum number of children allowed to be supervised by one daycare worker in Iowa is seven 2-year-old children, eight 3-year-old children, or fifteen 5-year-old children<sup>9</sup>. If the number of additional children at an appropriate age for daycare is between 20 and 30, this may at most result in an additional two to four daycare workers being needed.

The impact of additional residents on local hospital beds is also likely to be small. The state of Iowa has an average of 2.75 hospital beds per 1,000 people, or around 1 hospital bed per 360 people<sup>10</sup>. The new

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<sup>8</sup> <https://support.implan.com/hc/en-us/articles/115009510907-Common-Construction-Analysis-Questions>

<sup>9</sup> <https://www.desmoinesregister.com/story/news/politics/2022/06/16/more-kids-per-class-younger-workers-allowed-iowa-child-care-center-law-regulations/9587915002/>

<sup>10</sup> <https://www.kff.org/other/state-indicator/total-hospital-beds/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

housing development is estimated to bring in an additional 288 residents who primarily reside in the local area. The jobs created by the additional community spending of the new residents would result in an estimated maximum of 161 additional local residents. This means an additional one or two hospital beds may be necessary, though the hospital in Grinnell currently has 49 beds<sup>11</sup>, which may already be sufficient to care for the expanded population.

One additional benefit of the Sapphire Lake development is that it may help to recruit and retain top-level talent working in important positions in and around Grinnell, such as doctors and other hospital staff, upper management positions in community businesses, and professors and administrators at Grinnell College.

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<sup>11</sup> <https://www.unitypoint.org/grinnell/who-we-are.aspx>



## 6 Tax Increment Financing (TIF)

TIF is a practice whereby municipalities use anticipated increases in property tax revenues to finance improvements for public purposes. Iowa Code provides the statutory authority for TIF, which has been allowed in Iowa since 1969 for areas designated by cities as “blighted.” Authority was expanded in 1985 to allow TIF for economic development and to allow counties to establish areas.

TIF, a method of paying for community improvements with future tax revenues, is premised on the expectation that property valuations will increase as a result of such improvements. This study describes and analyzes the economic aspects of TIF with attention to their state-level policy implications. As project partners are well aware, because TIF has a direct impact on the State General Fund through its interaction with the State School Foundation Aid formula, the state will expect that if a new TIF district is created to support the Sapphire Lake project that the TIF district will be successful.

To estimate TIF receipts from the Sapphire Lake development a series of assumptions were made. Table 36 documents the baseline assumptions which were entered into a model built for the City of Grinnell. Primary assumptions include:

- A city levy rate of \$31.00/\$1,000 taxable value and a rollback percentage of 56.6501%.
- Beginning in 2026, one 15-yr district will be created in each even year through 2044.
- Low and Moderate Income (LMI) set-aside percentage is 45% but capped at \$6.5 million.
- LMI is progressively factored to 0% for Years 1-5, 25% for Years 6-10, 50% for Years 11-15, 75% for Years 16-20 and 100% for Years 21+ (until the maximum \$6.5 million is reached).
- Total homes built, initial value, homes per TIF district and buildout rates in the Sapphire Lake development are as follows:
  - 300 Lakefront homes valued at \$600,000, 30 homes per TIF district which will be built equally during the first two years (50%/year) of each TIF district.
  - 300 2<sup>nd</sup> Tier homes valued at \$235,000, 30 homes per TIF district which will be built equally during the first five years (20%/year) of each TIF district.

Table 36. TIF Model Assumptions

<b>TIF Model Assumptions</b>			
<b>County or City Analysis?</b>		<b>CITY</b>	
Year of first TIF District	2026	<b>TIF Levy Rates</b>	
Total # TIF Districts	10	City (Grinnell) (\$/\$1,000 Taxable Value)	\$ 31.00
TIF District Length (yrs)	15	County (Poweshiek) (\$/\$1,000 Taxable Value)	\$ 23.00
Discount Rate	5.0%	Levy (\$/\$1,000 Taxable Value)	\$ 31.00
Annual New Construction Inflation	0.0%	<b>Total Homes</b>	
Annual Assessed Value Appreciation	0.0%	% Lakefront	50%
<b>Rollback</b>		% 2nd Tier	50%
City Rollback Percentage	54.6501%	<b>Total Lakefront Homes</b>	300
County Rollback Percentage	54.6501%	Initial Value of Lakefront Homes (Year 1)	\$600,000
Rollback Percentage	54.6501%	Lakefront Homes/TIF District	30
<b>LMI Percentage</b>		Lakefront Homes Buildout (%/year)	50.000%
	45.0%	<b>Total 2nd Tier Homes</b>	300
		Initial Value of Lakefront Homes (Year 1)	\$235,000
		2nd Tier Homes/TIF District	30
		2nd Tier Homes Buildout (%/year)	20.000%



## 6.1 TIF Receipts

Assuming that model inputs presented in Table 36 come to fruition, we estimate cumulative TIF receipts from all districts from 2026-2058 will be approximately \$59.8 million (see Figure 1). As expected, due to the phasing in of ten, 15-year districts over the course of ten years, annual receipts start low, build and peak in middle years and taper in ending years.

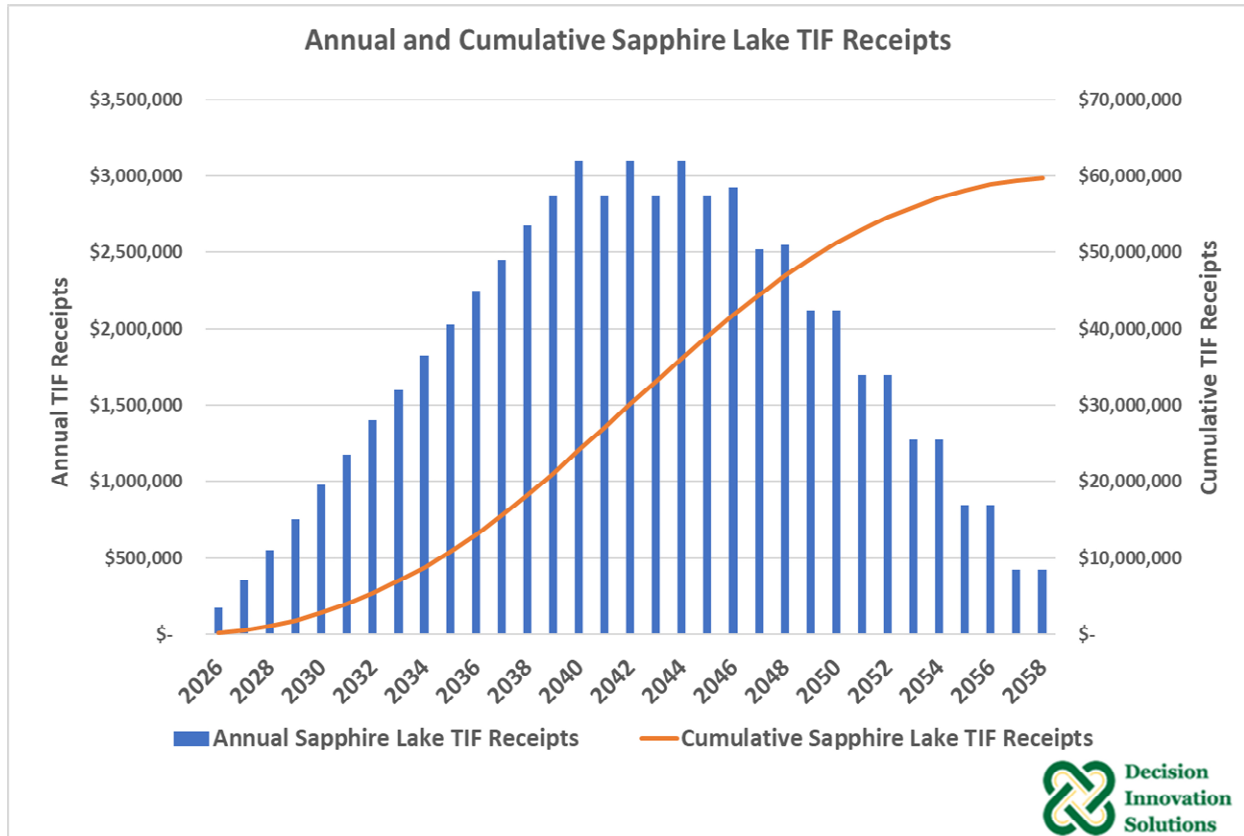


Figure 1. Annual and Cumulative Sapphire Lake TIF Receipts

## 6.2 LMI Set-Aside

Assuming that model inputs presented in Table 36 come to fruition, that LMI is progressively factored in Years 1-20 and that no LMI maximum is imposed (\$6.5 million), we estimate cumulative LMI receipts from all districts from 2026-2058 would be approximately \$18.2 million (see Figure 2). As expected, due to the phasing in of ten, 15-year districts over the course of ten years, annual LMI starts low, builds and peaks in middle years and tapers in ending years. If a maximum LMI of \$6.5 million is imposed, it will be reached sometime in 2042 or 2043.

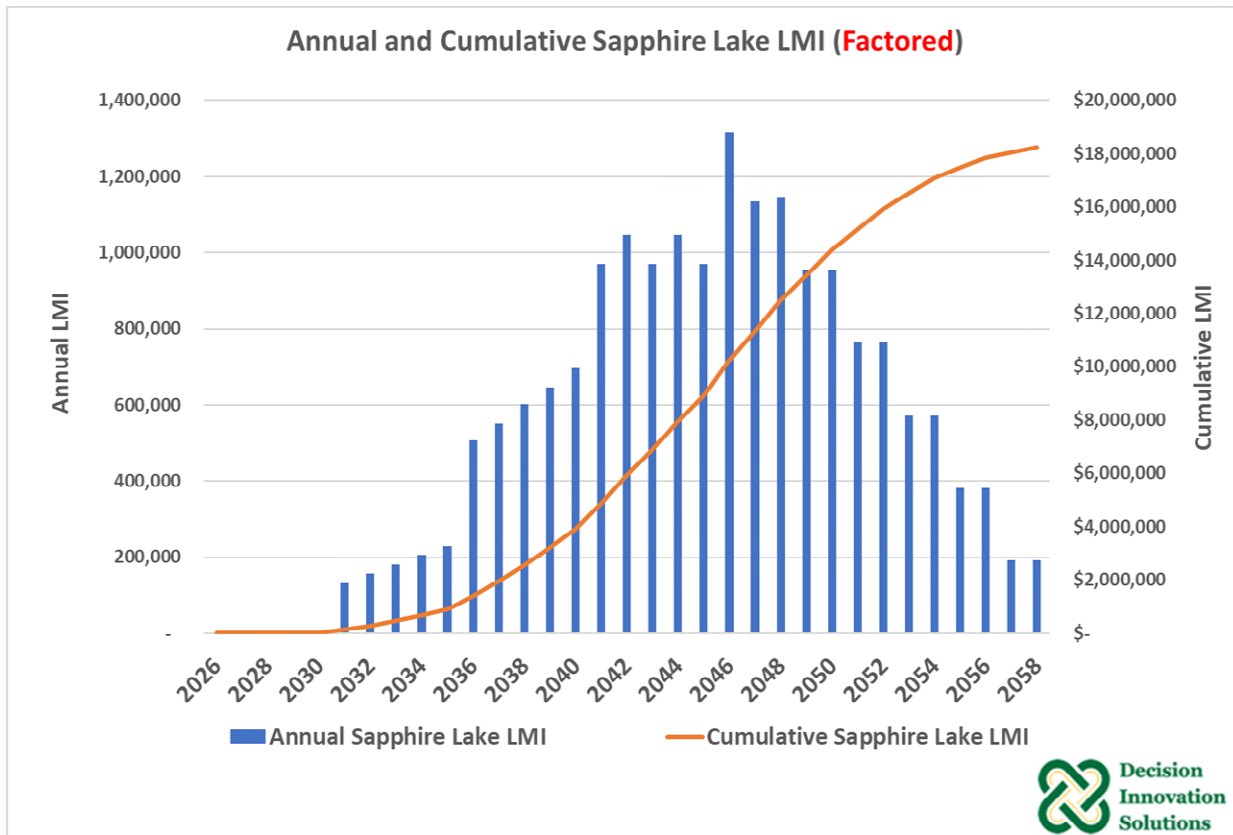


Figure 2. Annual and Cumulative Sapphire Lake LMI (Factored)

### 6.3 Net TIF Receipts

Assuming that model inputs presented in Table 36 come to fruition, that LMI is factored in Years 1-20 and that no LMI maximum is imposed (\$6.5 million), we estimate cumulative net TIF receipts from all districts from 2026-2058 would be approximately \$41.5 million (see Figure 3). As expected, due to the phasing in of ten, 15-year districts over the course of ten years, annual net TIF receipts start low, build and peak in middle years and tapers in ending years.

If a maximum LMI of \$6.5 million is imposed and is reached sometime in 2042 or 2043, cumulative net TIF receipts over the 2026-2058 timeframe increases by about \$11.8 million to approximately \$53.3 million (see Figure 4).

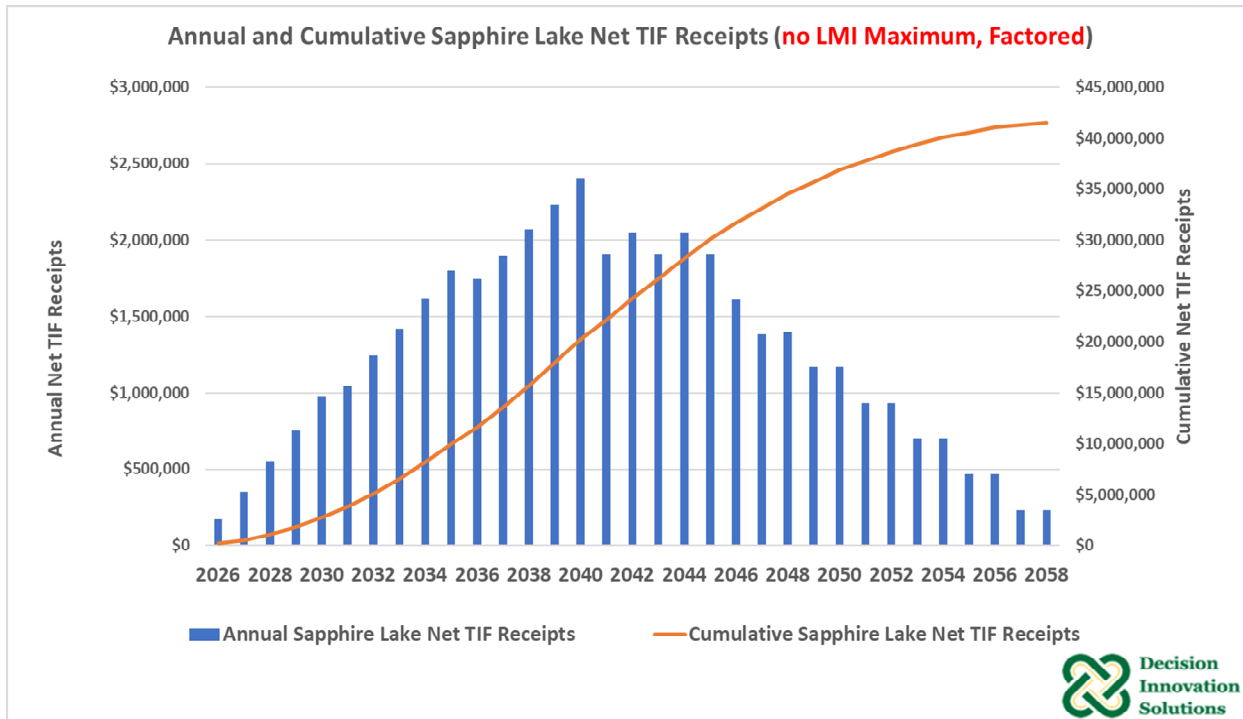


Figure 3. Annual and Cumulative Sapphire Lake Net TIF Receipts (no LMI Maximum)

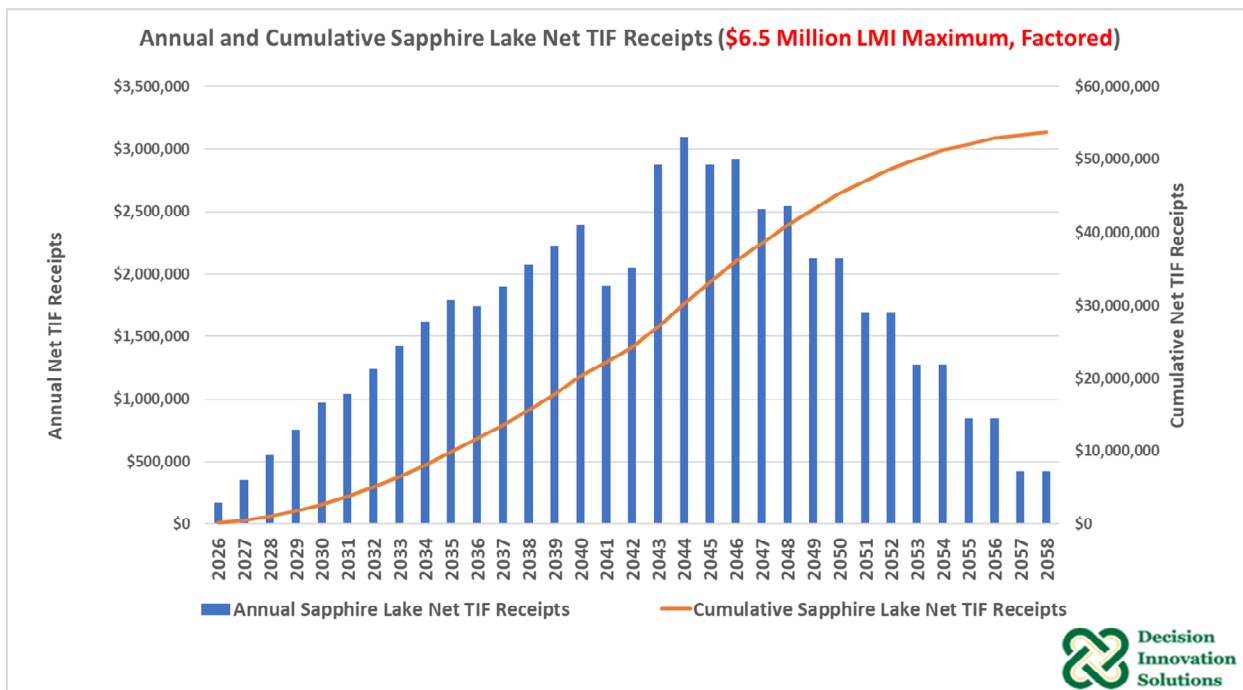


Figure 4. Annual and Cumulative Sapphire Lake Net TIF Receipts (\$6.5 Million LMI Maximum)

### 6.4 Non-TIF Receipts

Assuming that model inputs presented in Table 36 come to fruition and that homes built in the Sapphire Lake development continue to generate property tax revenue beyond expiration of all TIF districts in 2058, we estimate cumulative net non-TIF receipts from all districts upon expiration through 2058

would be approximately \$38.2 million (see Figure 5). As shown, non-TIF receipts begin in 2041, after the expiration of the first 15-year TIF district.

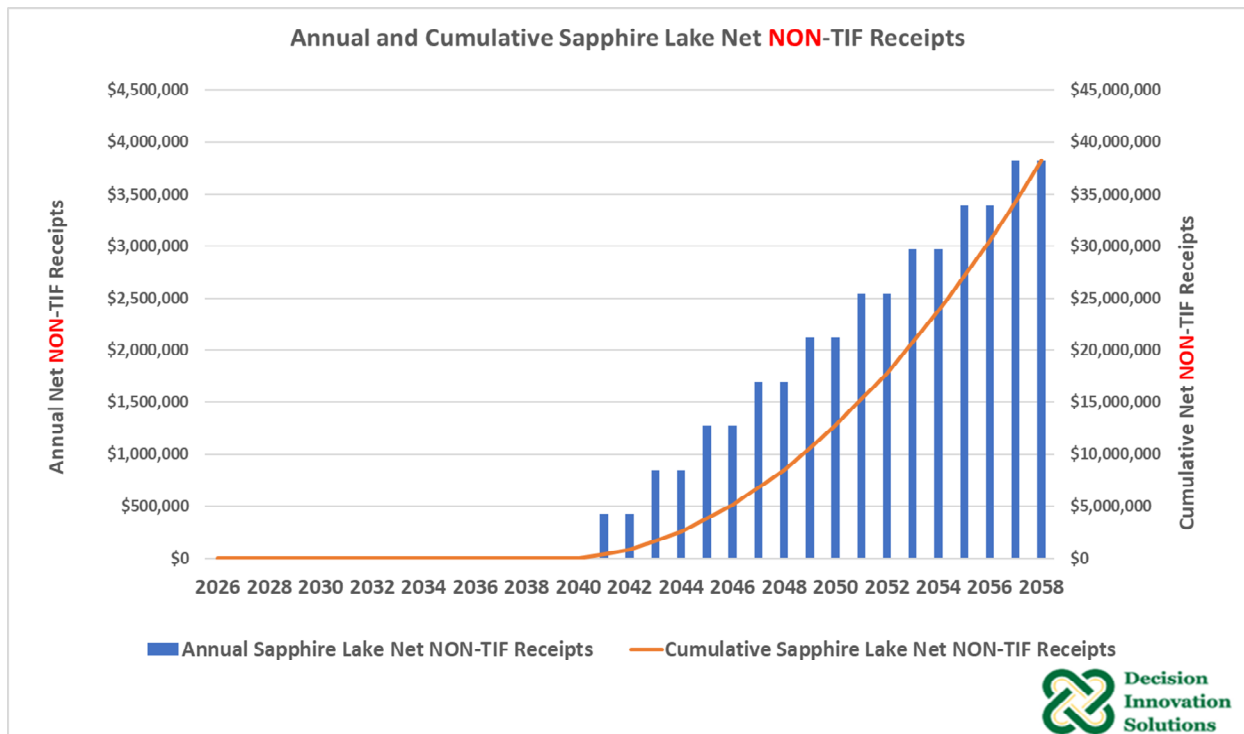


Figure 5. Annual and Cumulative Sapphire Lake Non-TIF Receipts

## 6.5 Summary

Assuming model inputs presented in Table 36 come to fruition, that LMI is progressively factored in Years 1-20 and that an LMI maximum of \$6.5 million is imposed, we estimate the following<sup>12</sup>:

- Cumulative TIF receipts from 2026-2058 will be approximately \$59.8 million.
- LMI receipts from 2026-2043 would be approximately \$6.5 million.
- Cumulative net TIF receipts from 2026-2058 would be approximately \$53.3 million.
- Cumulative net non-TIF receipts from all districts upon expiration through 2058 would be approximately \$38.2 million.

A few items that would have measurable (positive) impact on the results include:

- We assume no value appreciation of homes built in the districts.
- We assume no inflation to the cost to build homes in the districts.
- We assume no increases to city levy rates or decreases to rollback percentages.

<sup>12</sup> The amounts listed in this summary are not adjusted for inflation. Using a 5% discount rate reduces the listed amounts to \$27.1 million for cumulative TIF receipts, \$3.5 million for LMI receipts (from a \$6.5 million maximum), \$24.0 million for cumulative net TIF receipts and \$10.4 million for cumulative net non-TIF receipts.

## 7 Appendix A, State Level Impact Results

### 7.1 Lake and Dam Construction

- Overall construction impact results

Total Impact Summary - Lake Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	185	\$ 11.3	\$ 12.8	\$ 28.1	
Indirect	53	\$ 3.3	\$ 5.8	\$ 11.3	
Induced	61	\$ 2.9	\$ 5.5	\$ 9.8	
<b>Total</b>	<b>299</b>	<b>\$ 17.6</b>	<b>\$ 24.1</b>	<b>\$ 49.2</b>	

- Overall tax impact results

Taxes Paid - Lake Construction				
Impact Type	State and Local		Federal (\$M)	Total (\$M)
	(\$M)			
Direct	\$ 0.2	\$ 2.1	\$ 2.3	
Indirect	\$ 0.8	\$ 0.5	\$ 1.3	
Induced	\$ 0.6	\$ 0.5	\$ 1.1	
<b>Total</b>	<b>\$ 1.5</b>	<b>\$ 3.2</b>	<b>\$ 4.7</b>	

- Top industries impacted in terms of value added. Doesn't necessarily need to be included in the application but can provide additional context to the economic impacts throughout the broader economy. Note there are some differences between the state and local geographies in terms of top industries impacted.

Top Ten Industries Impacted - Lake Construction	
Industry	Total Value Added (\$M)
Construction of other new nonresidential structures	\$ 8.3
Landscape and horticultural services	\$ 1.8
Architectural, engineering, and related services	\$ 1.1
Owner-occupied dwellings	\$ 1.0
Retail - Building material and garden equipment and supplies stores	\$ 0.7
Monetary authorities and depository credit intermediation	\$ 0.6
Construction of new highways and streets	\$ 0.5
Construction of new power and communication structures	\$ 0.5
Wholesale - Other durable goods merchant wholesalers	\$ 0.4
Truck transportation	\$ 0.4

### 7.2 Home Construction

- Overall (10 years combined) construction impact

Total Impact Summary - Home Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	2,781	\$ 179.1	\$ 207.3	\$ 373.7	
Indirect	707	\$ 40.6	\$ 70.7	\$ 130.0	
Induced	915	\$ 44.2	\$ 83.1	\$ 147.1	
<b>Total</b>	<b>4,404</b>	<b>\$ 263.8</b>	<b>\$ 361.2</b>	<b>\$ 650.8</b>	

- Overall (10 years combined) tax impact

Taxes Paid - Home Construction				
Impact Type	State and Local (\$M)		Federal (\$M)	Total (\$M)
Direct	\$ 2.0	\$ 33.2	\$ 35.1	
Indirect	\$ 10.0	\$ 6.4	\$ 16.4	
Induced	\$ 9.4	\$ 7.6	\$ 17.0	
<b>Total</b>	<b>\$ 21.3</b>	<b>\$ 47.2</b>	<b>\$ 68.5</b>	

- Impact of first “full year” of construction. Useful to contextualize what the overall impact actually looks like on an annual basis

2027 Impact Summary - Home Construction					
Impact Type	Employment	Labor Income (\$M)	Value Added (\$M)	Output (\$M)	
Direct	255	\$ 16.4	\$ 19.0	\$ 34.0	
Indirect	64	\$ 3.7	\$ 6.4	\$ 11.7	
Induced	84	\$ 4.0	\$ 7.6	\$ 13.4	
<b>Total</b>	<b>402</b>	<b>\$ 24.1</b>	<b>\$ 33.0</b>	<b>\$ 59.1</b>	

- Top industries impacted in terms of value added. Doesn’t necessarily need to be included in the application but can provide additional context to the economic impacts throughout the broader economy. Note there are some differences between the state and local geographies in terms of top industries impacted.

Top Ten Industries Impacted - Construction	
Industry	Total Value Added (\$M)
Construction of new single-family residential structures	\$ 202.8
Retail - Building material and garden equipment and supplies stores	\$ 23.8
Owner-occupied dwellings	\$ 14.6
Monetary authorities and depository credit intermediation	\$ 6.3
Construction of new multifamily residential structures	\$ 4.5
Hospitals	\$ 3.8
Truck transportation	\$ 3.6
Wholesale - Other durable goods merchant wholesalers	\$ 3.4
Offices of physicians	\$ 3.2
Management of companies and enterprises	\$ 3.2

### 7.3 Construction of Lake Restaurant and Convenience Store

- Restaurant construction impact summary

Total Impact Summary - Restaurant Construction				
Impact Type	Employment	Labor Income	Value Added	Output
Direct	3.9	\$ 251,560	\$ 272,794	\$ 518,417
Indirect	0.7	\$ 47,014	\$ 78,785	\$ 156,011
Induced	1.2	\$ 60,055	\$ 113,006	\$ 199,895
<b>Total</b>	<b>5.8</b>	<b>\$ 358,628</b>	<b>\$ 464,584</b>	<b>\$ 874,324</b>

- Restaurant construction tax impact summary

Taxes Paid - Restaurant Construction			
Impact Type	State and Local	Federal	Total
Direct	\$ 3,854	\$ 45,912	\$ 49,766
Indirect	\$ 8,185	\$ 8,186	\$ 16,371
Induced	\$ 12,746	\$ 10,348	\$ 23,094
<b>Total</b>	<b>\$ 24,785</b>	<b>\$ 64,446</b>	<b>\$ 89,231</b>

- Restaurant construction top industries impacted in terms of value added

Top Ten Industries Impacted - Restaurant Construction	
Industry	Total Value Added
Construction of new commercial structures, including farm structures	\$ 245,214
Wholesale - Other durable goods merchant wholesalers	\$ 22,744
Owner-occupied dwellings	\$ 19,833
Wholesale - Professional and commercial equipment and supplies	\$ 12,570
Monetary authorities and depository credit intermediation	\$ 9,097
Truck transportation	\$ 5,561
Hospitals	\$ 5,154
Management of companies and enterprises	\$ 4,698
Insurance carriers, except direct life	\$ 4,605
Offices of physicians	\$ 4,369

- Convenience store construction impact summary

Total Impact Summary - Convenience Store Construction					
Impact Type	Employment	Labor Income	Value Added	Output	
Direct	2.8	\$ 184,386	\$ 228,741	\$ 484,920	
Indirect	0.6	\$ 41,592	\$ 70,949	\$ 141,308	
Induced	0.9	\$ 45,363	\$ 85,356	\$ 150,980	
<b>Total</b>	<b>4.3</b>	<b>\$ 271,341</b>	<b>\$ 385,047</b>	<b>\$ 777,208</b>	

- Convenience store construction tax impact summary

Taxes Paid - Convenience Store Construction				
Impact Type	State and Local	Federal	Total	
Direct	\$ 3,262	\$ 35,226	\$ 38,488	
Indirect	\$ 7,018	\$ 7,361	\$ 14,379	
Induced	\$ 9,632	\$ 7,815	\$ 17,447	
<b>Total</b>	<b>\$ 19,912</b>	<b>\$ 50,402</b>	<b>\$ 70,314</b>	

- Convenience store construction top industries impacted in terms of value added

Top Ten Industries Impacted - Convenience Store Construction	
Industry	Total Value Added
Construction of new commercial structures, including farm structures	\$ 144,980
Pump and pumping equipment manufacturing	\$ 38,755
Metal tank (heavy gauge) manufacturing	\$ 19,677
Owner-occupied dwellings	\$ 14,952
Ready-mix concrete manufacturing	\$ 12,224
Prefabricated metal buildings and components manufacturing	\$ 11,828
Monetary authorities and depository credit intermediation	\$ 7,428
Wholesale - Other durable goods merchant wholesalers	\$ 6,783
Truck transportation	\$ 4,955
Management of companies and enterprises	\$ 4,578



## 7.4 Operations of Lake Restaurant and Convenience Store

- Restaurant operations annual impact summary

Total Impact Summary - Restaurant					
Impact Type	Employment	Labor Income	Value Added	Output	
Direct	5.9	\$ 145,680	\$ 215,307	\$ 425,391	
Indirect	0.8	\$ 49,510	\$ 80,001	\$ 161,507	
Induced	0.8	\$ 38,949	\$ 73,282	\$ 129,609	
<b>Total</b>	<b>7.5</b>	<b>\$ 234,139</b>	<b>\$ 368,590</b>	<b>\$ 716,506</b>	

- Restaurant operations annual tax impact summary

Taxes Paid - Restaurant			
Impact Type	State and Local	Federal	Total
Direct	\$ 4,646	\$ 29,992	\$ 34,638
Indirect	\$ 7,917	\$ 8,723	\$ 16,640
Induced	\$ 8,279	\$ 6,708	\$ 14,987
<b>Total</b>	<b>\$ 20,842</b>	<b>\$ 45,424</b>	<b>\$ 66,265</b>

- Restaurant operations top ten industries impacted in terms of value added

Top Ten Industries Impacted - Restaurant	
Industry	Total Value Added
Full-service restaurants	\$ 217,431
Management of companies and enterprises	\$ 17,004
Owner-occupied dwellings	\$ 12,772
Other real estate	\$ 8,374
Monetary authorities and depository credit intermediation	\$ 5,689
Electric power transmission and distribution	\$ 4,952
Insurance carriers, except direct life	\$ 4,411
Employment services	\$ 3,637
Hospitals	\$ 3,364
Wholesale - Other nondurable goods merchant wholesalers	\$ 3,200

- Convenience store operations annual impact summary. Note that as a retail industry, the output value shown is the retail margin on goods sold, not the full value of goods sold

Total Impact Summary - Convenience Store					
Impact Type	Employment	Labor Income	Value Added	Output	
Direct	1.6	\$ 47,834	\$ 80,078	\$ 157,754	
Indirect	0.5	\$ 24,181	\$ 38,819	\$ 77,274	
Induced	0.3	\$ 14,416	\$ 27,123	\$ 47,971	
<b>Total</b>	<b>2.3</b>	<b>\$ 86,431</b>	<b>\$ 146,021</b>	<b>\$ 282,999</b>	

- Convenience store operations annual tax impact summary

Taxes Paid - Convenience Store			
Impact Type	State and Local	Federal	Total
Direct	\$ 19,392	\$ 5,585	\$ 24,978
Indirect	\$ 3,645	\$ 4,309	\$ 7,954
Induced	\$ 3,064	\$ 2,483	\$ 5,547
<b>Total</b>	<b>\$ 26,101</b>	<b>\$ 12,377</b>	<b>\$ 38,478</b>

- Convenience store operations top ten industries impacted in terms of value added

Top Ten Industries Impacted - Convenience Store	
Industry	Total Value Added
Retail - Gasoline stores	\$ 42,189
Retail - Food and beverage stores	\$ 38,592
Warehousing and storage	\$ 7,060
Owner-occupied dwellings	\$ 4,726
Other real estate	\$ 3,901
Monetary authorities and depository credit intermediation	\$ 3,896
Electric power transmission and distribution	\$ 3,168
Insurance carriers, except direct life	\$ 1,983
Employment services	\$ 1,390
Management of companies and enterprises	\$ 1,291