



## Marian Gibson

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**From:** Marian Gibson  
**Sent:** Monday, July 10, 2017 1:50 PM  
**To:** 'David Silverman'  
**Subject:** FW: Economic impact analysis- project Compass  
**Attachments:** Untitled attachment 00100.txt; Project Compass\_Impact Report v1.docx

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-----Original Message-----

**From:** Patrick Robinson [mailto:probinson@northpointkc.com]  
**Sent:** Monday, June 05, 2017 4:26 AM  
**To:** marian.gibson@villageofelwood.com  
**Subject:** Economic impact analysis- project Compass

Marian

I wanted to share the preliminary draft of the economic impact analysis completed by Professor Hewings of the University of Illinois.

For purposes of discussions that we will have this week, table 2 references construction job creation. In year 1 (2018), the report indicates 1.6 or 1,600 direct construction positions and 1.3 or 1,300 indirect construction positions. Year 1 is higher because of the bridge and development of infrastructure in addition to commencement of building construction.

The balance of the construction jobs are based on building construction. The report assumed absorption would be level from year to year. In year 2 through the balance of building construction, the report indicates that 1.2 or 1,200 construction positions per year would be required. In addition, 1.0 or 1,000 indirect construction positions are required.

It is worth explaining the distinction between direct and indirect construction positions. The direct positions are active on the site and include things like earthwork moving, concrete placement, steel erection, etc. For indirect positions, instead of earthwork there might be a need for replacement parts for the equipment utilized on site. Instead of concrete placement, there will be a need to mine aggregate at the quarry for the concrete.

Please review and let me know if you have any questions.

Thanks,

Patrick



# **Project Compass:**

## **Economic Impact Analysis**

**Report to Serafin & Associates**

Prepared by  
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## **Glossary of Terms and Models Used in the Analysis**

To assist the reader in the interpretation of the results, a brief introduction to impact analysis and a glossary of terms is provided in this section.

### **Linkages**

A regional economy like the one characterizing the state of Illinois has several important features. First, sectors in an economy are linked – some directly, others indirectly. For example, a sector producing automobile parts that are shipped to the final assembly line would represent a direct linkage between two sectors. Assume the automobile component supplier purchases some fabricated metals products from another supplier; this too represents a direct linkage. However, the fabricated metals producer has an indirect linkage to the automobile assembly producer. Although not directly dependent on automobile production, the fabricated metal producer is clearly indirectly dependent on the production levels of the assembler. Hence, while many sectors of the economy are linked directly, many if not more are linked indirectly. In short, no one is independent in the economic system. In the case of a construction project, the construction would have little direct connection with supermarkets; yet, indirectly, many supermarket jobs are dependent on the expenditures made by construction employees or those employed by suppliers to the construction project. Similarly, the operation of the facilities will generate a different set of direct and indirect linkages.

### **Ripple or Multiplier Effects**

Consider the case just reviewed; assume automobile production increases. Now, the assembler will require more components: this will generate a direct effect – and a column in the tables in this report will indicate the size of these direct effects. But we know that the impacts will not stop here; the component supplier will purchase more fabricated metal products, the fabricated metal producer will buy more steel, the steel producer will buy more iron ore or scrap and so forth. What we have described here are the multiple levels of the ripple effect – a direct change in one sector leads to expansion in other sectors of the economy. These sector-to-sector effects are referred to as indirect effects – and these too are shown in the summary tables.

During this whole process, firms need to purchase not only components and materials from other sectors, but they also have to pay wages and salaries to their employees. In turn, these

employees will generate their own ripple effect. For example, an assembly line worker will use the extra income earned from overtime (assumed to occur to meet the additional demand) to take his/her family to dinner. Part of this expenditure becomes income to the waiter; he spends some of this income at the dry cleaners and part of that expenditure is then used by the owners of the dry cleaning business to buy lumber to renovate their house. Part of this expenditure will be used by employees in the lumber yard to enjoy an evening at the cinema – and so the process continues until the impact diminishes to zero. This part of the ripple effect is referred to as induced income impacts.

So we have direct effects and two types of indirect effects – one generated by industry-industry purchases and sales and one generated by expenditures by employees from wages and salaries. The summation of these impacts are revealed in the tables as total impacts. If the total impacts are divided by the direct impacts, we obtain the ripple or multiplier effect. Consider the employment multiplier of 1.5; the interpretation is as follows, for every direct job, an additional 0.5 jobs are generated through a combination of the indirect and induced impacts.

### **Models Used**

In this report, two modeling systems are used; the majority of the analysis is conducted with two proprietary models, one of the Illinois economy as a whole and one for the Chicago Metropolitan Region; both models were developed by the Regional Economics Applications Laboratory. IREIM (Illinois Regional Econometric Input-output Model) and CREIM (Chicago Regional Econometric Input-output Model) combine the cross-sectional structure of an economy whereby firms buys and sell from each other, hire labor, pay wages and salaries with which consumer expenditures are made, with the time-series perspective provided by econometric analysis. These models and those for several other Midwest states were initially developed in the early 1990s; they have been updated and expanded on many occasions (the model was re-calibrated two years ago) and have been widely used for impact analysis and forecasting (the Chicago model, for example, was used to make the Go-to-2040 Forecasts for the Chicago Metropolitan Agency for Planning).

The impacts on Will County and the tax analysis were conducted using IMPLAN, a proprietary suite of models that has been offered for several decades by a North Carolina-based company. Inputs generated by IREIM and CREIM are entered in this model to estimate a variety of state



and local government taxes. While the IMPLAN models share some of the properties of CREIM and ILREIM, they are calibrated for just a single year; hence, impact analysis with these models for future time periods are conducted with the caveat that the results assume no changes in economic structure. However, they do provide a sense of the order of magnitude of economic effects for the future.

## **Executive Summary**

## 1. Introduction

Project Compass involves a nearly ten-year construction phase and an operations ramp-up that will see over 19,000 direct jobs associated with the facility by 2027. In a state and region struggling to recover from the effects of the recession and the burdens imposed by the state's fiscal ill-health, these impacts represent an important contribution to economic growth and development. This report documents the anticipated economic impacts on a year-by-year basis for three geographical regions – the state of Illinois, the Chicago Metropolitan Region and Will County in which the project is to be located. The reason for producing analyses at three spatial scales reflects the magnitude of the project and the expectation that the impacts are likely to spillover from Will County into the Chicago metro area and the rest of the state of Illinois. County and regional economies are much more open than the national economy and journey-to-work data for the Chicago region reveal considerable cross-county movements on a daily basis. However, the impacts presented at each spatial scale should not be considered as additive – they merely reflect estimations of the magnitude of the impacts. Of course impacts at the county level will be contained in both the Chicago region estimates and the state-wide estimates.

Sections 2, 3 and 4 provide the estimates for the impacts at different spatial scales. The state-wide and Chicago region estimates were made using REAL's models of these economies. These models capture traditional multiplier effects but also include the feedbacks from revenues to state and local governments (through taxes and fees) that are then spent on a variety of projects from school funding to highway maintenance and social spending. Further, these models are dynamic in the sense that some impacts spillover to the next year and the model also adjusts the structure of the economy to reflect anticipated changes in the links between supply and demand. For example, REAL has noted that, over time, both the Illinois and Chicago metro economies have been "hollowing out;" the average establishment has been buying less from within these regional economies and selling less to other establishment located therein. In section 4, the impacts on Will County are estimated using a model developed from IMPLAN. While this model shares many of the same features as the ones used for the Illinois and Chicago impacts, it does not include the feedback from state and local government expenditures. Section 5 provides an estimate of the state and local tax impacts.

In all cases, the impacts associated with the construction of the facilities are differentiated from those that could be expected with the operations. The construction employment levels are relatively constant from the second through the ninth year. This is not the case for the operations impacts that grow significantly from year to year. It would be tempting to add the year-by-year job estimates and present them as total jobs created by the project. However, many of these jobs are likely to be held by the same people over the time period.

The report concludes in section 6 with some summary comments.

## 2. Economic Impact: State of Illinois

The data presented in the tables in this section were derived from the Illinois Regional Econometric Input-Output Model. The direct impacts for employment, purchases and wage and salary income were provide by the company. The model has detail for 45 different sectors of the economy; for ease of presentation, the sectors were aggregated into nine sectors. At the foot of table 2.1, the definition of these aggregated sectors is provided. The results in table 2.1 will be explored to provide a road map for the interpretation of the remaining tables.

The entries in the row marked “Direct” were entered into the model for 2018. The model was then run to generate the total impact of the spending and re-spending in the economy to generate the entries marked “Total” in the table. The difference between the “Total” and “Direct” provides the estimate of the “Indirect” impacts. These comprise the impacts associated with the supply chain expenditures (for example, steel I-beams, concrete, r-bar and inputs necessary to make these components) and the impacts of wages and salaries by on-site employees and those in the supply chain whose partial wages and salaries could be attributed to purchases by the project. For example, in 2018, direct expenditures were estimated to be \$165.5 million; the total impact of these expenditures was \$353.8 million, yielding an indirect impact of \$184.4 million. If the “Total” is divided by the “Direct,” a value of 2.1 is obtained. This is the multiplier or ripple effect; in essence, for each \$1 spent directly a total of \$2.1 would be generated - \$1 of which is the direct expenditure and \$1.1 the indirect impact. For employment and income, the multipliers are 1.8 – each direct job (direct dollar of income) will generate 1.8 jobs (\$1.8 of income) of which 1 is the direct job (direct income) and 0.8 the indirect jobs (indirect income).

**Table 2.1: Impacts of for the construction by IREIM (2018)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.5	0.9	0.0
Construction	180.7	110.9	1.7
Nondurables	13.3	2.9	0.0
Durables	19.9	6.4	0.1
TCU	25.7	6.6	0.1
Trade	26.7	11.6	0.2
FIRE	21.6	5.5	0.1
Services	61.2	29.4	0.5

Government	2.3	12.4	0.2
<b>Total</b>	<b>353.8</b>	<b>186.5</b>	<b>2.9</b>
Direct	<b>169.5</b>	<b>104.0</b>	<b>1.6</b>
Indirect	184.4	82.5	1.3
Multiplier	2.1	1.8	1.8

Note: Durable and Nondurable represent a two-fold division of manufacturing; TCU is Trade, Communications and Utilities; FIRE is Finance, Insurance and Real Estate.

**Table 2.2: Impacts of for the construction by IREIM (2019)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	145.2	88.5	1.3
Nondurables	10.7	2.3	0.0
Durables	15.5	5.0	0.1
TCU	20.6	5.2	0.1
Trade	21.5	9.1	0.2
FIRE	17.2	4.3	0.1
Services	49.2	23.6	0.4
Government	1.8	9.7	0.1
<b>Total</b>	<b>283.7</b>	<b>148.3</b>	<b>2.3</b>
Direct	<b>136.3</b>	<b>83.0</b>	<b>1.2</b>
Indirect	147.5	65.3	1.0
Multiplier	2.1	1.8	1.8

**Table 2.3: Impacts of for the construction by IREIM (2020)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	149.6	91.1	1.3
Nondurables	10.9	2.3	0.0
Durables	15.6	5.0	0.1
TCU	21.2	5.2	0.1
Trade	22.1	9.1	0.2
FIRE	17.6	4.4	0.1
Services	50.6	24.4	0.4
Government	1.8	9.8	0.1
<b>Total</b>	<b>291.5</b>	<b>152.0</b>	<b>2.3</b>
Direct	<b>140.5</b>	<b>85.5</b>	<b>1.2</b>
Indirect	151.0	66.5	1.0
Multiplier	2.1	1.8	1.8

**Table 2.4: Impacts of for the construction by IREIM (2021)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	154.2	93.8	1.3
Nondurables	11.0	2.3	0.0
Durables	15.7	5.0	0.1
TCU	21.8	5.3	0.1
Trade	22.7	9.2	0.2
FIRE	18.1	4.4	0.1
Services	52.1	25.1	0.4
Government	1.9	9.9	0.1
<b>Total</b>	<b>299.3</b>	<b>155.7</b>	<b>2.2</b>
Direct	<b>144.8</b>	<b>88.1</b>	<b>1.2</b>
Indirect	154.5	67.6	1.0
Multiplier	2.1	1.8	1.8

**Table 2.5: Impacts of for the construction by IREIM (2022)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	158.9	96.5	1.3
Nondurables	11.2	2.3	0.0
Durables	15.8	5.0	0.1
TCU	22.4	5.3	0.1
Trade	23.3	9.3	0.2
FIRE	18.7	4.4	0.1
Services	53.6	25.9	0.4
Government	1.9	10.0	0.1
<b>Total</b>	<b>307.8</b>	<b>159.5</b>	<b>2.2</b>
Direct	<b>149.3</b>	<b>90.7</b>	<b>1.2</b>
Indirect	158.5	68.8	1.0
Multiplier	2.1	1.8	1.8

**Table 2.6: Impacts of for the construction by IREIM (2023)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	163.7	99.4	1.3
Nondurables	11.6	2.4	0.0
Durables	15.9	5.0	0.1
TCU	23.2	5.4	0.1
Trade	24.0	9.4	0.2
FIRE	19.2	4.5	0.1
Services	55.1	26.7	0.4
Government	2.0	10.1	0.1
<b>Total</b>	<b>316.8</b>	<b>163.6</b>	<b>2.2</b>
Direct	<b>153.9</b>	<b>93.4</b>	<b>1.2</b>
Indirect	162.8	70.2	1.0
Multiplier	2.1	1.8	1.8



**Table 2.7: Impacts of for the construction by IREIM (2024)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.0	0.7	0.0
Construction	168.7	102.3	1.3
Nondurables	11.9	2.4	0.0
Durables	16.1	5.0	0.1
TCU	24.0	5.5	0.1
Trade	24.8	9.5	0.2
FIRE	19.8	4.5	0.1
Services	56.8	27.6	0.4
Government	2.0	10.3	0.1
<b>Total</b>	<b>326.1</b>	<b>167.9</b>	<b>2.2</b>
Direct	<b>158.7</b>	<b>96.2</b>	<b>1.2</b>
Indirect	167.4	71.7	1.0
Multiplier	2.1	1.7	1.8

**Table 2.8: Impacts of for the construction by IREIM (2025)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.1	0.7	0.0
Construction	173.9	105.4	1.3
Nondurables	12.2	2.5	0.0
Durables	16.3	5.1	0.1
TCU	24.8	5.6	0.1
Trade	25.5	9.6	0.2
FIRE	20.4	4.6	0.1
Services	58.6	28.6	0.4
Government	2.1	10.4	0.1
<b>Total</b>	<b>335.9</b>	<b>172.6</b>	<b>2.2</b>
Direct	<b>163.5</b>	<b>99.1</b>	<b>1.2</b>
Indirect	172.4	73.4	1.0
Multiplier	2.1	1.7	1.8

**Table 2.9: Impacts of for the construction by IREIM (2026)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.2	0.8	0.0
Construction	179.2	108.5	1.3
Nondurables	12.6	2.5	0.0
Durables	16.5	5.1	0.1
TCU	25.7	5.7	0.1
Trade	26.3	9.7	0.2
FIRE	21.0	4.7	0.1
Services	60.4	29.6	0.4
Government	2.1	10.5	0.1
<b>Total</b>	<b>345.9</b>	<b>177.3</b>	<b>2.2</b>
Direct	<b>168.6</b>	<b>102.1</b>	<b>1.2</b>
Indirect	177.3	75.2	1.0
Multiplier	2.1	1.7	1.8

**Table 2.10: Impacts of for the construction by IREIM (2027)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	0.0	0.0	0.0
Construction	1.6	0.0	0.0
Nondurables	0.1	0.0	0.0
Durables	0.1	0.0	0.0
TCU	0.2	0.0	0.0
Trade	0.2	0.0	0.0
FIRE	0.2	0.0	0.0
Services	0.5	0.0	0.0
Government	0.0	0.0	0.0
<b>Total</b>	<b>3.1</b>	<b>0.0</b>	<b>0.0</b>
Direct	<b>1.5</b>	<b>0.0</b>	<b>0.0</b>
Indirect	1.6	0.0	0.0
Multiplier	2.1	0.0	0.0

Note: this table is included for completeness to reflect some expenditures in 2027 but no direct jobs or income are anticipated

Tables 2.11 through 2.20 show the comparable results for the logistics' operations. The interpretation of the tables is exactly the same as for the construction operations. However, since

employment is forecast to increase very significantly over the period covered in the analysis, the magnitude of the impacts change much more than for the construction operations. A description of the abbreviated sectors is included at the base of table 2.11

**Table 2.11: Impacts of for the logistics operations by IREIM (2018)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.3	0.3	0.0
Construction	13.4	5.1	0.1
Nondurables	13.1	1.7	0.0
Durables	8.9	1.8	0.0
TCU	46.1	6.4	0.1
Trade	17.8	4.8	0.2
FIRE	38.9	6.1	0.2
Services	393.0	99.1	2.8
Government	2.7	8.9	0.2
<b>Total</b>	<b>535.3</b>	<b>134.1</b>	<b>3.8</b>
Direct	<b>307.2</b>	<b>74.1</b>	<b>2.0</b>
Indirect	228.1	60.0	1.8
Multiplier	1.7	1.8	1.9

Note: Durable and Nondurable represent a two-fold division of manufacturing; TCU is Trade, Communications and Utilities; FIRE is Finance, Insurance and Real Estate.

**Table 2.12: Impacts of for the logistics operations by IREIM (2019)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.5	0.5	0.0
Construction	26.9	10.3	0.3
Nondurables	26.2	3.4	0.1
Durables	17.4	3.6	0.1
TCU	92.3	12.9	0.3
Trade	35.9	9.6	0.3
FIRE	77.8	12.3	0.3
Services	785.2	204.0	5.6
Government	5.5	18.0	0.5
<b>Total</b>	<b>1,069.8</b>	<b>274.7</b>	<b>7.5</b>
Direct	<b>613.2</b>	<b>152.6</b>	<b>3.9</b>
Indirect	456.5	122.0	3.6

Multiplier	1.7	1.8	1.9
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**Table 2.13: Impacts of for the logistics operations by IREIM (2020)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	3.7	0.8	0.0
Construction	40.3	15.7	0.4
Nondurables	39.0	5.1	0.1
Durables	25.5	5.3	0.1
TCU	138.6	19.5	0.4
Trade	54.1	14.5	0.5
FIRE	116.4	18.4	0.5
Services	1,176.2	315.0	8.5
Government	8.2	27.3	0.7
<b>Total</b>	<b>1,602.0</b>	<b>421.5</b>	<b>11.2</b>
Direct	<b>918.0</b>	<b>235.8</b>	<b>5.9</b>
Indirect	684.0	185.7	5.3
Multiplier	1.7	1.8	1.9

**Table 2.14: Impacts of for the logistics operations by IREIM (2021)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	4.7	1.1	0.1
Construction	53.5	21.4	0.6
Nondurables	51.2	6.8	0.1
Durables	33.2	6.9	0.1
TCU	185.0	26.0	0.5
Trade	72.4	19.4	0.6
FIRE	155.1	24.6	0.6
Services	1,564.9	432.1	11.3
Government	11.0	36.7	0.9
<b>Total</b>	<b>2,131.1</b>	<b>575.0</b>	<b>14.8</b>
Direct	<b>1,220.9</b>	<b>323.9</b>	<b>7.8</b>
Indirect	910.1	251.1	7.0
Multiplier	1.7	1.8	1.9

**Table 2.15: Impacts of for the logistics operations by IREIM (2022)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	5.7	1.3	0.1
Construction	66.8	27.3	0.7
Nondurables	63.5	8.5	0.1
Durables	40.8	8.5	0.2
TCU	232.0	32.6	0.6
Trade	90.8	24.4	0.8
FIRE	194.1	31.0	0.8
Services	1,951.0	555.8	14.1
Government	13.7	46.4	1.1
<b>Total</b>	<b>2,658.5</b>	<b>735.8</b>	<b>18.5</b>
Direct	<b>1,521.5</b>	<b>417.0</b>	<b>9.8</b>
Indirect	1,137.0	318.8	8.7
Multiplier	1.7	1.8	1.9

**Table 2.16: Impacts of for the logistics operations by IREIM (2023)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	6.8	1.6	0.1
Construction	80.2	33.5	0.9
Nondurables	76.2	10.3	0.2
Durables	48.2	10.2	0.2
TCU	279.8	39.4	0.7
Trade	109.6	29.5	0.9
FIRE	232.9	37.4	0.9
Services	2,336.1	686.4	16.9
Government	16.4	56.2	1.3
<b>Total</b>	<b>3,186.1</b>	<b>904.4</b>	<b>22.1</b>
Direct	<b>1,820.7</b>	<b>515.4</b>	<b>11.7</b>
Indirect	1,365.4	389.0	10.4
Multiplier	1.7	1.8	1.9

**Table 2.17: Impacts of for the logistics operations by IREIM (2024)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	7.8	1.9	0.1
Construction	93.7	40.1	1.0
Nondurables	88.8	12.1	0.2
Durables	55.5	11.8	0.2
TCU	328.7	46.4	0.8
Trade	128.7	34.8	1.1
FIRE	272.3	44.0	1.1
Services	2,720.1	824.3	19.7
Government	19.2	66.3	1.4
<b>Total</b>	<b>3,714.7</b>	<b>1,081.6</b>	<b>25.7</b>
Direct	<b>2,118.6</b>	<b>619.4</b>	<b>13.7</b>
Indirect	1,596.1	462.2	12.1
Multiplier	1.8	1.7	1.9

**Table 2.18: Impacts of for the logistics operations by IREIM (2025)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	9.1	2.2	0.1
Construction	107.5	46.9	1.2
Nondurables	101.5	14.0	0.2
Durables	63.0	13.4	0.2
TCU	379.2	53.5	1.0
Trade	148.3	40.2	1.2
FIRE	312.0	50.7	1.2
Services	3,105.5	970.3	22.6
Government	21.9	76.7	1.6
<b>Total</b>	<b>4,248.0</b>	<b>1,268.0</b>	<b>29.4</b>
Direct	<b>2,415.8</b>	<b>729.1</b>	<b>15.6</b>
Indirect	1,832.2	538.9	13.8
Multiplier	1.8	1.7	1.9

**Table 2.19: Impacts of for the logistics operations by IREIM (2026)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	10.2	2.5	0.1
Construction	121.3	54.0	1.3
Nondurables	114.1	15.9	0.2
Durables	70.4	15.1	0.3
TCU	430.7	60.8	1.1
Trade	168.1	45.8	1.4
FIRE	351.8	57.6	1.4
Services	3,488.7	1,124.0	25.4
Government	24.7	87.3	1.8
<b>Total</b>	<b>4,779.8</b>	<b>1,463.0</b>	<b>33.0</b>
Direct	<b>2,711.2</b>	<b>844.8</b>	<b>17.6</b>
Indirect	2,068.6	618.2	15.4
Multiplier	1.8	1.7	1.9

**Table 2.20: Impacts of for the logistics operations by IREIM (2027)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	11.2	2.9	0.1
Construction	135.3	61.6	1.5
Nondurables	126.7	17.8	0.3
Durables	77.6	16.8	0.3
TCU	483.4	68.5	1.2
Trade	188.0	51.5	1.5
FIRE	391.4	64.6	1.5
Services	3,870.0	1,286.0	28.3
Government	27.4	98.1	2.0
<b>Total</b>	<b>5,310.9</b>	<b>1,667.7</b>	<b>36.5</b>
Direct	<b>3,004.7</b>	<b>966.8</b>	<b>19.5</b>
Indirect	2,306.2	700.9	17.0
Multiplier	1.8	1.7	1.9



### 3. Economic Impact: Chicago Metropolitan Region

The data presented in the tables in this section were derived from the Chicago Region Econometric Input-Output Model. The direct impacts for employment, purchases and wage and salary income were provide by the company. The model has detail for 45 different sectors of the economy; for ease of presentation, the sectors were aggregated into nine sectors. At the foot of table 3.1, the definition of these aggregated sectors is provided. The results in table 3.1 will be explored to provide a road map for the interpretation of the remaining tables.

The entries in the row marked “Direct” were entered into the model for 2018. The model was then run to generate the total impact of the spending and re-spending in the economy to generate the entries marked “Total” in the table. The difference between the “Total” and “Direct” provides the estimate of the “Indirect” impacts. These comprise the impacts associated with the supply chain expenditures (for example, steel I-beams, concrete, r-bar and inputs necessary to make these components) and the impacts of wages and salaries by on-site employees and those in the supply chain whose partial wages and salaries could be attributed to purchases by the project. For example, in 2018, direct expenditures were estimated to be \$165.5 million; the total impact of these expenditures was \$517.8 million, yielding an indirect impact of \$348.4 million. If the “Total” is divided by the “Direct,” a value of 3.1 is obtained. This is the multiplier or ripple effect; in essence, for each \$1 spent directly a total of \$3.1 would be generated - \$1 of which is the direct expenditure and \$2.1 the indirect impact. For employment and income, the multipliers are 2.4 and 2.3 – each direct job (direct dollar of income) will generate 2.4 jobs (\$2.3 of income) of which 1 is the direct job (\$1 of direct income) and 1.4 the indirect jobs (\$1.3 indirect income).

**Table 3.1: Impacts of for the construction by CREIM (2018)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	2.1	0.8	0.0
Construction	186.4	114.4	1.8
Nondurables	31.8	6.0	0.0
Durables	30.8	8.9	0.1
TCU	40.9	9.3	0.1
Trade	46.8	21.2	0.5
FIRE	59.0	14.4	0.2

Services	117.0	46.0	1.1
Government	3.0	18.2	0.1
<b>Total</b>	<b>517.8</b>	<b>239.3</b>	<b>3.9</b>
Direct	<b>169.5</b>	<b>104.0</b>	<b>1.6</b>
Indirect	348.4	135.3	2.3
Multiplier	3.1	2.3	2.4

Note: Durable and Nondurable represent a two-fold division of manufacturing; TCU is Trade, Communications and Utilities; FIRE is Finance, Insurance and Real Estate.

**Table 3.2: Impacts of for the construction by CREIM (2019)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.7	0.7	0.0
Construction	149.9	91.3	1.4
Nondurables	25.7	4.7	0.0
Durables	24.7	6.9	0.1
TCU	32.7	7.3	0.1
Trade	37.4	16.7	0.4
FIRE	47.7	11.4	0.1
Services	94.3	36.4	0.8
Government	2.4	14.3	0.1
<b>Total</b>	<b>416.4</b>	<b>189.7</b>	<b>3.0</b>
Direct	<b>136.3</b>	<b>83.0</b>	<b>1.2</b>
Indirect	280.1	106.6	1.8
Multiplier	3.1	2.3	2.4

**Table 3.3: Impacts of for the construction by CREIM (2020)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.7	0.7	0.0
Construction	154.5	94.0	1.4
Nondurables	26.5	4.7	0.0
Durables	25.4	6.9	0.1
TCU	33.6	7.4	0.1
Trade	38.4	16.9	0.4
FIRE	49.5	11.6	0.1
Services	97.6	37.2	0.8
Government	2.4	14.4	0.1
<b>Total</b>	<b>429.6</b>	<b>193.8</b>	<b>3.0</b>
Direct	<b>140.5</b>	<b>85.5</b>	<b>1.2</b>
Indirect	289.1	108.3	1.7
Multiplier	3.1	2.3	2.4

**Table 3.4: Impacts of for the construction by CREIM (2021)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.6	0.7	0.0
Construction	159.2	96.8	1.4
Nondurables	27.2	4.8	0.0
Durables	26.2	6.9	0.1
TCU	34.6	7.4	0.1
Trade	39.4	17.1	0.4
FIRE	51.4	11.9	0.1
Services	101.0	38.0	0.8
Government	2.5	14.6	0.1
<b>Total</b>	<b>443.1</b>	<b>198.0</b>	<b>2.9</b>
Direct	<b>144.8</b>	<b>88.1</b>	<b>1.2</b>
Indirect	298.3	110.0	1.7
Multiplier	3.1	2.2	2.4

**Table 3.5: Impacts of for the construction by CREIM (2022)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.6	0.7	0.0
Construction	163.9	99.6	1.4
Nondurables	28.1	4.8	0.0
Durables	27.0	6.9	0.1
TCU	35.7	7.5	0.1
Trade	40.6	17.3	0.4
FIRE	53.5	12.1	0.1
Services	104.7	38.8	0.8
Government	2.6	14.7	0.1
<b>Total</b>	<b>457.7</b>	<b>202.4</b>	<b>2.9</b>
Direct	<b>149.3</b>	<b>90.7</b>	<b>1.2</b>
Indirect	308.4	111.7	1.7
Multiplier	3.1	2.2	2.4

**Table 3.6: Impacts of for the construction by CREIM (2023)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.6	0.7	0.0
Construction	168.8	102.5	1.4
Nondurables	29.1	4.8	0.0
Durables	27.8	6.8	0.1
TCU	36.9	7.6	0.1
Trade	41.9	17.5	0.4
FIRE	55.7	12.3	0.1
Services	108.7	39.7	0.8
Government	2.6	14.9	0.1
<b>Total</b>	<b>473.2</b>	<b>206.9</b>	<b>2.9</b>
Direct	<b>153.9</b>	<b>93.4</b>	<b>1.2</b>
Indirect	319.3	113.5	1.7
Multiplier	3.1	2.2	2.3

**Table 3.7: Impacts of for the construction by CREIM (2024)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.6	0.7	0.0
Construction	173.8	105.4	1.4
Nondurables	30.2	4.9	0.0
Durables	28.6	6.8	0.1
TCU	38.2	7.8	0.1
Trade	43.1	17.7	0.4
FIRE	58.1	12.6	0.1
Services	112.9	40.6	0.8
Government	2.7	15.1	0.1
<b>Total</b>	<b>489.3</b>	<b>211.6</b>	<b>2.9</b>
Direct	<b>158.7</b>	<b>96.2</b>	<b>1.2</b>
Indirect	330.7	115.3	1.6
Multiplier	3.1	2.2	2.3

**Table 3.8: Impacts of for the construction by CREIM (2025)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.7	0.7	0.0
Construction	178.9	108.5	1.4
Nondurables	31.3	5.0	0.0
Durables	29.5	6.8	0.1
TCU	39.6	7.9	0.1
Trade	44.5	17.9	0.4
FIRE	60.7	12.9	0.1
Services	117.4	41.6	0.8
Government	2.8	15.2	0.1
<b>Total</b>	<b>506.4</b>	<b>216.4</b>	<b>2.9</b>
Direct	<b>163.5</b>	<b>99.1</b>	<b>1.2</b>
Indirect	342.9	117.2	1.6
Multiplier	3.1	2.2	2.3

**Table 3.9: Impacts of for the construction by CREIM (2026)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.7	0.7	0.0
Construction	184.2	111.6	1.4
Nondurables	32.4	5.0	0.0
Durables	30.4	6.8	0.1
TCU	41.0	8.0	0.1
Trade	45.9	18.1	0.4
FIRE	63.3	13.1	0.1
Services	122.1	42.6	0.8
Government	2.9	15.4	0.1
<b>Total</b>	<b>523.9</b>	<b>221.3</b>	<b>2.8</b>
Direct	<b>168.6</b>	<b>102.1</b>	<b>1.2</b>
Indirect	355.4	119.2	1.6
Multiplier	3.1	2.2	2.3

**Table 3.10: Impacts of for the construction by CREIM (2027)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	0.0	0.0	0.0
Construction	1.6	0.0	0.0
Nondurables	0.3	0.0	0.0
Durables	0.3	0.0	0.0
TCU	0.4	0.0	0.0
Trade	0.4	0.0	0.0
FIRE	0.6	0.0	0.0
Services	1.1	0.0	0.0
Government	0.0	0.0	0.0
<b>Total</b>	<b>4.7</b>	<b>0.0</b>	<b>0.0</b>
Direct	<b>1.5</b>	<b>0.0</b>	<b>0.0</b>
Indirect	3.2	0.0	0.0
Multiplier	3.1	0.0	0.0

Note: this table is included for completeness to reflect some expenditures in 2027 but no direct jobs or income are anticipated

Tables 3.11 through 3.20 show the comparable results for the logistics' operations. The interpretation of the tables is exactly the same as for the construction operations. However, since employment is forecast to increase very significantly over the period covered in the analysis, the magnitude of the impacts change much more than for the construction operations. A description of the abbreviated sectors is included at the base of table 3.11

**Table 3.11: Impacts of for the logistics operations by CREIM (2018)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	1.5	0.6	0.0
Construction	15.0	8.3	0.2
Nondurables	27.3	4.6	0.0
Durables	14.5	3.7	0.0
TCU	55.3	10.1	0.1
Trade	32.3	13.3	0.4
FIRE	69.6	15.6	0.3
Services	422.8	116.4	3.2
Government	2.7	14.2	0.1
<b>Total</b>	<b>641.0</b>	<b>186.8</b>	<b>4.3</b>
Direct	<b>299.4</b>	<b>74.1</b>	<b>2.0</b>
Indirect	341.6	112.7	2.4
Multiplier	2.1	2.5	2.2

Note: Durable and Nondurable represent a two-fold division of manufacturing; TCU is Trade, Communications and Utilities; FIRE is Finance, Insurance and Real Estate.

**Table 3.12: Impacts of for the logistics operations by CREIM (2019)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	3.1	1.3	0.0
Construction	30.4	17.2	0.3
Nondurables	55.6	9.4	0.1
Durables	29.3	7.4	0.1
TCU	111.8	20.5	0.2
Trade	64.8	26.9	0.8
FIRE	142.2	32.1	0.5
Services	859.2	239.6	6.4
Government	5.4	28.9	0.2
<b>Total</b>	<b>1,301.8</b>	<b>383.4</b>	<b>8.7</b>

Direct	<b>608.3</b>	<b>152.6</b>	<b>3.9</b>
Indirect	693.5	230.7	4.8
Multiplier	2.1	2.5	2.2



**Table 3.13: Impacts of for the logistics operations by CREIM (2020)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	4.5	2.0	0.1
Construction	45.9	26.6	0.5
Nondurables	84.5	14.2	0.1
Durables	44.5	11.2	0.1
TCU	169.9	31.4	0.4
Trade	97.8	41.1	1.2
FIRE	217.8	49.5	0.7
Services	1,309.7	369.9	9.6
Government	8.2	44.0	0.4
<b>Total</b>	<b>1,982.9</b>	<b>590.0</b>	<b>13.0</b>
Direct	<b>926.9</b>	<b>235.8</b>	<b>5.9</b>
Indirect	1,056.0	354.1	7.2
Multiplier	2.1	2.5	2.2

**Table 3.14: Impacts of for the logistics operations by CREIM (2021)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	5.8	2.7	0.1
Construction	61.4	36.4	0.7
Nondurables	113.5	19.1	0.2
Durables	60.0	15.0	0.2
TCU	229.7	42.9	0.5
Trade	131.3	55.7	1.6
FIRE	296.6	67.9	1.0
Services	1,774.8	507.9	12.8
Government	10.9	59.5	0.5
<b>Total</b>	<b>2,684.1</b>	<b>807.1</b>	<b>17.4</b>
Direct	<b>1,255.5</b>	<b>323.9</b>	<b>7.8</b>
Indirect	1,428.6	483.2	9.6
Multiplier	2.1	2.5	2.2

**Table 3.15: Impacts of for the logistics operations by CREIM (2022)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	7.1	3.4	0.1
Construction	76.7	46.7	0.8
Nondurables	143.6	24.2	0.2
Durables	75.9	18.9	0.2
TCU	291.8	54.9	0.6
Trade	165.5	70.8	2.0
FIRE	379.1	87.3	1.2
Services	2,255.4	653.9	16.0
Government	13.7	75.6	0.6
<b>Total</b>	<b>3,408.7</b>	<b>1,035.7</b>	<b>21.7</b>
Direct	<b>1,594.2</b>	<b>417.0</b>	<b>9.8</b>
Indirect	1,814.5	618.7	12.0
Multiplier	2.1	2.5	2.2

**Table 3.16: Impacts of for the logistics operations by CREIM (2023)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	8.4	4.1	0.1
Construction	91.7	57.3	1.0
Nondurables	175.0	29.5	0.2
Durables	92.0	22.8	0.2
TCU	356.3	67.6	0.7
Trade	200.3	86.5	2.4
FIRE	465.7	107.9	1.5
Services	2,751.9	808.5	19.2
Government	16.6	92.1	0.7
<b>Total</b>	<b>4,157.8</b>	<b>1,276.3</b>	<b>26.1</b>
Direct	<b>1,943.3</b>	<b>515.4</b>	<b>11.7</b>
Indirect	2,214.5	760.9	14.4
Multiplier	2.1	2.5	2.2

**Table 3.17: Impacts of for the logistics operations by CREIM (2024)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	9.7	4.8	0.1
Construction	106.4	68.3	1.2
Nondurables	207.3	35.0	0.3
Durables	108.5	26.7	0.3
TCU	423.3	81.1	0.8
Trade	235.7	102.8	2.7
FIRE	556.3	129.8	1.7
Services	3,264.8	972.0	22.5
Government	19.5	109.3	0.8
<b>Total</b>	<b>4,931.6</b>	<b>1,529.7</b>	<b>30.5</b>
Direct	<b>2,303.0</b>	<b>619.4</b>	<b>13.7</b>
Indirect	2,628.6	910.4	16.8
Multiplier	2.1	2.5	2.2

**Table 3.18: Impacts of for the logistics operations by CREIM (2025)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	11.2	5.6	0.2
Construction	121.0	79.8	1.3
Nondurables	240.7	40.7	0.3
Durables	125.4	30.7	0.3
TCU	493.0	95.3	1.0
Trade	271.9	119.7	3.1
FIRE	651.2	152.6	2.0
Services	3,794.4	1,144.9	25.8
Government	22.4	127.0	1.0
<b>Total</b>	<b>5,731.3</b>	<b>1,796.3</b>	<b>34.9</b>
Direct	<b>2,673.4</b>	<b>729.1</b>	<b>15.6</b>
Indirect	3,057.9	1,067.2	19.3
Multiplier	2.1	2.5	2.2

**Table 3.19: Impacts of for the logistics operations by CREIM (2026)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	12.6	6.4	0.2
Construction	135.2	91.6	1.5
Nondurables	275.1	46.6	0.4
Durables	142.6	34.7	0.3
TCU	565.7	110.3	1.1
Trade	308.8	137.1	3.5
FIRE	750.6	176.8	2.2
Services	4,341.2	1,327.7	29.1
Government	25.4	145.3	1.1
<b>Total</b>	<b>6,557.3</b>	<b>2,076.6</b>	<b>39.3</b>
Direct	<b>3,054.6</b>	<b>844.8</b>	<b>17.6</b>
Indirect	3,502.7	1,231.7	21.7
Multiplier	2.1	2.5	2.2

**Table 3.20: Impacts of for the logistics operations by CREIM (2027)**

	Output (\$m)	Income (\$m)	Employment ('000)
Resources	13.9	7.2	0.2
Construction	149.2	103.8	1.6
Nondurables	310.4	52.8	0.4
Durables	160.2	38.7	0.4
TCU	641.6	126.3	1.2
Trade	346.2	155.3	3.8
FIRE	854.7	202.8	2.5
Services	4,905.7	1,521.1	32.4
Government	28.5	164.3	1.2
<b>Total</b>	<b>7,410.4</b>	<b>2,372.4</b>	<b>43.7</b>
Direct	<b>3,446.8</b>	<b>966.8</b>	<b>19.5</b>
Indirect	3,963.5	1,405.5	24.2
Multiplier	2.1	2.5	2.2

#### 4. Economic Impact: Will County

The data presented in the tables in this section were derived from a model of Will County estimated using IMPLAN. The direct impacts for employment, purchases and wage and salary income were provide by the company. IMPLAN's model is derived from 2015 data and adjusted for inflation to represent 2017 prices. The model is not dynamic in the sense that the structure of the economy is assumed to be fixed for the forecast period. Further, the estimated direct effects assume that, for example, all employees live in Will County and spend their disposable income in the county. Hence, the estimates in this section can be considered as an upper bound estimate of the total impacts.

The entries in the row marked "Direct" were entered into the model for 2018. The model was then run to generate the total impact of the spending and re-spending in the economy to generate the entries marked "Total" in the table. The difference between the "Total" and "Direct" provides the estimate of the "Indirect" impacts. These comprise the impacts associated with the supply chain expenditures (for example, steel I-beams, concrete, r-bar and inputs necessary to make these components) and the impacts of wages and salaries by on-site employees and those in the supply chain whose partial wages and salaries could be attributed to purchases by the project. For example, in 2018, direct expenditures were estimated to be \$169.5 million; the total impact of these expenditures was \$247.3 million, yielding an indirect impact of \$77.9 million. If the "Total" is divided by the "Direct," a value of 1.46 is obtained. This is the multiplier or ripple effect; in essence, for each \$1 spent directly a total of \$1.46 would be generated - \$1 of which is the direct expenditure and \$0.46 is the indirect impact. For employment and income, the multipliers are 1.43 and 1.3 – each direct job (direct dollar of income) will generate 1.43 jobs (\$1.3 of income) of which 1 is the direct job (\$1 of direct income) and 0.43 the indirect jobs (\$0.3 indirect income). The multipliers are much smaller than those found for Illinois and the Chicago region as a whole; the reasons are two-fold. First, Will County is a much smaller economy and does not have the range of goods and services available in either the metropolitan region or state as a whole. Secondly, the IMPLAN model does not include the feedback effects from state and local government spending. Comparable interpretations apply to the data in table 4.2.

**Table 4.1 Economic Impacts: Construction**

2018				2023			
	Employment	Income	Output		Employment	Income	Output
Direct	1,600	\$104,000,000	\$169,450,000	Direct	1,240	\$88,073,796	\$153,924,178
Indirect	688	\$31,200,000	\$77,947,000	Indirect	533	\$26,422,139	\$66,626,383
Total	2,288	\$135,200,000	\$247,397,000	Total	1,773	\$114,495,935	\$211,466,347
Multiplier	1.43	1.3	1.46	Multiplier	1.43	1.3	1.46
2019				2024			
	Employment	Income	Output		Employment	Income	Output
Direct	1,240	\$83,018,000	\$136,260,000	Direct	1,240	\$88,073,796	\$158,664,903
Indirect	533	\$24,905,400	\$62,679,600	Indirect	533	\$26,422,139	\$66,626,383
Total	1,773	\$107,923,400	\$198,939,600	Total	1,773	\$114,495,935	\$211,466,347
Multiplier	1.43	1.3	1.46	Multiplier	1.43	1.3	1.46
2020				2025			
	Employment	Income	Output		Employment	Income	Output
Direct	1,240	\$85,508,540	\$140,488,800	Direct	1,240	\$88,073,796	\$163,543,350
Indirect	533	\$25,652,562	\$64,624,848	Indirect	533	\$26,422,139	\$66,626,383
Total	1,773	\$111,161,102	\$205,113,648	Total	1,773	\$114,495,935	\$211,466,347
Multiplier	1.43	1.3	1.46	Multiplier	1.43	1.3	1.46
2021				2026			
	Employment	Income	Output		Employment	Income	Output
Direct	1,240	\$88,073,796	\$144,839,964	Direct	1,240	\$88,073,796	\$168,563,651
Indirect	533	\$26,422,139	\$66,626,383	Indirect	533	\$26,422,139	\$66,626,383
Total	1,773	\$114,495,935	\$211,466,347	Total	1,773	\$114,495,935	\$211,466,347
Multiplier	1.43	1.3	1.46	Multiplier	1.43	1.3	1.46
2022				No activity in 2027			
	Employment	Income	Output				
Direct	1,240	\$88,073,796	\$149,317,163				
Indirect	533	\$26,422,139	\$68,685,895				
Total	1,773	\$114,495,935	\$218,003,058				
Multiplier	1.43	1.3	1.46				

**Table 4.2 Economic Impacts: Operations**

2018				2023			
	Employment	Income	Output		Employment	Income	Output
Direct	1,950	\$74,100,000	\$208,141,927	Direct	11,700	\$515,413,253	\$1,248,851,560
Indirect	995	\$32,604,000	\$137,373,672	Indirect	5,967	\$226,781,832	\$824,242,029
Total	2,945	\$106,704,000	\$345,515,598	Total	17,667	\$742,195,085	\$2,073,093,589
Multiplier	1.51	1.44	1.66	Multiplier	1.51	1.44	1.66
2019				2024			
	Employment	Income	Output		Employment	Income	Output
Direct	3,900	\$152,646,000	\$416,283,853	Direct	13,650	\$619,354,926	\$1,456,993,486
Indirect	1,989	\$67,164,240	\$274,747,343	Indirect	6,962	\$272,516,168	\$961,615,701
Total	5,889	\$219,810,240	\$691,031,196	Total	20,612	\$891,871,094	\$2,418,609,187
Multiplier	1.51	1.44	1.66	Multiplier	1.51	1.44	1.66
2020				2025			
	Employment	Income	Output		Employment	Income	Output
Direct	5,850	\$235,838,070	\$624,425,780	Direct	15,600	\$729,069,227	\$1,665,135,413
Indirect	2,984	\$103,768,751	\$412,121,015	Indirect	7,956	\$320,790,460	\$1,098,989,373
Total	8,834	\$339,606,821	\$1,036,546,795	Total	23,556	\$1,049,859,687	\$2,764,124,786
Multiplier	1.51	1.44	1.66	Multiplier	1.51	1.44	1.66
2021				2026			
	Employment	Income	Output		Employment	Income	Output
Direct	7,800	\$323,884,283	\$832,567,707	Direct	17,550	\$844,808,967	\$1,873,277,340
Indirect	3,978	\$142,509,084	\$549,494,686	Indirect	8,951	\$371,715,946	\$1,236,363,044
Total	11,778	\$466,393,367	\$1,382,062,393	Total	26,501	\$1,216,524,913	\$3,109,640,384
Multiplier	1.51	1.44	1.66	Multiplier	1.51	1.44	1.66
2022				2027			
	Employment	Income	Output		Employment	Income	Output
Direct	9,750	\$417,001,014	\$1,040,709,633	Direct	19,500	\$966,836,929	\$2,081,419,266
Indirect	4,973	\$183,480,446	\$686,868,358	Indirect	9,945	\$425,408,249	\$1,373,736,716
Total	14,723	\$600,481,460	\$1,727,577,991	Total	29,445	\$1,392,245,178	\$3,455,155,982
Multiplier	1.51	1.44	1.66	Multiplier	1.51	1.44	1.66





## 5. Tax Impacts

The final table is derived from the IMPLAN model to yield a sense of the magnitude of state and local tax dollars that are generated by the project on a year-to-year basis. The tax impacts have been aggregated into four main categories – employee compensation taxes (income taxes and other withholdings); taxes on production, indirect taxes on households and corporate income taxes. Since employment levels are constant for much of the construction period, employee and household taxes are constant.

**Table 5.1 Tax Impacts**  
(Constant 2017 dollars)

	Construction				Operations			
	Employee Compensation	Tax on Production	Households	Corporations	Employee Compensation	Tax on Production	Households	Corporations
2018	\$297,723	\$8,396,488	\$3,623,652	\$852,040	\$306,782	\$9,282,877	\$3,604,927	\$899,136
2019	\$297,723	\$6,751,876	\$3,623,652	\$685,152	\$613,564	\$18,565,754	\$7,209,854	\$1,798,272
2020	\$297,723	\$6,961,419	\$3,623,652	\$706,415	\$920,346	\$27,848,631	\$10,814,781	\$2,697,408
2021	\$297,723	\$7,177,026	\$3,623,652	\$728,294	\$1,227,128	\$37,131,508	\$14,419,708	\$3,596,544
2022	\$297,723	\$7,398,877	\$3,623,652	\$750,807	\$1,533,910	\$46,414,385	\$18,024,635	\$4,495,680
2023	\$297,723	\$7,627,161	\$3,623,652	\$773,972	\$1,840,692	\$55,697,262	\$21,629,562	\$5,394,816
2024	\$297,723	\$7,862,071	\$3,623,652	\$797,810	\$2,147,474	\$64,980,139	\$25,234,489	\$6,293,952
2025	\$297,723	\$8,103,805	\$3,623,652	\$822,340	\$2,454,256	\$74,263,016	\$28,839,416	\$7,193,088
2026	\$297,723	\$8,352,568	\$3,623,652	\$847,583	\$2,761,038	\$83,545,893	\$32,444,343	\$8,092,224
2027					\$3,067,820	\$92,828,770	\$36,049,270	\$8,991,360

Note: no significant construction activity planned for 2027

## 6. Summary

## Marian Gibson

---

**From:** Marian Gibson  
**Sent:** Monday, July 10, 2017 1:49 PM  
**To:** 'David Silverman'  
**Subject:** FW: Trip Gen Memo Draft  
**Attachments:** image001.jpg; Untitled attachment 00312.htm; image002.jpg; Untitled attachment 00315.htm; EIP Trip Generation Study DRAFT 2017-06-18 (003).pdf; Untitled attachment 00318.htm

Marian T. Gibson, ICMA-CM  
Village Administrator  
Village of Elwood  
401 East Mississippi Ave.  
Elwood, IL 60421  
marian.gibson@villageofelwood.com  
815 424-1094 (Direct)  
815 509-2282 (Cell)  
815 423-6861 (Fax)

---

**From:** probinson@northpointkc.com [mailto:probinson@northpointkc.com]  
**Sent:** Tuesday, June 20, 2017 3:26 PM  
**To:** marian.gibson@villageofelwood.com  
**Subject:** Fwd: Trip Gen Memo Draft

Draft traffic generation memo is attached.

Sent from my iPad

Begin forwarded message:

**From:** Tom George <tgeorge@northpointkc.com>  
**Date:** June 19, 2017 at 10:15:08 AM CDT  
**To:** Patrick Robinson <probinson@northpointkc.com>, Ian McDonald <imcdonald@northpointkc.com>  
**Subject:** FW: Trip Gen Memo Draft

Patrick, Ian,

Draft traffic attached. I reviewed numbers with John Beasley to get a sanity check and based on his experience these numbers are still conservative, although well closer to reality than ITE would have us.

Tom George



## MEMORANDUM

To: Tom George  
NorthPoint Development

From: Tim Sjogren, P.E., PTOE  
Emma Albers, P.E.  
Kimley-Horn and Associates, Inc.

Date: June 18, 2017

Subject: Elwood International Port Trip Generation Study

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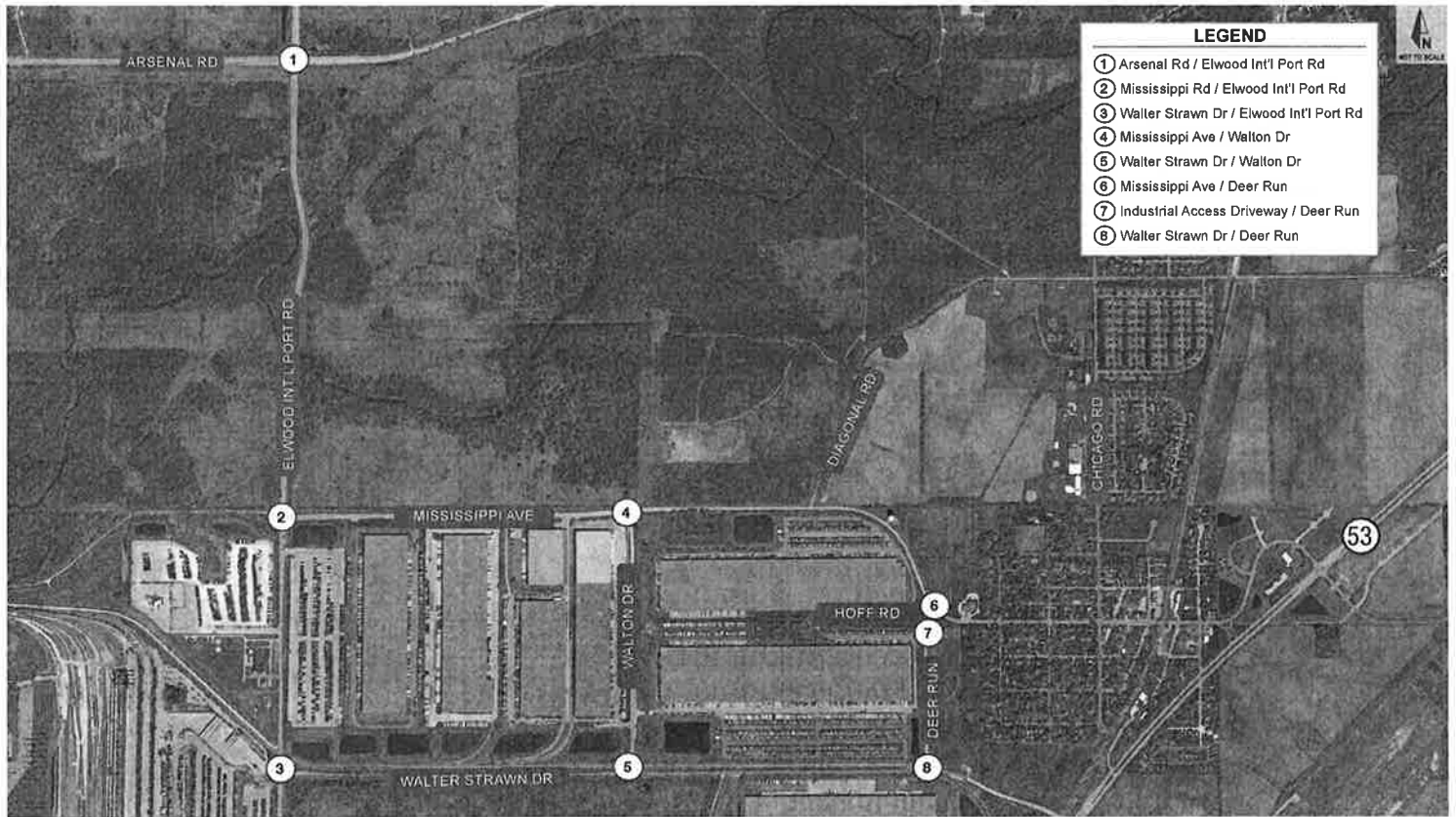
At the request of NorthPoint Development, Kimley-Horn has performed a trip generation analysis in the vicinity of the Elwood International Port in Elwood, Illinois. The purpose of this evaluation is to determine site-generated traffic characteristics for the intermodal facility and nearby industrial buildings in order to derive trip generation rates for use in a future traffic impact analysis for the proposed Compass Business Park.

### Traffic Data Collection

To provide a basis for the trip generation study, turning movement count data was collected at the following intersections:

1. Arsenal Road at Elwood International Port (EIP) Road
2. Mississippi Road at Elwood International Port Road
3. Walter Strawn Drive at Elwood International Port Road
4. Mississippi Avenue at Walton Drive
5. Walter Strawn Drive at Walton Drive
6. Mississippi Avenue at Deer Run
7. Industrial Access Driveway at Deer Run
8. Walter Strawn Drive at Deer Run

A map of the study intersections is shown in **Exhibit 1**. The traffic counts were performed for a 72-hour period beginning at 12:00AM on Tuesday, June 6, 2017, and ending at 12:00AM on Friday, June 9, 2017. Vehicle classification was included in all counts to separate car, small/medium truck, and heavy truck volumes. A complete summary of the resulting count data is contained on a CD submitted along with this memorandum.



### Trip Generation Summary

In order to understand the number of trips generated by the intermodal and industrial facilities, the number of vehicles entering and exiting the facilities was recorded continuously and tabulated in 15-minute intervals. With consideration for the respective access locations for the intermodal and industrial facilities, vehicular movements that are presumed to correspond to inbound and outbound traffic for each facility were identified. For example, inbound trips for the intermodal facility can be attributed to the westbound left turn, westbound through, southbound through, and southbound right turn at the intersection of EIP Road/Walter Strawn Drive. A map of the movements used to determine inbound and outbound trips generated by the industrial and intermodal facilities is shown in **Exhibit 2**. This exhibit shows three different categories considered in this trip generation analysis:

1. Trips generated by the intermodal facility
2. Trips generated by the industrial facility
3. Trips shared between the intermodal and industrial facilities (heavy trucks only)

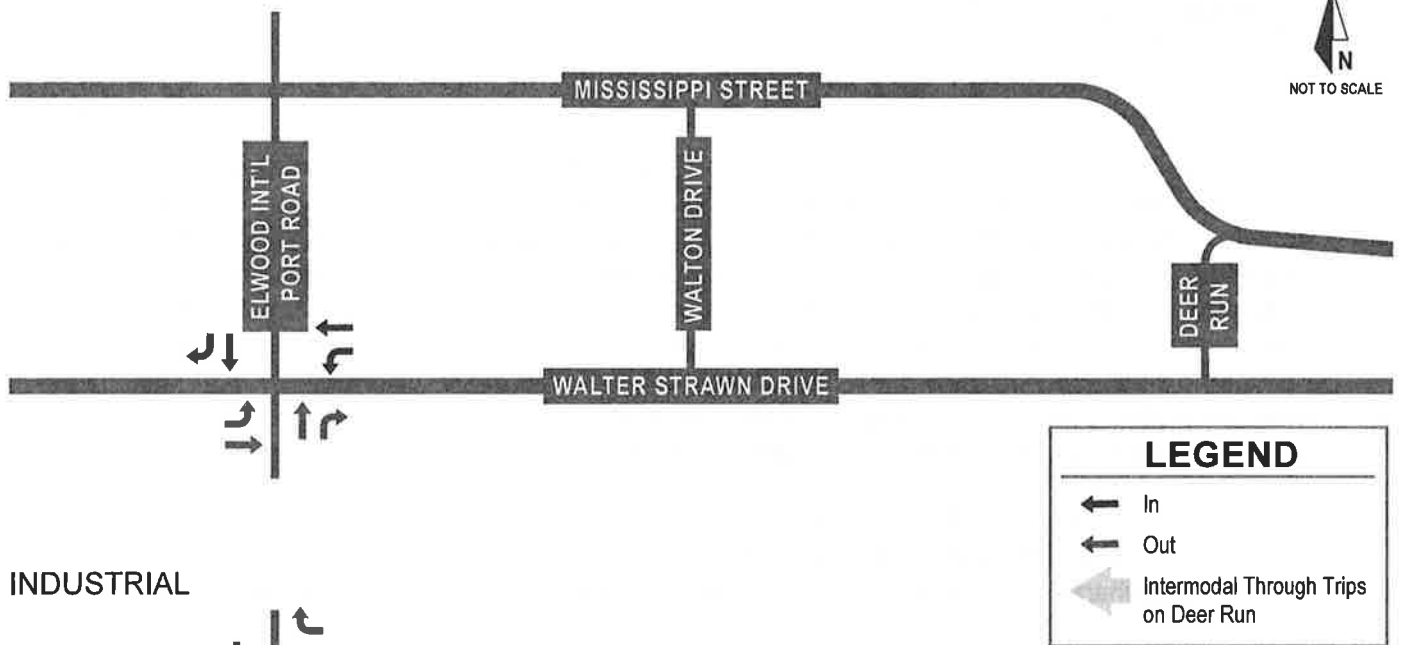
It should be noted that shared trips between the two facilities overlap the independent tabulation of intermodal and industrial trips. As such, the shared truck trips comprise a portion of the total industrial trip generation and will be quantified accordingly later in this memorandum.

The anticipated movement of intermodal traffic through the industrial area is also illustrated on Exhibit 2. Based on a review of traffic count data, it appears that a significant quantity of intermodal-related passenger vehicles use Mississippi Road to travel to and from the east. An effort was made to quantify these intermodal through trips on Deer Run. Given the assumption that intermodal through trips on Deer Run are traveling via the west leg at Walter Strawn Drive/Deer Run and the east leg at Mississippi Avenue/Deer Run, north- and southbound through traffic on Deer Run at the Industrial Access Driveway was reduced based on the proportional turning movements at these intersections. The arrow representing these through trips on Exhibit 2 mirror this routing pattern to further illustrate the presumed methodology. To avoid double-counting these through trips in the industrial trip generation analysis, the volumes derived from the Deer Run counts were subtracted from the inbound and outbound industrial trip generation totals.

In addition to these site-specific movements, consideration was given to the potential for traffic that is passing through the study area today. The Village of Elwood is located east of the study area, and one of the most direct connections between the Village and I-55 would be to travel along Mississippi Road and through EIP Road/Arsenal Road intersection. In order to provide a conservative analysis regarding site-generated traffic volumes, however, no reduction was incorporated to account for this through traffic to/from the Village of Elwood and other locations to the east.

Using the methodology outlined herein, inbound and outbound trip generation characteristics were identified on a daily and peak hour basis for each of the three categories listed above. Based on the operational characteristics of the intermodal and industrial facilities, heavy trucks were tabulated separately from the remaining vehicle types. The resulting trip generation estimates were averaged across the three days of data collection and are presented in **Table 1** for each facility.

## INTERMODAL FACILITY



## INDUSTRIAL



## INDUSTRIAL SHARED WITH INTERMODAL





Table 1. Average Weekday Trip Generation by Facility

Land Use	Daily <sup>1</sup>			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
<i>Intermodal Trips</i>									
Cars	2,044	2,180	4,224	125	119	244	93	157	250
Trucks	3,171	3,070	6,241	96	121	217	202	200	402
<b>Total</b>	<b>5,215</b>	<b>5,250</b>	<b>10,465</b>	<b>221</b>	<b>240</b>	<b>461</b>	<b>295</b>	<b>357</b>	<b>652</b>
<i>Industrial Trips</i>									
Cars	2,906	2,910	5,816	277	111	388	189	428	617
Trucks	857	842	1,699	39	33	72	44	56	100
<b>Total</b>	<b>3,763</b>	<b>3,752</b>	<b>7,515</b>	<b>316</b>	<b>144</b>	<b>460</b>	<b>233</b>	<b>484</b>	<b>717</b>
<i>Shared Industrial &amp; Intermodal Truck Trips</i>									
Trucks	154	141	295	9	7	16	8	13	21

<sup>1</sup>Video data collection at the intersection of EIP Road and Mississippi Road ceased at 9:00PM on Thursday, June 8. To avoid skewed daily trip generation data based on these omitted hours, daily trip generation numbers are based on Tuesday and Wednesday data collection only.

The above data reveals good correlation between inbound and outbound daily trips, with the total intermodal trip generation estimates showing less than one percent difference between inbound and outbound volumes. Inbound and outbound industrial trips are within three percent of each other, and the shared truck counts show a difference of less than 10 percent between inbound and outbound trips.

### 3. Trip Generation Rates

Based on the trip estimates detailed in Table 1, trip generation rates were calculated per 1,000 square feet of industrial space and per 1,000 lifts at the intermodal facility. Using on aerial measurements, the industrial park contains approximately 8,300,000 square feet in total size. The total number of lifts currently operating at the intermodal facility is approximately 1,000,000, based on information provided by NorthPoint Development. Using these variables, trip generation rates were calculated for the two facility types, as presented in Table 2.

**Table 2. Trip Generation Rates by Land Use**

Land Use	Unit	Weekday		
		Daily	AM Peak	PM Peak
Intermodal				
Cars	Per 1,000 lifts	4.224 50% in/50% out	0.244 51% in/49% out	0.250 37% in/63% out
Trucks	Per 1,000 lifts	6.241 50% in/50% out	0.217 44% in/56% out	0.402 50% in/50% out
Total	Per 1,000 lifts	10.465 50% in/50% out	0.461 48% in/52% out	0.652 45% in/55% out
Industrial				
Cars	Per 1,000 sq. ft.	0.701 50% in/50% out	0.047 71% in/29% out	0.074 31% in/69% out
Trucks	Per 1,000 sq. ft.	0.205 50% in/50% out	0.009 54% in/46% out	0.012 44% in/56% out
Total	Per 1,000 sq. ft.	0.905 50% in/50% out	0.055 69% in/31% out	0.086 32% in/68% out
Shared Industrial & Intermodal Truck Trips¹				
Trucks	Per 1,000 sq. ft.	0.036 50% in/50% out	0.0019 56% in/44% out	0.0025 38% in/62% out
% of Total Industrial Truck Trip Generation		17%	22%	21%

<sup>1</sup>Shared truck trips overlap the total trip generation rates developed for the intermodal and industrial components. Because the rates shown above are rounded to a selected number of decimal places, some rounding error exists in the calculation of percent shared truck trips for the industrial park.

For context, the industrial trip generation rates were compared to data in the Institute of Transportation Engineers (ITE) manual Trip Generation, Ninth Edition, for High Cube Warehouse/Distribution Center (Land Use Code 152). The ITE rates are presented in **Table 3** for total site traffic and for trucks. Note that trip generation data for intermodal facilities is not provided in Trip Generation.

**Table 3. ITE Trip Generation Rates – Land Use Code 152**

Vehicle Type	Unit	Weekday		
		Daily	AM Peak	PM Peak
Total	Per 1,000 sq. ft.	1.68 50% in/50% out	0.11 69% in/31% out	0.12 31% in/69% out
Trucks	Per 1,000 sq. ft.	0.64	0.03	0.04

As shown above, the trip generation rates resulting from the empirical analysis detailed herein yield lower trip generation rates per 1,000 square feet of industrial space than is presented in Trip Generation. Given this decrease, it is recommended that a future traffic impact study for the proposed Compass Business Park be based on these average trip generation rates developed from local data.

Please do not hesitate to contact this office with further questions on this matter.

## Marian Gibson

---

**From:** Marian Gibson  
**Sent:** Monday, July 10, 2017 1:48 PM  
**To:** 'David Silverman'  
**Subject:** FW: Update Trip Gen Memo updated draft  
**Attachments:** Untitled attachment 00038.htm; EIP Trip Generation Study - PreFinal - 6.23.17.pdf

Marian T. Gibson, ICMA-CM  
Village Administrator  
Village of Elwood  
401 East Mississippi Ave.  
Elwood, IL 60421  
marian.gibson@villageofelwood.com  
815 424-1094 (Direct)  
815 509-2282 (Cell)  
815 423-6861 (Fax)

---

**From:** Patrick Robinson [mailto:probinson@northpointkc.com]  
**Sent:** Friday, June 23, 2017 6:47 PM  
**To:** Marian Gibson <marian.gibson@villageofelwood.com>  
**Subject:** Fwd: Update Trip Gen Memo updated draft

FYI -traffic counts were reduced based on some double counting.

Sent from my iPhone

Begin forwarded message:

**From:** Tom George <tgeorge@northpointkc.com>  
**To:** Patrick Robinson <probinson@northpointkc.com>, Ian McDonald <imcdonald@northpointkc.com>  
**Subject:** FW: Update Trip Gen Memo

Patrick, Ian,

Tim's explanation of the revisions is below. Truck and car counts are now even lower.

Tom George



d: 816.895.8104 c: 630.258.5299 e: [tgeorge@northpointkc.com](mailto:tgeorge@northpointkc.com)

4825 NW 41<sup>st</sup> Street, Suite 500  
Riverside, MO 64150  
[www.beyondthecontract.com](http://www.beyondthecontract.com)

---

**From:** Sjogren, Tim [mailto:[Tim.Sjogren@kimley-horn.com](mailto:Tim.Sjogren@kimley-horn.com)]  
**Sent:** Friday, June 23, 2017 4:13 PM  
**To:** Tom George <[tgeorge@northpointkc.com](mailto:tgeorge@northpointkc.com)>  
**Cc:** Fancier, Rory <[Rory.Fancier@kimley-horn.com](mailto:Rory.Fancier@kimley-horn.com)>  
**Subject:** Update Trip Gen Memo

Tom-

Attached is the revised trip generation memo. I'll call you to discuss the changes, but it largely is driven by how we designated trucks without trailers. Previously they were grouped with the cars and medium trucks and we've now put them under trucks as they would presumably have to stay on the new bridge as well. We also discovered an area where some vehicles were being double counted. The result of both is even lower trip generation for the industrial park.

Will call shortly.

Thanks!  
Tim

**Tim Sjogren, P.E., PTOE**  
**Kimley-Horn** | 1001 Warrenville Road, Suite 350, Lisle, IL 60532  
Direct: 331 481 7332 | Mobile: 630 370 0086  
Connect with us: [Twitter](#) | [LinkedIn](#) | [Facebook](#) | [Instagram](#)

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## MEMORANDUM

To: Tom George  
NorthPoint Development

From: Tim Sjogren, P.E., PTOE  
Emma Albers, P.E.  
Kimley-Horn and Associates, Inc.

Date: June 23, 2017

Subject: Elwood International Port Trip Generation Study

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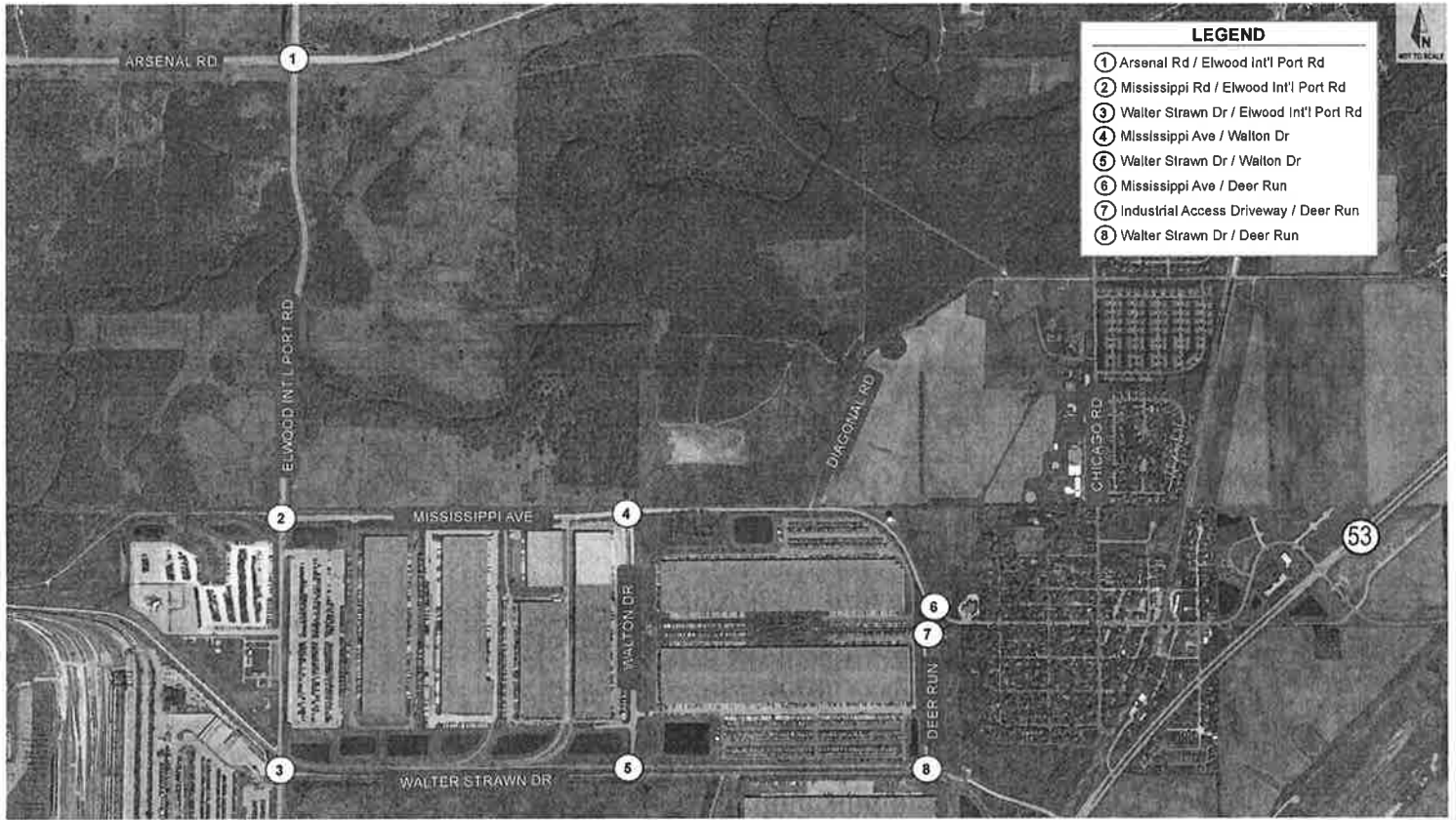
At the request of NorthPoint Development, Kimley-Horn has performed a trip generation analysis in the vicinity of the Elwood International Port in Elwood, Illinois. The purpose of this evaluation is to determine site-generated traffic characteristics for the intermodal facility and nearby industrial buildings in order to derive trip generation rates for use in a future traffic impact analysis for the proposed Compass Business Park.

### Traffic Data Collection

To provide a basis for the trip generation study, turning movement count data was collected at the following intersections:

1. Arsenal Road at Elwood International Port (EIP) Road
2. Mississippi Road at Elwood International Port Road
3. Walter Strawn Drive at Elwood International Port Road
4. Mississippi Avenue at Walton Drive
5. Walter Strawn Drive at Walton Drive
6. Mississippi Avenue at Deer Run
7. Industrial Access Driveway at Deer Run
8. Walter Strawn Drive at Deer Run

A map of the study intersections is shown in **Exhibit 1**. The traffic counts were performed for a 72-hour period beginning at 12:00AM on Tuesday, June 6, 2017, and ending at 12:00AM on Friday, June 9, 2017. Vehicle classification was included in all counts to separate car, small/medium truck, and heavy truck volumes. A complete summary of the resulting count data is contained on a CD submitted along with this memorandum.



### Trip Generation Summary

In order to understand the number of trips generated by the intermodal and industrial facilities, the number of vehicles entering and exiting the facilities was recorded continuously and tabulated in 15-minute intervals. With consideration for the respective access locations for the intermodal and industrial facilities, vehicular movements that are presumed to correspond to inbound and outbound traffic for each facility were identified. For example, inbound trips for the intermodal facility can be attributed to the westbound left turn, westbound through, southbound through, and southbound right turn at the intersection of EIP Road/Walter Strawn Drive. A map of the movements used to determine inbound and outbound trips generated by the industrial and intermodal facilities is shown in **Exhibit 2**. This exhibit shows three different categories considered in this trip generation analysis:

1. Trips generated by the intermodal facility
2. Trips generated by the industrial facility
3. Trips shared between the intermodal and industrial facilities (heavy trucks only)

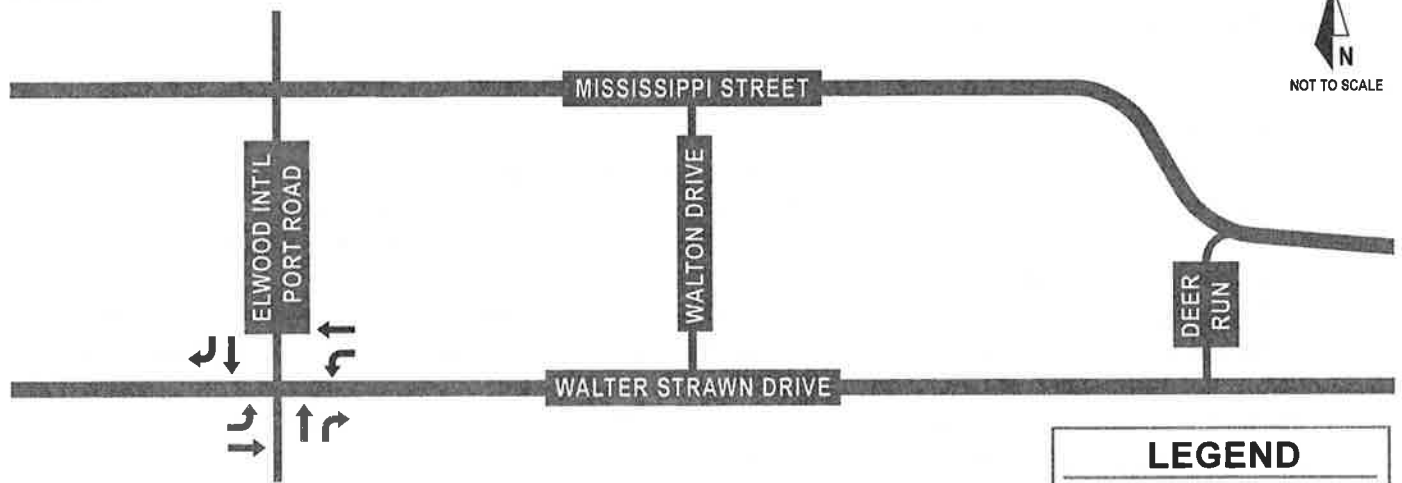
It should be noted that the total number of industrial trips correspond to the sum of the "Industrial" and "Industrial Shared with Intermodal" categories on Exhibit 2. Furthermore, an existing transload building on the east side of EIP Road south of Walter Strawn Road was included in intermodal trip generation for the purposes of this evaluation due to its location within the intermodal area.

The anticipated movement of intermodal traffic through the industrial area is also illustrated on Exhibit 2. Based on a review of traffic count data, it appears that a significant quantity of intermodal-related passenger vehicles use Mississippi Road to travel to and from the east. An effort was made to quantify these intermodal through trips on Deer Run. Given the assumption that intermodal through trips on Deer Run are traveling via the west leg at Walter Strawn Drive/Deer Run and the east leg at Mississippi Avenue/Deer Run, north- and southbound through traffic on Deer Run at the Industrial Access Driveway was reduced based on the proportional turning movements at these intersections. The arrow representing these through trips on Exhibit 2 mirror this routing pattern to further illustrate the presumed methodology. To avoid double-counting these through trips in the industrial trip generation analysis, the volumes derived from the Deer Run counts were subtracted from the inbound and outbound industrial trip generation totals.

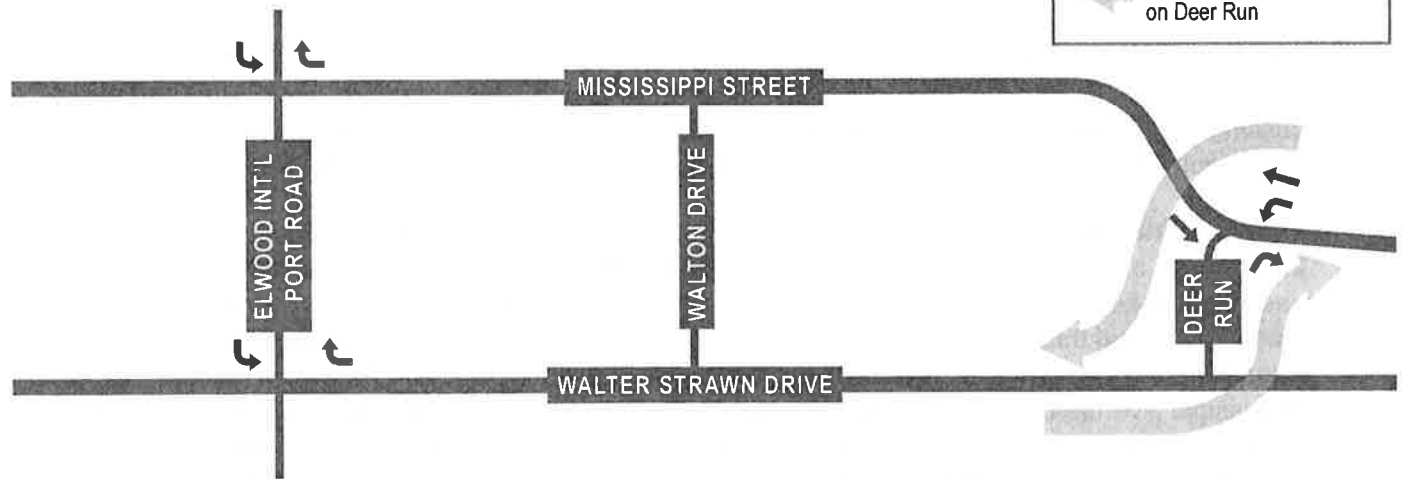
In addition to these site-specific movements, consideration was given to the potential for traffic that is passing through the study area today. The Village of Elwood is located east of the study area, and one of the most direct connections between the Village and I-55 would be to travel along Mississippi Road and through EIP Road/Arsenal Road intersection. In order to provide a conservative analysis regarding site-generated traffic volumes, however, no reduction was incorporated to account for this through traffic to/from the Village of Elwood and other locations to the east.

Using the methodology outlined herein, inbound and outbound trip generation characteristics were identified on a daily and peak hour basis for each of the three categories listed above. Based on the operational characteristics of the developments, passenger car trips were tabulated separately from the remaining vehicle types (medium and heavy trucks) for the purposes of distinguishing trip generation rates for each type. The resulting trip generation estimates were averaged across the three days of data collection and are presented in **Table 1** for each facility. Note that medium trucks,

# INTERMODAL FACILITY



# INDUSTRIAL



# INDUSTRIAL SHARED WITH INTERMODAL





a classification which includes both box trucks (UPS, garbage, etc) and semi cabs without an attached trailer, have been combined with heavy trucks into a single category (Trucks) in this table.

**Table 1. Average Weekday Trip Generation by Facility**

Land Use	Daily			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
<i>Intermodal Trips</i>									
Cars	977	981	1,958	57	87	144	36	66	102
Trucks <sup>1</sup>	4,178	4,197	8,375	164	154	318	259	292	551
<b>Total</b>	<b>5,155</b>	<b>5,178</b>	<b>10,333</b>	<b>221</b>	<b>241</b>	<b>462</b>	<b>295</b>	<b>358</b>	<b>653</b>
<i>Industrial Trips</i>									
Cars	2,214	2,208	4,422	270	105	375	200	413	613
Trucks <sup>2</sup>	829	846	1,675	36	32	68	47	56	103
<b>Total</b>	<b>3,043</b>	<b>3,054</b>	<b>6,097</b>	<b>306</b>	<b>137</b>	<b>443</b>	<b>247</b>	<b>469</b>	<b>716</b>
<i>Shared Industrial &amp; Intermodal Truck Trips</i>									
Trucks	219	212	431	10	12	22	13	15	28

<sup>1</sup>Medium trucks comprise roughly 27% of daily trips, 32% of AM peak hour trips, and 27% of PM peak hour trips at the intermodal facility.

<sup>2</sup>Medium trucks comprise roughly 16% of daily trips, 18% of AM peak hour trips, and 24% of PM peak hour trips from the industrial buildings.

The above data reveals good correlation between inbound and outbound daily trips, with the total intermodal and industrial trip generation estimates showing less than one percent difference between inbound and outbound volumes. Shared truck counts show a difference of less than four percent between inbound and outbound trips.

### 3. Trip Generation Rates

Based on the trip estimates detailed in Table 1, trip generation rates were calculated per 1,000 square feet of industrial space and per 1,000 lifts at the intermodal facility. Using on aerial measurements, the industrial park contains approximately 8,300,000 square feet in total size. The total number of lifts currently operating at the intermodal facility is approximately 1,000,000, based on information provided by NorthPoint Development. Using these variables, trip generation rates were calculated for the two facility types, as presented in Table 2.

Table 2. Trip Generation Rates by Land Use

Land Use	Unit	Weekday		
		Daily	AM Peak	PM Peak
Intermodal				
Cars	Per 1,000 lifts	1.958 50% in/50% out	0.144 40% in/60% out	0.102 35% in/65% out
Trucks	Per 1,000 lifts	8.375 50% in/50% out	0.318 52% in/48% out	0.551 47% in/53% out
Total	Per 1,000 lifts	10.333 50% in/50% out	0.462 48% in/52% out	0.653 45% in/55% out
Industrial				
Cars	Per 1,000 sq. ft.	0.533 50% in/50% out	0.045 72% in/28% out	0.074 33% in/67% out
Trucks	Per 1,000 sq. ft.	0.202 50% in/50% out	0.008 53% in/47% out	0.012 46% in/54% out
Total	Per 1,000 sq. ft.	0.735 50% in/50% out	0.053 69% in/31% out	0.086 34% in/66% out
Shared Industrial & Intermodal Truck Trips				
Trucks	Per 1,000 sq. ft.	0.052 50% in/50% out	0.0027 45% in/55% out	0.0034 46% in/54% out

For context, the industrial trip generation rates were compared to data in the Institute of Transportation Engineers (ITE) manual Trip Generation, Ninth Edition, for High Cube Warehouse/Distribution Center (Land Use Code 152). The ITE rates are presented in Table 3 for total site traffic and for trucks. Note that trip generation data for intermodal facilities is not provided in Trip Generation.

Table 3. ITE Trip Generation Rates – Land Use Code 152

Vehicle Type	Unit	Weekday		
		Daily	AM Peak	PM Peak
Total	Per 1,000 sq. ft.	1.68 50% in/50% out	0.11 69% in/31% out	0.12 31% in/69% out
Trucks	Per 1,000 sq. ft.	0.64	0.03	0.04

As shown above, the trip generation rates resulting from the empirical analysis detailed herein yield lower trip generation rates per 1,000 square feet of industrial space than is presented in Trip Generation. Given this decrease, it is recommended that a future traffic impact study for the proposed Compass Business Park be based on these average trip generation rates developed from local data.

Please do not hesitate to contact this office with further questions on this matter.

## Marian Gibson

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**From:** Mayor Matichak  
**Sent:** Monday, July 10, 2017 5:04 PM  
**To:** Marian Gibson  
**Subject:** Fwd: Preliminary Draft Projections  
**Attachments:** Draft Executive Summary 04.19.17.pdf; Untitled attachment 00169.htm

Sent from my iPhone

Begin forwarded message:

**From:** [probinson@northpointkc.com](mailto:probinson@northpointkc.com)  
**Date:** July 7, 2017 at 5:35:01 PM CDT  
**To:** [mayor.matichak@villageofelwood.com](mailto:mayor.matichak@villageofelwood.com)  
**Subject:** Fwd: Preliminary Draft Projections

Mayor Matichak

The attached report shows the preliminary economic projections for the Compass Business Park.

Table 2 on page A-6, indicates a baseline of \$498 million of incremental revenue. There is also a conservative and optimistic scenario.

It seems that there should be adequate revenue to fund things like a community center.

I know one of the big questions is focused on benefits to the Village.

Please give me a call to discuss.

Thanks,

Patrick

Sent from my iPad



## **DRAFT EXECUTIVE SUMMARY – REVENUE FORECAST – DATED 4/18/17**

### **VILLAGE OF ELWOOD, ILLINOIS NORTH POINT DEVELOPMENT**

**April \_\_, 2017**

#### **Introduction**

NorthPoint Development (the “Developer”) has proposed to develop certain property located in the Village and it is proposed that the site would be included in a TIF District (as such term is hereinafter defined)(the “Development Site”) which development would principally consist of the construction of approximately 27,596,000 square feet of industrial/warehouse space on the Development Site (the “Industrial Development”).

The Village of Elwood, Illinois (the “Village”) would need to determine the Industrial Development Site would qualify (the “TIF Property”) as part of a “redevelopment project area” (the “TIF District”) as defined in the Tax Increment Allocation Redevelopment Act, 65 ILCS 5/11-74.4-1, as amended (the “TIF Act”) in 2017 pursuant to a redevelopment plan and project (the “TIF Plan”). The term of the TIF District would be 23 years after the date of such designation. In order to designate the Development Site, the Village will first have to determine if the site qualifies under the TIF Act and certain properties must be annexed.

Such designation will allow the Village to use the property tax increment generated thereby to pay for certain eligible redevelopment costs (the “Incremental Property Taxes”). Due to the one year lag in collections of property taxes, the Village will receive the final payment of Incremental Property Taxes in the 24<sup>th</sup> year from the date of the designation of the TIF District.

The following preliminary analyses provide a projection of the Incremental Property Taxes that would be generated by the Industrial Development based on three Incremental Property Tax collection scenarios.

This development includes different types of industrial products that vary by square footage, occupancy dates and valuation.

The following is a description of the three Incremental Property Taxes scenarios analyzed herein that assume the properties within the Industrial Development would have a varying market values for assessment purposes:

- 1) Scenario #1 - Baseline (Exhibit A) - Analysis of Incremental Property Taxes assuming that the market value for manufacturing facilities are \$32/square foot and warehouse facilities are \$30/square foot. The total project square footage is 27,596,000; and
- 2) Scenario #2 - Conservative – (Exhibit B) - Analysis of Incremental Property Taxes assuming that the market value for manufacturing facilities are \$28/square foot and warehouse facilities are \$26/square foot. The total project square footage is 24,796,000; and
- 3) Scenario #3 - Aggressive – (Exhibit C) - Analysis of Incremental Property Taxes assuming that the market value for manufacturing facilities are \$35/square foot and warehouse facilities are \$33/square foot. The total project square footage is 27,596,000.

Kane, McKenna and Associates, Inc. ("Kane, McKenna") has reviewed the materials in relation to available file material, industry reports and research of comparable properties. **Certain of the general assumptions described in Exhibit A have been provided by the Developer including, but not limited to, the projected market value used to determine Incremental Property Taxes.** Kane, McKenna has not been provided with any type of marketing studies related to the Industrial Development. The purpose of the analysis contained herein is to determine the incremental property tax benefits derived from the Industrial Development. The analysis herein may be supplemented by additional cost data, engineering reports, or market information as well as other data in order to review/test the assumptions.

#### **Analysis of Projected Incremental Property Taxes**

The equalized assessed value of the Development Site used to determine the initial equalized assessed value for the TIF District is \$2,514,372 (the "Base EAV"). The following Table 1 is a list of the parcels and their respective assessed values of the parcels within the Development Site:

	<u>PIN</u>	<u>Tax Code</u>	<u>2015</u> <u>EAV</u>
1	10-11-23-300-001-0000	1007	\$ 56,601
2	10-11-26-100-004-0000	1007	\$ 93,033
3	10-11-26-100-003-0000	1007	\$ 14,369
4	10-11-26-100-002-0000	1007	\$ 17,783
5	10-11-27-100-008-0000		\$ 9,915
6	10-11-27-100-005-0000	1007	\$ 27,346
7	10-11-27-100-007-0000		\$ 20,660
8	10-11-23-400-004-0000	1002	\$ 83,342
9	10-11-23-400-005-0000	1002	\$ 16,105
10	10-11-23-400-002-0000	1002	\$ 8,949
11	10-11-24-300-004-0000	1002	\$ 62,869
12	10-11-24-300-005-0000	1002	\$ 99,824
13	10-11-24-100-009-0000	1002	\$ 4,745
14	10-11-24-100-002-0000	1002	\$ 3,895
15	10-11-24-200-002-0000	1002	\$ 40,470
16	10-11-24-100-009-0000	1002	\$ 4,745
17	10-11-24-100-010-0000	1002	\$ 17,487
18	10-11-13-300-019-0000	1002	\$ 25,506
19	10-11-13-300-021-0000	1002	\$ 14,225
20	10-11-23-200-003-0000	1002	\$ 6,395
21	10-11-23-200-002-0000	1002	\$ 10,747
22	10-11-23-200-001-0000	1004	\$ 52,280
23	10-11-14-400-002-0000	1004	\$ 17,269
24	10-11-14-400-001-0001		\$ 17,577
25	10-11-24-400-028-0000	1002	\$ 25,809
26	10-11-25-100-009-0000	1002	\$ 17,545
27	10-11-29-207-003-0000	1007	\$ 950,625
28	10-11-29-401-001-0000	1007	\$ 451,750
29	10-11-29-207-002-0000	1007	\$ 186,115
30	10-11-29-207-004-0000	1007	\$ 1
31	10-11-29-302-001-0000	1007	\$ 1
32	10-11-29-300-014-0000	1007	\$ 1
33	10-11-29-207-001-0000	1007	\$ 112,990
34	10-11-29-200-011-0000	1010	\$ 3,915
35	10-11-28-100-002-0000	1007	\$ 13,711
36	10-11-22-400-010-0000	1007	\$ 16,899
37	10-11-22-400-007-0000	1007	\$ 2,170
38	10-11-22-400-008-0000	1007	\$ 6,703
		Total	\$ 2,514,372

Furthermore, the analyses herein also assume that the 2015 state equalization factor (1). As most of the Development Site is currently unincorporated, any such portions of the Development Site are expected to be annexed into the Village. The 2015 tax rate of 8.538% used in the analyses herein to determine the Incremental Property Taxes includes the 2015 tax year tax rate for the Development Site (8.094%) and the tax rate for the Village (0.444%) which reflects the projected tax rate that would assume the annexation.

The market value assumptions used by KMA are based on information available obtained by KMA from the Will County Assessor and its files, for comparable uses. **The property absorption assumptions are preliminary and based on the Developers analysis. It is expected that these assumptions would be supplemented by market studies.**

The KMA assumption for market value growth assumes a conservative 1.0% annual growth rate across all scenarios. The more conservative growth rate used by KMA reflects both the more recent historic growth rates for comparable property in Will County.

## **Summary**

### **Analysis of Projected Incremental Property Taxes**

The TIF Act provides that the Village may reimburse itself for administrative costs relating to a redevelopment project area. None of the analyses provide for the reimbursement of any administrative costs but the Village can allow for the payment of such costs as well as other TIF eligible costs identified by the Village. Furthermore, the TIF Act does not allow the Village to enter into obligations payable from Incremental Property Taxes with a term that exceeds 20 years.

#### **Scenario #1 – Baseline (\$32/Sq.Ft. and \$30/Sq.Ft. Market Value)**

The main findings in the analysis of Scenario #1 Incremental Property Taxes related to Scenario #1 are:

- Pursuant to Scenario #1, the Industrial Development is projected to generate \$489,174,332 of Scenario #1 Incremental Property Taxes (see Exhibit A) which would be available for the payment of eligible redevelopment costs as determined pursuant to the TIF Act.
- The analysis for Scenario #1 provides that the Village could retire obligations that would provide for eligible redevelopment costs of \$184,119,848 (assuming an interest rate of 6% and a term of 20 years commencing with the year 2019) (Exhibit A).

#### **Scenario #2 – Conservative (28/Sq.Ft. and \$26/Sq.Ft. Market Value)**

The main findings in the analysis of Scenario #2 Incremental Property Taxes related to Scenario #2 are:

- Pursuant to Scenario #2, the Industrial Development is projected to generate \$297,058,403 of Scenario #2 Incremental Property Taxes (see Exhibit B) which would be available for the payment of eligible redevelopment costs as determined pursuant to the TIF Act.
- The analysis for Scenario #2 provides that the Village could retire obligations that would provide for eligible redevelopment costs of \$96,649,188 (assuming an interest rate of 6% and a term of 20 years commencing with the year 2019) (see Exhibit B).

#### **Scenario #3 – Aggressive (\$35/Sq.Ft. and \$30/Sq.Ft. Market Value)**

The main findings in the analysis of Scenario #3 Incremental Property Taxes related to Scenario #3 are:



- Pursuant to Scenario #3, the Industrial Development is projected to generate \$519,052,429 of Scenario #3 Incremental Property Taxes (see Exhibit C) which would be available for the payment of eligible redevelopment costs as determined pursuant to the TIF Act.
- The analysis for Scenario #3 provides that the Village could retire obligations that would provide for eligible redevelopment costs of \$202,977,189 assuming an interest rate of 6% and a term of 20 years commencing with the year 2019) (see Exhibit C).

Projected increment for each scenarios are summarized in the table below.

**Provided by Will County Clerk and Will County Treasurer**

- (a) 2016 Tax Rate (Tax Code 16043)= 8.0937% and Village Tax Rate = 0.444%
- (b) Total 2015 Assessed Value for the Development Site = \$2,514,372

**Property Tax Assumptions**

- (a) Annual growth rate for property assessments = 1.0%.
- (b) Tax collection – one year in arrears, e.g., 2017 taxes collected in 2018.
- (c) Will County assessment rate of 33% was used to determine the assessed value of the properties
- (d) TIF expires in 2041 (final property tax collection year of 2042).

<b>Table 2</b>			
<b>Collection Year</b>	<b>Projected Annual Incremental Property Taxes</b>		
	<b>Baseline</b>	<b>Conservative</b>	<b>Aggressive</b>
2018	-	-	-
2019	-	-	-
2020	259,133	-	259,133
2021	1,893,732	200,065	2,242,956
2022	4,526,328	1,215,803	6,110,036
2023	7,603,679	2,492,035	10,640,549
2024	10,769,559	3,803,758	15,103,792
2025	13,924,569	5,067,616	19,399,049
2026	17,295,657	6,276,901	23,425,294
2027	20,886,522	7,524,573	25,588,426
2028	24,246,800	8,956,461	25,846,457
2029	25,928,550	10,550,315	26,107,068
2030	26,189,982	12,194,431	26,370,285
2031	26,454,029	13,783,325	26,636,135
2032	26,720,716	15,216,335	26,904,643
2033	26,990,070	16,617,005	27,175,836
2034	27,262,117	18,102,161	27,449,742
2035	27,536,885	19,689,949	27,726,386
2036	27,814,401	21,121,017	28,005,797
2037	28,094,692	21,816,270	28,288,001
2038	28,377,786	22,036,579	28,573,028
2039	28,663,710	22,259,092	28,860,905
2040	28,952,494	22,483,829	29,151,661
2041	29,244,166	22,710,814	29,445,324
2042	29,538,754	22,940,069	29,741,924
<b>Total</b>	<b>\$ 489,174,332</b>	<b>\$ 297,058,403</b>	<b>\$ 519,052,429</b>

**EXHIBIT #A - BASELINE**

**PRELIMINARY - FOR DISCUSSION PURPOSES ONLY**

**Preliminary Draft (Baseline)  
Proposed Project  
Preliminary User Assumptions**

Component Name	Project Description	Class Code	Occupancy Date	Building Sq. Ft./ # Units	Avg. Initial Market Value Sq. Ft./Unit
1	Manufacturing (1)	2	Jan-24	1,458,000	32
2	Manufacturing (2)	2	Jan-27	435,000	32
3	Large Warehouse (1)	2	Jan-21	12,089,000	30
4	Large Warehouse (2)	2	Jan-22	5,526,000	30
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30
6	Medium Warehouse (2)	2	Jan-23	1,848,000	30
Totals				27,596,000	

Notes:

Preliminary Draft (Baseline)  
Proposed Project  
Projected Incremental Taxes

Projected Incremental Taxes					2018	2019	2020	2021	2022	2023	2024	2025	2026	
TIF Year							1	2	3	4	5	6	7	
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-24	1,458,000	32.00	0	0	0	0	1,348,488	4,085,918	6,877,963	9,725,439	12,629,178
2	Manufacturing (2)	2	Jan-27	435,000	32.00	0	0	0	0	0	0	0	829,035	2,511,976
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00	0	5,549,395	16,814,667	33,965,627	51,457,925	63,521,950	75,822,109	88,361,919	107,094,646
4	Large Warehouse (2)	2	Jan-22	5,526,000	30.00	0	0	4,697,091	9,539,633	14,426,532	24,197,086	34,214,680	44,430,206	49,914,702
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00	0	0	3,182,394	9,642,653	19,478,159	29,509,411	36,427,728	46,826,189	57,428,976
6	Medium Warehouse (2)	2	Jan-23	1,848,000	30.00	0	0	0	2,379,757	4,859,135	7,335,317	12,259,332	14,911,911	17,562,179
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0
Total EAV All Components						0	5,549,395	24,694,151	55,527,671	91,570,239	128,649,682	165,601,812	205,084,700	247,141,658
I. Incremental Property Taxes:														
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b) Incremental EAV						0	3,035,023	22,179,779	53,013,299	89,055,867	126,135,310	163,087,440	202,570,328	244,627,286
(c) Tax Rate : 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d) Total Est. Incremental Property Taxes						0	0	259,133	1,893,732	4,526,328	7,603,679	10,769,559	13,924,569	17,295,657
(e) Incremental Property Taxes														
(f) Est. Incremental Property Taxes Available						0	0	259,133	1,893,732	4,526,328	7,603,679	10,769,559	13,924,569	17,295,657
(g) Administrative Costs							Not applicable	0	0	0	0	0	0	0
(h) Carryforward of Administrative Costs							Not applicable	0	0	0	0	0	0	0
(i) Incremental Property Taxes						0	0	259,133	1,893,732	4,526,328	7,603,679	10,769,559	13,924,569	17,295,657
(j) Cumulative Incremental Property Taxes						0	0	259,133	2,152,865	6,679,193	14,282,872	25,052,431	38,977,000	56,272,657
(k) NPV of Incremental Property Taxes @ 6.0%							0	230,628	1,820,641	5,405,917	11,087,829	18,679,943	27,940,576	38,792,086

Preliminary Draft (Baseline)  
Proposed Project  
Projected Incremental Taxes

						TIF Year										
						2027	2028	2029	2030	2031	2032	2033	2034	2035		
						8	9	10	11	12	13	14	15	16		
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit											
1	Manufacturing (1)	2	Jan-24	1,458,000	32.00	15,590,018	17,177,365	17,349,139	17,522,630	17,697,857	17,874,835	18,053,584	18,234,119	18,416,461		
2	Manufacturing (2)	2	Jan-27	435,000	32.00	4,228,493	5,124,934	5,176,183	5,227,945	5,280,225	5,333,027	5,386,357	5,440,221	5,494,623		
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00	126,193,191	133,524,415	134,859,659	136,208,256	137,570,338	138,946,042	140,335,502	141,738,857	143,156,246		
4	Large Warehouse (2)	2	Jan-22	5,526,000	30.00	55,449,768	61,035,315	61,645,668	62,262,124	62,884,746	63,513,593	64,148,729	64,790,216	65,438,118		
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00	64,827,180	68,921,528	69,610,743	70,306,850	71,009,919	71,720,018	72,437,218	73,161,591	73,893,206		
6	Medium Warehouse (2)	2	Jan-23	1,848,000	30.00	20,209,283	20,411,376	20,615,489	20,821,644	21,029,861	21,240,159	21,452,561	21,667,086	21,883,757		
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0		
<b>Total EAV All Components</b>						<b>286,497,932</b>	<b>306,194,932</b>	<b>309,256,882</b>	<b>312,349,450</b>	<b>315,472,945</b>	<b>318,627,674</b>	<b>321,813,951</b>	<b>325,032,091</b>	<b>328,282,412</b>		
<b>I. Incremental Property Taxes:</b>																
(a)	Base EAV					2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372		
(b)	Incremental EAV					283,983,560	303,680,560	306,742,510	309,835,078	312,958,573	316,113,302	319,299,579	322,517,719	325,768,040		
(c)	Tax Rate : 8.5381%					8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%		
(d)	Total Est. Incremental Property Taxes					20,886,522	24,246,800	25,928,550	26,189,982	26,454,029	26,720,716	26,990,070	27,262,117	27,536,885		
(e)	Incremental Property Taxes															
(f)	Est. Incremental Property Taxes Available					20,886,522	24,246,800	25,928,550	26,189,982	26,454,029	26,720,716	26,990,070	27,262,117	27,536,885		
(g)	Administrative Costs		Not applicable			0	0	0	0	0	0	0	0	0		
(h)	Carryforward of Administrative Costs		Not applicable			0	0	0	0	0	0	0	0	0		
(i)	Incremental Property Taxes					20,886,522	24,246,800	25,928,550	26,189,982	26,454,029	26,720,716	26,990,070	27,262,117	27,536,885		
(j)	Cumulative Incremental Property Taxes					77,159,180	101,405,980	127,334,530	153,524,512	179,978,541	206,699,257	233,689,327	260,951,444	288,488,329		
(k)	NPV of Incremental Property Taxes @ 6.0%					51,154,786	64,894,073	78,352,909	91,368,528	103,771,209	115,589,808	126,851,821	137,583,452	147,809,671		

Preliminary Draft (Baseline)  
Proposed Project  
Projected Incremental Taxes

						TIF Year		2036	2037	2038	2039	2040	TIF	Final
								17	18	19	20	21	Expiration	Collection
													2041	2042
Component	Project	Class	Occupancy	Sq. Ft./	Market Value									
Name	Description	Code	Date	# Units	Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-24	1,458,000	32.00			18,600,625	18,786,632	18,974,498	19,164,243	19,355,885	19,549,444	19,744,939
2	Manufacturing (2)	2	Jan-27	435,000	32.00			5,549,569	5,605,065	5,661,116	5,717,727	5,774,904	5,832,653	5,890,980
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00			144,587,808	146,033,686	147,494,023	148,968,963	150,458,653	151,963,239	153,482,872
4	Large Warehouse (2)	2	Jan-22	5,526,000	30.00			66,092,500	66,753,425	67,420,959	68,095,168	68,776,120	69,463,881	70,158,520
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00			74,632,139	75,378,460	76,132,245	76,893,567	77,662,503	78,439,128	79,223,519
6	Medium Warehouse (2)	2	Jan-23	1,848,000	30.00			22,102,595	22,323,621	22,546,857	22,772,326	23,000,049	23,230,049	23,462,350
0		0	Jan-00	0	0.00			0	0	0	0	0	0	0
<b>Total EAV All Components</b>								<b>331,565,236</b>	<b>334,880,888</b>	<b>338,229,697</b>	<b>341,611,994</b>	<b>345,028,114</b>	<b>348,478,395</b>	<b>351,963,179</b>
<b>I. Incremental Property Taxes:</b>														
(a)	Base EAV							2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b)	Incremental EAV							329,050,864	332,366,516	335,715,325	339,097,622	342,513,742	345,964,023	349,448,807
(c)	Tax Rate - 8.5381%							8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d)	Total Est. Incremental Property Taxes							27,814,401	28,094,692	28,377,786	28,663,710	28,952,494	29,244,166	29,538,754
(e)	Incremental Property Taxes													
(f)	Est. Incremental Property Taxes Available							27,814,401	28,094,692	28,377,786	28,663,710	28,952,494	29,244,166	29,538,754
(g)	Administrative Costs		Not applicable					0	0	0	0	0	0	0
(h)	Carryforward of Administrative Costs		Not applicable					0	0	0	0	0	0	0
(i)	Incremental Property Taxes							27,814,401	28,094,692	28,377,786	28,663,710	28,952,494	29,244,166	29,538,754
(j)	Cumulative Incremental Property Taxes							316,302,730	344,397,422	372,775,208	401,438,918	430,391,412	459,635,578	489,174,332
(k)	NPV of Incremental Property Taxes @ 6.0%							157,554,274	166,839,935	175,688,263	184,119,848	192,154,313	199,810,355	207,105,794

**EXHIBIT B - CONSERVATIVE**



**PRELIMINARY - FOR DISCUSSION PURPOSES ONLY**

**Preliminary Draft (Conservative)  
Proposed Project  
Preliminary User Assumptions**

Component Name	Project Description	Class Code	Occupancy Date	Building	Avg. Initial
				Sq. Ft / # Units	Market Value Sq. Ft./Unit
1	Manufacturing (1)	2	Jan-27	972,000	28
2	Manufacturing (2)	2	Jan-30	290,000	28
3	Large Warehouse (1)	2	Jan-22	12,089,000	26
4	Large Warehouse (2)	2	Jan-23	4,605,000	26
5	Medium Warehouse (1)	2	Jan-23	4,992,000	26
6	Medium Warehouse (2)	2	Jan-25	1,848,000	26
Totals				24,796,000	

Notes:

Preliminary Draft (Conservative)  
Proposed Project  
Projected Incremental Taxes

						2018	2019	2020	2021	2022	2023	2024	2025	2026
TIF Year								1	2	3	4	5	6	7
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-27	972,000	28.00	0	0	0	0	0	0	0	1,215,680	2,506,202
2	Manufacturing (2)	2	Jan-30	290,000	28.00	0	0	0	0	0	0	0	0	0
3	Large Warehouse (1)	2	Jan-22	12,089,000	26.00	0	0	4,857,570	9,856,934	14,910,711	25,023,798	30,374,838	35,783,942	46,407,680
4	Large Warehouse (2)	2	Jan-23	4,605,000	26.00	0	0	0	4,111,520	8,350,359	8,524,941	12,800,299	17,160,312	17,425,753
5	Medium Warehouse (1)	2	Jan-23	4,992,000	26.00	0	0	0	2,785,655	8,440,536	11,412,127	14,396,312	17,439,039	17,707,268
6	Medium Warehouse (2)	2	Jan-25	1,848,000	26.00	0	0	0	0	0	2,103,912	4,295,896	4,431,764	6,596,825
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0
Total EAV All Components						0	0	4,857,570	16,754,110	31,701,606	47,064,778	61,867,345	76,030,737	90,643,728
I. Incremental Property Taxes:														
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b) Incremental EAV						0	0	2,343,198	14,239,738	29,187,234	44,550,406	59,352,973	73,516,365	88,129,356
(c) Tax Rate - 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d) Total Est. Incremental Property Taxes						0	0	0	200,065	1,215,803	2,492,035	3,803,758	5,067,616	6,276,901
(e) Incremental Property Taxes														
(f) Est. Incremental Property Taxes Available						0	0	0	200,065	1,215,803	2,492,035	3,803,758	5,067,616	6,276,901
(g) Administrative Costs						0	0	0	0	0	0	0	0	0
(h) Carryforward of Administrative Costs						0	0	0	0	0	0	0	0	0
(i) Incremental Property Taxes						0	0	0	200,065	1,215,803	2,492,035	3,803,758	5,067,616	6,276,901
(j) Cumulative Incremental Property Taxes						0	0	0	200,065	1,415,868	3,907,903	7,711,661	12,779,277	19,056,178
(k) NPV of Incremental Property Taxes @ 6.0%							0	0	167,978	1,131,008	2,993,202	5,674,701	9,044,955	12,983,161

Preliminary Draft (Conservative)  
Proposed Project  
Projected Incremental Taxes

						2027	2028	2029	2030	2031	2032	2033	2034	2035
						8	9	10	11	12	13	14	15	16
TIF Year														
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-27	972,000	28.00	3,771,379	5,061,609	6,377,266	7,718,731	9,086,387	10,426,987	10,531,257	10,636,570	10,742,935
2	Manufacturing (2)	2	Jan-30	290,000	28.00	0	747,386	1,561,779	2,339,806	3,080,131	3,110,932	3,142,042	3,173,462	3,205,197
3	Large Warehouse (1)	2	Jan-22	12,089,000	26.00	52,127,118	57,908,442	69,064,492	75,169,741	81,390,188	93,101,549	99,560,932	106,191,000	118,480,572
4	Large Warehouse (2)	2	Jan-23	4,605,000	26.00	21,917,084	26,496,498	26,858,145	31,574,611	36,382,721	36,846,159	41,797,281	46,792,934	47,260,863
5	Medium Warehouse (1)	2	Jan-23	4,992,000	26.00	20,793,981	26,879,396	30,212,998	33,561,756	36,974,470	37,443,826	40,906,907	47,555,034	51,232,623
6	Medium Warehouse (2)	2	Jan-25	1,848,000	26.00	8,804,744	8,988,516	11,263,405	13,582,893	13,817,347	16,206,732	18,592,219	18,778,142	18,965,923
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0
Total EAV All Components						107,414,306	126,081,847	145,338,084	163,947,538	180,731,244	197,136,186	214,530,639	233,127,142	249,888,114
I. Incremental Property Taxes:														
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b) Incremental EAV						104,899,934	123,567,475	142,823,712	161,433,166	178,216,872	194,621,814	212,016,267	230,612,770	247,373,742
(c) Tax Rate - 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d) Total Est. Incremental Property Taxes						7,524,573	8,956,461	10,550,315	12,194,431	13,783,326	15,216,335	16,617,005	18,102,161	19,689,949
(e) Incremental Property Taxes														
(f) Est. Incremental Property Taxes Available						7,524,573	8,956,461	10,550,315	12,194,431	13,783,326	15,216,335	16,617,005	18,102,161	19,689,949
(g) Administrative Costs						0	0	0	0	0	0	0	0	0
(h) Carryforward of Administrative Costs						0	0	0	0	0	0	0	0	0
(i) Incremental Property Taxes						7,524,573	8,956,461	10,550,315	12,194,431	13,783,326	15,216,335	16,617,005	18,102,161	19,689,949
(j) Cumulative Incremental Property Taxes						26,580,751	35,537,212	46,087,526	58,281,958	72,065,283	87,281,618	103,898,623	122,000,784	141,690,733
(k) NPV of Incremental Property Taxes @ 6.0%						17,438,943	22,438,185	27,995,959	34,056,218	40,518,378	47,248,578	54,182,273	61,308,122	68,620,268

Preliminary Draft (Conservative)  
Proposed Project  
Projected Incremental Taxes

						TIF Year		2036	2037	2038	2039	2040	TIF	Final
								17	18	19	20	21	Expiration	Collection
													22	2042
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-27	972,000	28.00			10,850,365	10,958,868	11,068,457	11,179,142	11,290,933	11,403,842	11,517,881
2	Manufacturing (2)	2	Jan-30	290,000	28.00			3,237,249	3,269,621	3,302,317	3,335,341	3,368,694	3,402,381	3,436,405
3	Large Warehouse (1)	2	Jan-22	12,089,000	26.00			125,309,434	126,562,528	127,828,153	129,106,435	130,397,499	131,701,474	133,018,489
4	Large Warehouse (2)	2	Jan-23	4,605,000	26.00			47,733,472	48,210,807	48,692,915	49,179,844	49,671,642	50,168,369	50,670,042
5	Medium Warehouse (1)	2	Jan-23	4,992,000	26.00			51,744,849	52,262,399	52,785,023	53,312,873	53,846,002	54,384,462	54,928,306
6	Medium Warehouse (2)	2	Jan-25	1,848,000	26.00			19,155,582	19,347,138	19,540,609	19,736,016	19,933,376	20,132,709	20,334,037
0		0	Jan-00	0	0.00			0	0	0	0	0	0	0
<b>Total EAV All Components</b>								<b>258,031,051</b>	<b>260,611,361</b>	<b>263,217,475</b>	<b>265,849,650</b>	<b>268,508,146</b>	<b>271,193,228</b>	<b>273,905,160</b>
<b>I. Incremental Property Taxes:</b>														
(a)	Base EAV							2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b)	Incremental EAV							255,516,679	258,096,989	260,703,103	263,335,278	265,993,774	268,678,856	271,390,788
(c)	Tax Rate : 8.5381%							8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d)	Total Est. Incremental Property Taxes							21,121,017	21,816,270	22,036,579	22,259,092	22,483,829	22,710,814	22,940,069
(e)	Incremental Property Taxes													
(f)	Est. Incremental Property Taxes Available							21,121,017	21,816,270	22,036,579	22,259,092	22,483,829	22,710,814	22,940,069
(g)	Administrative Costs		Not applicable					0	0	0	0	0	0	0
(h)	Carryforward of Administrative Costs		Not applicable					0	0	0	0	0	0	0
(i)	Incremental Property Taxes							21,121,017	21,816,270	22,036,579	22,259,092	22,483,829	22,710,814	22,940,069
(j)	Cumulative Incremental Property Taxes							162,811,750	184,628,020	206,664,599	228,923,690	251,407,520	274,118,334	297,058,403
(k)	NPV of Incremental Property Taxes @ 6.0%							76,019,885	83,230,446	90,101,556	96,649,188	102,888,565	108,834,194	114,499,899

**EXHIBIT C - AGGRESSIVE**

**PRELIMINARY - FOR DISCUSSION PURPOSES ONLY**

**Preliminary Draft (Aggressive)  
Proposed Project  
Preliminary User Assumptions**

Component Name	Project Description	Class Code	Occupancy Date	Building Sq. Ft./ # Units	Avg. Initial Market Value Sq. Ft./Unit
1	Manufacturing (1)	2	Jan-24	1,458,000	35
2	Manufacturing (2)	2	Jan-27	435,000	35
3	Large Warehouse (1)	2	Jan-21	12,089,000	30
4	Large Warehouse (2)	2	Jan-23	5,526,000	30
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30
6	Medium Warehouse (2)	2	Jan-24	1,848,000	30
Totals				27,596,000	

Notes:

Preliminary Draft (Aggressive)  
Proposed Project  
Projected Incremental Taxes

						2018	2019	2020	2021	2022	2023	2024	2025	2026
TIF Year								1	2	3	4	5	6	7
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-24	1,458,000	35.00	0	0	0	0	2,949,817	7,448,289	9,089,242	13,738,934	18,417,551
2	Manufacturing (2)	2	Jan-27	435,000	35.00	0	0	0	0	0	0	0	2,720,271	5,494,948
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00	0	5,549,395	22,419,556	45,287,503	62,893,019	80,846,118	99,151,989	117,815,892	130,893,456
4	Large Warehouse (2)	2	Jan-23	5,526,000	30.00	0	0	0	4,744,062	19,166,009	33,875,921	48,878,115	59,240,275	59,832,678
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00	0	0	6,364,787	19,285,306	32,463,598	42,624,705	52,985,787	63,549,828	67,563,501
6	Medlum Warehouse (2)	2	Jan-24	1,848,000	30.00	0	0	0	4,759,515	9,666,245	14,618,088	19,614,931	19,811,080	20,009,191
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0
Total EAV All Components						0	5,549,395	28,784,343	74,076,385	127,138,689	179,413,120	229,720,063	276,876,281	302,211,325
I. Incremental Property Taxes:														
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372
(b) Incremental EAV						0	3,035,023	26,269,971	71,562,013	124,624,317	176,898,748	227,205,691	274,361,909	299,696,953
(c) Tax Rate : 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%
(d) Total Est. Incremental Property Taxes						0	0	259,133	2,242,956	6,110,036	10,640,549	15,103,792	19,399,049	23,425,294
(e) Incremental Property Taxes														
(f) Est. Incremental Property Taxes Available						0	0	259,133	2,242,956	6,110,036	10,640,549	15,103,792	19,399,049	23,425,294
(g) Administrative Costs							Not applicable	0	0	0	0	0	0	0
(h) Carryforward of Administrative Costs							Not applicable	0	0	0	0	0	0	0
(i) Incremental Property Taxes						0	0	259,133	2,242,956	6,110,036	10,640,549	15,103,792	19,399,049	23,425,294
(j) Cumulative Incremental Property Taxes						0	0	259,133	2,502,090	8,612,126	19,252,675	34,356,467	53,755,516	77,180,810
(k) NPV of Incremental Property Taxes @ 5.0%							0	230,828	2,113,857	6,953,578	14,904,815	25,552,393	38,453,868	53,151,188

Preliminary Draft (Aggressive)  
Proposed Project  
Projected Incremental Taxes

						TIF Year									
						2027	2028	2029	2030	2031	2032	2033	2034	2035	
						8	9	10	11	12	13	14	15	16	
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit										
1	Manufacturing (1)	2	Jan-24	1,458,000	35.00	18,601,726	18,787,743	18,975,621	19,165,377	19,357,031	19,550,601	19,746,107	19,943,568	20,143,004	
2	Manufacturing (2)	2	Jan-27	435,000	35.00	5,549,898	5,605,397	5,661,451	5,718,065	5,775,246	5,832,998	5,891,328	5,950,242	6,009,744	
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00	132,202,391	133,524,415	134,859,659	136,208,256	137,570,338	138,946,042	140,335,502	141,738,857	143,156,246	
4	Large Warehouse (2)	2	Jan-23	5,526,000	30.00	60,431,004	61,035,315	61,645,668	62,262,124	62,884,746	63,513,593	64,148,729	64,790,216	65,438,118	
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00	68,239,136	68,921,528	69,610,743	70,306,850	71,009,919	71,720,018	72,437,218	73,161,591	73,893,206	
6	Medium Warehouse (2)	2	Jan-24	1,848,000	30.00	20,209,283	20,411,376	20,615,489	20,821,644	21,029,861	21,240,159	21,452,561	21,667,086	21,883,757	
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0	0	0	
Total EAV All Components						305,233,438	308,285,773	311,368,631	314,482,317	317,627,140	320,803,411	324,011,446	327,251,560	330,524,076	
I. Incremental Property Taxes:															
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	
(b) Incremental EAV						302,719,066	305,771,401	308,854,259	311,967,945	315,112,768	318,289,039	321,497,074	324,737,188	328,009,704	
(c) Tax Rate : 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	
(d) Total Est. Incremental Property Taxes						25,588,426	25,846,457	26,107,068	26,370,285	26,636,135	26,904,643	27,175,836	27,449,742	27,726,386	
(e) Incremental Property Taxes															
(f) Est. Incremental Property Taxes Available						25,588,426	25,846,457	26,107,068	26,370,285	26,636,135	26,904,643	27,175,836	27,449,742	27,726,386	
(g) Administrative Costs						0	0	0	0	0	0	0	0	0	
(h) Carryforward of Administrative Costs						0	0	0	0	0	0	0	0	0	
(i) Incremental Property Taxes						25,588,426	25,846,457	26,107,068	26,370,285	26,636,135	26,904,643	27,175,836	27,449,742	27,726,386	
(j) Cumulative Incremental Property Taxes						102,769,236	128,615,692	154,722,760	181,093,046	207,729,181	234,633,824	261,809,660	289,259,402	316,985,788	
(k) NPV of Incremental Property Taxes @ 6.0%						68,296,937	82,729,464	96,482,341	109,587,565	122,075,625	133,975,575	145,315,102	156,120,690	166,417,184	



Preliminary Draft (Aggressive)  
Proposed Project  
Projected Incremental Taxes

Proposed Project Projected Incremental Taxes						TIF Year		2036	2037	2038	2039	2040	TIF Expiration	Final Collection
								17	18	19	20	21	2041	2042
Component Name	Project Description	Class Code	Occupancy Date	Sq. Ft./ # Units	Market Value Sq. Ft./Unit									
1	Manufacturing (1)	2	Jan-24	1,458,000	35.00	20,344,434	20,547,878	20,753,357	20,960,891	21,170,500	21,382,205	21,596,027		
2	Manufacturing (2)	2	Jan-27	435,000	35.00	6,069,841	6,130,540	6,191,845	6,253,764	6,316,301	6,379,464	6,443,259		
3	Large Warehouse (1)	2	Jan-21	12,089,000	30.00	144,587,808	146,033,686	147,494,023	148,968,963	150,458,653	151,963,239	153,482,872		
4	Large Warehouse (2)	2	Jan-23	5,526,000	30.00	66,092,500	66,753,425	67,420,959	68,095,168	68,776,120	69,463,881	70,158,520		
5	Medium Warehouse (1)	2	Jan-22	6,240,000	30.00	74,632,139	75,378,460	76,132,245	76,893,567	77,662,503	78,439,128	79,223,519		
6	Medium Warehouse (2)	2	Jan-24	1,848,000	30.00	22,102,595	22,323,621	22,546,857	22,772,326	23,000,049	23,230,049	23,462,350		
0		0	Jan-00	0	0.00	0	0	0	0	0	0	0		
Total EAV All Components						333,829,316	337,167,610	340,539,286	343,944,679	347,384,125	350,857,967	354,366,546		
I. Incremental Property Taxes:														
(a) Base EAV						2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372	2,514,372		
(b) Incremental EAV						331,314,944	334,653,238	338,024,914	341,430,307	344,869,753	348,343,595	351,852,174		
(c) Tax Rate - 8.5381%						8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%	8.5381%		
(d) Total Est. Incremental Property Taxes						28,005,797	28,288,001	28,573,028	28,860,905	29,151,661	29,445,324	29,741,924		
(e) Incremental Property Taxes														
(f) Est. Incremental Property Taxes Available						28,005,797	28,288,001	28,573,028	28,860,905	29,151,661	29,445,324	29,741,924		
(g) Administrative Costs						0	0	0	0	0	0	0		
(h) Carryforward of Administrative Costs						0	0	0	0	0	0	0		
(i) Incremental Property Taxes						28,005,797	28,288,001	28,573,028	28,860,905	29,151,661	29,445,324	29,741,924		
(j) Cumulative Incremental Property Taxes						344,991,584	373,279,586	401,852,614	430,713,519	459,865,180	489,310,504	519,052,429		
(k) NPV of Incremental Property Taxes @ 6.0%						176,228,841	185,578,393	194,487,598	202,977,189	211,066,924	218,775,629	226,121,246		

