

Economic Contribution of Nwana to Michigan

Statewide, Regional, and Local Contribution

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Prepared by

Public Sector Consultants
Lansing, Michigan
www.publicsectorconsultants.com

Prepared for

Nestle Waters North America
Stanwood, Michigan

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EXECUTIVE SUMMARY

Nestle Waters North America (Nwana) makes an important contribution to Michigan's economy. Nwana employs Michigan workers, supports businesses and other industries through the purchase of goods and services, and funds important public services through tax payments. This economic activity benefits the immediate local area of Mecosta and Osceola Counties; the region, comprising Mecosta, Osceola, Montcalm, Newaygo, and Kent Counties; and the rest of the state. Nwana is currently expanding their facilities to support proposed growth. The construction activity contributes to the state and region's economy, and the operation of the expanded facilities will have an ongoing economic impact.

CURRENT YEARLY ECONOMIC CONTRIBUTION

Nwana directly employs 281 Michigan workers and makes \$51.3 million in purchases each year from Michigan vendors to support its operations.¹ When examining Nwana's ongoing annual economic contribution, we focus on the ongoing payments to Michigan businesses of \$51.3 million.

Annual statewide economic contribution of Nwana:

- Direct employment of 281 Michiganders (earning \$15.7 million) and purchases of \$51.3 million from Michigan businesses
- A total of 765 jobs and \$160.9 million in economic activity across the state—when including indirect and induced economic activity²
- Nearly \$4.8 million paid in state and local taxes³

Annual regional contribution of Nwana (Kent, Mecosta, Montcalm, Newaygo, and Osceola Counties):⁴

- Direct employment of 242 individuals, who also live in the region, and an economic contribution to the region of \$18.6 million
- A total of 370 jobs and \$35.4 million in economic output
- Nearly \$2.4 million in state and local taxes, including \$949 thousand in property taxes

Local contribution (Mecosta and Osceola Counties):⁵

- Direct employment of 154 individuals, who also live in the local area, and a direct economic contribution of \$8.9 million
- A total of 199 jobs and \$13.2 million in economic output

¹ In 2016, total Nwana Michigan spending was \$70.5 million when including payments to the State of Michigan and capital expenditures. Capital expenditures are not included in ongoing activities for estimation of annual impacts.

² Indirect economic activity results from Nwana purchasing goods and services and the employment needed to support those businesses. Induced economic activity results from direct and indirect employees purchasing goods and services in the economy.

³ Total taxes include approximately \$1 million paid directly by Nwana, \$500,000 paid directly by Nwana employees, and \$3.8 million paid in indirect/induced taxes.

⁴ The total regional impact is included in the statewide impact; they cannot be added together.

⁵ These are conservative estimates that include the impact of only those working and living in the area and do not include the local impact of commuter spending. These totals are included in the regional and state impact estimates; they cannot be added together.

- Nearly \$1.6 million in state and local taxes, including \$781,000 in property taxes (nearly \$667,000, or 4.3 percent, of local property taxes)

EXPANSION IN MICHIGAN

NWNA’s planned expansion of the Stanwood facility in Mecosta County will increase ongoing employment in the state by a minimum of 20 employees. This increase will have additional yearly impacts on statewide, regional, and local economies.

Total statewide contribution from expanded employment by NWNA: ⁶

- An additional 41 ongoing jobs and \$6.5 million in annual economic output across Michigan
- An additional \$255,000 in annual state and local taxes across the state

Total regional contribution from expanded employment by NWNA (included in the statewide totals):

- An additional 24 ongoing jobs and \$2.1 million in annual output for the five-county region
- An additional \$155,000 in annual taxes paid directly in the five-county region

Total local contribution from expanded employment by NWNA (included in the regional and statewide totals):

- An additional 12 ongoing jobs and \$0.9 million in annual output for Mecosta and Osceola Counties alone
- An additional \$96,000 in annual state and local tax is paid in Mecosta and Osceola Counties alone

POSTEXPANSION YEARLY CONTRIBUTION

Once NWNA has expanded its workforce, the total yearly contribution will be the sum of the estimates, presented above, for the current ongoing economic impact and the economic impact attributed to the expansion. The total of these two estimates is presented below and represents the total economic impact of the expanded facility.

Postexpansion yearly statewide contribution:

- A total of 805 ongoing jobs and \$167.4 million in annual economic output
- Nearly \$5.1 million in annual state and local taxes

Postexpansion yearly regional contribution (included in the statewide totals):

- A total of 393 ongoing jobs and \$37.4 million in annual economic output
- Over \$2.5 million in annual state and local taxes

Postexpansion yearly local contribution (included in the regional and statewide totals):

- A total of 210 ongoing jobs and \$14.1 million in economic output

⁶ These totals include direct, indirect, and induced effects.

- Over \$1.7 million in annual state and local taxes, including nearly \$827,000 in property taxes (over \$707,000, or 4.6 percent, of local property taxes)

CAPITAL EXPENDITURES—2017

NWNA is currently spending \$36 million on the expansion of its facilities and using Michigan companies. Additionally, NWNA plans to spend \$2.4 million more on capital improvements this year, including work on Well 14. While these two spending items are not ongoing, they represent an important, if transitory, economic contribution. For 2017, the expansion of the Stanwood facility and other capital improvements results in the following economic contributions⁷:

Statewide contribution from capital expenditures:

- A total of 467 jobs and nearly \$67.6 million in economic output across the state
- Over \$2.3 million in state and local taxes

Regional contribution from capital expenditures (included in the statewide totals):

- A total of 240 jobs and nearly \$34.4 million of economic output in the five-county region
- Over \$1.1 million in taxes paid directly in the five-county region

Local contribution from capital expenditures (included in the regional and statewide totals):

- A total of 73 jobs, and \$10.1 million of the economic output occurs in the two-county region
- Over \$306,000 in taxes paid directly in Mecosta and Osceola Counties

⁷ The capital expenditures were estimated with a one-year time horizon. This may cover part of 2017 and 2018, with the economic contribution and tax payments split between tax years. If the construction spans more than one year, the total number of jobs created could be lower because one job may exist for two years as opposed to two jobs in one year. All values are reported in 2016 dollars.

OVERVIEW

NWNA's Michigan bottling facility, located in Stanwood, currently employs 281 residents and spends over \$51 million with Michigan businesses annually. They are in the process of seeking approval to increase the volume of water extracted from their White Pine Springs well from 250 gallons per minute to 400 gallons per minute. To accommodate this increased withdrawal and production of bottled water, NWNA is spending over \$38.4 million on construction and capital expenditures in 2017. After the facility expansion is complete, 20 new, ongoing jobs will be created in the region.

NWNA is interested in identifying their annual economic contribution to the state, regional, and local economy both before and after the current expansion. They also would like to document the economic contribution from the current construction and capital expenditures. NWNA provided detailed spending and employment data so that employment and spending could be allocated directly to the county in which it occurs. This report estimates the economic contributions of NWNA for Michigan, the region of Kent, Mecosta, Montcalm, Newaygo, and Osceola Counties, and the local community of Mecosta and Osceola Counties.

METHODOLOGY

NWNA employs Michigan residents and makes purchases with Michigan businesses to support its production and distribution of bottled water from its Stanwood facility. These activities contribute to the local, regional, and state economy.

There is a waterfall effect of economic activity that occurs around initial spending and employment. NWNA's direct employees spend a portion of their wages at Michigan businesses, supporting employment at those businesses. Those employees, in turn, spend a portion of their wages at Michigan businesses, supporting, still, more employees. Similarly, when NWNA makes purchases from Michigan vendors, it fosters employment at those vendors, and those vendor employees spend money in Michigan, which supports yet more employees. These follow-on spending activities gradually decline as spending leaks out of the region, is saved, or is paid in taxes. This additional economic activity, resulting from the spending of employees and spending at vendors, is known as the multiplier effect. This analysis estimates NWNA'S full economic contribution to the local communities, region, and state, including the multiplier effect.

This analysis investigates the positive economic contributions of NWNA. It does not attempt to estimate if some portion of these jobs would exist, even if the facility were not present, nor does it estimate any negative economic effects due to the withdrawal of water from the Michigan basin. Conservative estimates were used whenever possible to avoid overstating the contribution of NWNA.

IMPLAN MODEL

An input-output (I-O) model uses a series of multipliers to estimate the total value of these follow-on spending activities. It tracks how spending flows through interdependent industries to meet demand. This analysis uses the IMPLAN (contribution analysis for PLANning) I-O modeling system to estimate the total

contribution of employment and economic activity NWNA generates in Michigan, the region, and in local communities.⁸ The economic contribution is split into the following categories:

- **Direct effect**—The annual direct employment and spending of NWNA.
- **Indirect effect**—The annual employment and spending generated by NWNA through the purchase of goods and services.
- **Induced effect**—The annual effect on the economy from household spending of those directly or indirectly employed by NWNA activity. (As these employees spend money on goods and services, the resulting employment and spending generated is the induced effect.)

NWNA’s direct economic contribution includes operational and capital expenditures, salaries, and benefits paid to staff living in Michigan. The analysis also separately includes the expected change in employment due to the expansion of the Stanwood, Michigan facility. The operational expenditures were run using an industry spending pattern modified to match actual spending by NWNA in Michigan. Employment impacts were estimated using a labor income change model and were combined with the operational expenditures for a total yearly impact. Direct impacts on employment, income, and output were added to the estimated indirect and induced impacts for a total effect. Capital and construction expenditures for the 2017 expansion were calculated using an industry change model.

NWNA provided detail on their total employment, wages, location of employees, estimated sales and taxes for use in the model, and estimation of their contribution to the economy. In addition, NWNNA provided construction expenditures for the expansion of the Mecosta County factory and other capital expenditures for 2017. Operational and capital expenditures were analyzed separately in the IMPLAN model.

The NWNNA-related expenditures, included in the economic contribution analysis, are the following:

- NWNNA annual spending with Michigan businesses
- NWNNA total annual employment and wages by place of residence to allow for statewide, regional, and local analysis
- NWNNA capital expenditures (including construction spending)
- Expected increase in ongoing annual employment due to expansion

The IMPLAN model provides state, local, as well as federal tax payment estimates. Industry spending patterns and labor income change analyses do not estimate direct taxes due to the model’s design, so these need to be estimated separately. Direct tax payments by NWNNA employees were estimated using IMPLAN’s underlying social accounting matrix. NWNNA also provided tax payments for the direct tax impact related to yearly operations.

Results of each analysis are presented below and include the direct, indirect, induced, and total impact. Labor income is already included in the total economic output; they cannot be added together.

⁸ IMPLAN was developed by the U.S. Department of Agriculture in the 1970s and was further developed in the 1980s through a partnership with the University of Minnesota. It is currently owned by IMPLAN Group LLC in Huntersville, North Carolina. IMPLAN uses 536 industry classification to model the economy. Data are available at the national, state, county, and zip code level.

MODELING THE STATE, REGION, AND LOCAL COMMUNITY

To estimate NWNA's contribution in Michigan, we built three models in IMPLAN using county-level data. One analysis was run at the statewide level, a second at the regional level, and a third at the local community level. The total employees and wages by county were available for all employees living or working in Michigan. This detailed information allowed a precise split between resident and nonresident employees for each level on analysis (statewide, regional, or local contribution).

The region, defined as Mecosta, Osceola, Montcalm, Newaygo, and Kent Counties, is home to the majority of those directly employed by NWNA in Michigan (242 individuals or 86 percent).

The local community is made up of Mecosta and Osceola Counties, where a large share of employees resides (154 individuals or 55 percent) and where the plant and water withdrawals are primarily located. At the local level (Mecosta and Osceola Counties), the state and local property taxes are divided to show the estimated share paid at the local level. Tax information was pulled from the county assessor to identify how the total millage rate for NWNA is split between the state and the county/local community. An estimated 85.5 percent of NWNA's property taxes are local property taxes, which benefit the local community—the remainder goes to the state.

NWNA ECONOMIC CONTRIBUTION

CURRENT OPERATIONS

NWNA had 281 employees at the Stanwood facility. Although NWNA spent \$70.5 million in Michigan's economy during 2016, only \$51.3 million of this spending represented operational spending for ongoing activities. The remainder was related to transitory capital expenditures. Therefore, we use the \$51.3 million in ongoing purchases with Michigan businesses when estimating NWNA's yearly economic contribution. When combined with the \$15.7 million paid to employees, NWNA directly contributes a total of \$67.0 million to Michigan's economy each year. NWNA employs residents and purchases goods from across the state. We estimate the statewide, regional, and local contributions to gain a better understanding of not only NWNA's local contributions but also its contribution to the state overall.

Statewide

NWNA's purchases and employee spending contribute to Michigan's economy. The spending and purchases generate additional activity in Michigan through the multiplier effect discussed earlier. The average multiplier for NWNA statewide economic activity is 2.4—meaning that for every dollar of direct NWNA economic contribution in Michigan, an additional \$1.40 of indirect and induced economic activity was generated.

Including these multiplier effects, the total economic contribution of the NWNA to Michigan was approximately \$160.9 million in 2016. In addition to the 281 people directly employed by NWNA, the presence of the company created, roughly, 484 additional indirect and induced jobs—a total of 765 jobs in Michigan with an income of \$43.3 million. The NWNA generated approximately \$4.8 million in state and local taxes.

Exhibit 1 shows the direct, indirect, induced, and total employment and economic output contributions.

EXHIBIT 1. Statewide Annual Economic Contribution, Ongoing Operations

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	281	\$15.7	\$67.0
Indirect Effect	262	\$18.0	\$63.8
Induced Effect	222	\$9.6	\$30.1
Total Effect	765	\$43.3	\$160.9

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

NWNA generated a significant amount of tax revenue in Michigan. NWNA and its employees paid approximately \$1.5 million state and local taxes in 2016. The indirect and induced economic activity of the NWNA also results in tax payments—a total tax contribution of \$4.8 million. Of the total tax payments, an estimated \$1.8 million was paid in property taxes.

Region

The average multiplier for NWNA's regional economic activity is 1.9—meaning that for every dollar of direct NWNA economic contribution in the region, an additional \$0.90 of indirect and induced economic activity was generated.

Including these multiplier effects, the total economic contribution of the NWNA to the region was approximately \$35.4 million in 2016. The presence of the NWNA created roughly 370 jobs with an income of \$20.0 million in the region, including direct, indirect, and induced employment. The NWNA generated approximately \$2.4 million in state and local taxes, including \$949,000 in property taxes within the region.

EXHIBIT 2. Regional Annual Economic Contribution, Ongoing Operations

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	242	\$13.6	\$18.6
Indirect Effect	46	\$2.8	\$6.1
Induced Effect	82	\$3.6	\$10.7
Total Effect	370	\$20.0	\$35.4

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Local Community

The average multiplier for NWNA local economic activity is 1.49—meaning that for every dollar of direct NWNA economic contribution in the local area, an additional \$0.49 of indirect and induced economic activity was generated.

Including these multiplier effects, the total economic contribution of the NWNA to the local area was approximately \$13.2 million in 2016. The presence of the NWNA created roughly 199 jobs with an income of \$9.5 million in the local area, including direct, indirect, and induced employment. The NWNA generated approximately \$1.6 million in state and local taxes, including \$781,000 in property taxes within

the two-county area. Of the \$781,000 in property taxes paid to state and local governments, nearly \$667,000 is local property taxes, or 4.3 percent of the local property tax base.

EXHIBIT 3. Local Annual Economic Contribution, Ongoing Operations

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	154	\$8.1	\$8.9
Indirect Effect	14	\$0.4	\$0.8
Induced Effect	30	\$1.0	\$3.5
Total Effect	199	\$9.5	\$13.2

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

EXPANSION OF STANWOOD FACILITY

The expansion of the Stanwood facility in Mecosta County will result in the creation of 20 ongoing direct jobs in the region: an increase of 7.1 percent. This new ongoing employment will have additional yearly impacts on the statewide, regional, and local economies both directly and through induced impact on the economy. Additionally, local, regional, and statewide purchases by NWNA are expected to increase due to the higher production of the Stanwood facility. Because the increases in local purchases are unknown, this analysis conservatively assumes that there would be some economies of scale and that purchases would not increase by the same percentage as employment. This analysis assumes that there would be an increase in purchases with Michigan businesses of 3.5 percent—roughly half the increase in employment.

Statewide

Overall, 20 new ongoing jobs will be directly added due to the expansion of the Stanwood facility, and purchases with Michigan businesses are expected to increase by around 3.5 percent, or \$2.7 million statewide. These figures, when combined with the indirect and induced effects of employment and spending, result in a total economic contribution of 41 jobs, \$2.2 million in labor income, and 6.5 million in economic output in the state due to expansion. In addition, state and local tax revenue is expected to increase by approximately \$255,000.

EXHIBIT 4. Statewide Economic Contribution, Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	20	\$1.1	\$2.7
Indirect Effect	9	\$0.6	\$2.2
Induced Effect	12	\$0.5	\$1.6
Total Effect	41	\$2.2	\$6.5

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Region

While 20 new jobs will be directly added due to the expansion of the Stanwood facility, this analysis assumes that employees will reside within the region at the same rate as current employees.⁹ Seventeen of the 20 new employees are expected to reside within the region and contribute to the regional economy. Purchases with regional businesses are expected to increase by approximately 3.5 percent. These figures, combined with the indirect and induced effects of this employment and spending, results in a total economic contribution of 24 jobs with an income of \$1.3 million—a total economic output of \$2.1 million in the region due to expansion. In addition, state and local tax revenue is expected to increase by approximately \$155,000.

EXHIBIT 5. Regional Economic Contribution, Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	17	\$1.0	\$1.1
Indirect Effect	2	\$0.1	\$0.2
Induced Effect	5	\$0.2	\$0.7
Total Effect	24	\$1.3	\$2.1

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Local Community

Nine of the 20 new employees are expected to reside within the local area of Mecosta and Osceola Counties and contribute directly to the local economy. Purchases with local businesses are also expected to increase by approximately 3.5 percent. Combined with the indirect and induced effects of this increased employment and spending, the total economic contribution is 12 jobs, \$67,000 in labor income, and a total of \$877,000 in economic output in the local area due to expansion. In addition, state and local tax revenue are expected to increase by approximately \$96,000.

EXHIBIT 6. Local Economic Contribution, Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	9	\$0.6	\$0.6
Indirect Effect	1	\$0.01	\$0.03
Induced Effect	2	\$0.07	\$0.2
Total Effect	12	\$0.7	\$0.9

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

TOTAL CONTRIBUTION AFTER EXPANSION

Once Nwana has expanded its workforce (by 7.1 percent) and increased purchases with businesses in Michigan (by 3.5 percent), the yearly contribution to the state's economy will increase statewide and regional employment, output, and total taxes. This new yearly contribution is separate from any

⁹ All current employees were allocated to the county in which they reside. This same percentage split by county was used to estimate the regional/local impact of new employment.

construction or capital expenditures occurring in Michigan because of Nwana. Nwana is spending \$38.4 million on construction and capital expenditures in 2017 (the impact estimated above). Those impacts are not included in the estimated total yearly contribution postexpansion.

Statewide

Due to the expansion of the Stanwood facility, statewide employment will increase by 5.2 percent, output by 4.0 percent, and state and local taxes by 6.3 percent. In total, the annual contribution to Michigan's economy is expected to be 805 ongoing jobs with an income of \$45.6 million, a total economic contribution of \$167.4 million, and \$5.1 million in paid state and local taxes.

EXHIBIT 7. Statewide Annual Economic Contribution, Current Ongoing Plus Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	301	\$16.9	\$69.7
Indirect Effect	271	\$18.6	\$66.0
Induced Effect	234	\$10.1	\$31.7
Total Effect	805	\$45.6	\$167.4

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Region

Regional employment will increase by 6.2 percent, output by 5.6 percent, and state and local taxes by 4.2 percent due to the expansion of the Stanwood facility. In total, the annual contribution to the region's economy is expected to be 393 ongoing jobs with an income of \$21.3 million, a total economic contribution of \$37.4 million, and \$2.5 million in state and local taxes paid.

EXHIBIT 8. Regional Annual Economic Contribution, Current Ongoing Plus Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	259	\$14.6	\$19.7
Indirect Effect	47	\$2.9	\$6.3
Induced Effect	87	\$3.9	\$11.4
Total Effect	393	\$21.3	\$37.4

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Local Community

Local employment will increase by 5.8 percent, output by 6.6 percent, and state and local taxes by 6.3 percent due to the expansion of the Stanwood facility. In total, the annual contribution to the region's economy is expected to be 210 ongoing jobs with an income of \$10.2 million, a total economic contribution of \$14.1 million, and \$1.7 million in state and local taxes paid. Of the total paid in state and local taxes, nearly \$827,000 is estimated to be paid in property taxes, with over \$707,000 paid in local property taxes.

EXHIBIT 9. Local Annual Economic Contribution, Current Ongoing Plus Operational Expansion

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	163	\$8.7	\$9.5
Indirect Effect	15	\$0.4	\$0.8
Induced Effect	33	\$1.0	\$3.8
Total Effect	210	\$10.2	\$14.1

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

CAPITAL EXPENDITURES—2017

The purchase of equipment and software and spending on construction projects is examined separately from purchases and employment to better account for the way these expenditures flow through the economy. Capital expenditures can vary significantly year to year. In 2017, NWNA is spending \$38.4 million on capital expenditures (primarily construction) with Michigan companies.¹⁰

Construction expenditures create a unique situation when looking at a small geographic area. Construction that occurred in Mecosta and Osceola Counties, but were conducted by non-local companies, still contributed to the local economy. We assume that construction occurring locally, by vendors outside the local area, would have some effect on the local economy through the purchase of local goods and/or labor. This analysis assumes that construction expenditures over \$400,000 that occurred within the two-county region, but paid entirely to outside vendors, has a 20 percent local effect from the purchase of local supplies and/or labor. Construction using local vendors was apportioned 100 percent to the local area. Using this assumption, we estimate the direct economic contribution of NWNA capital spending, occurring within the two-county region, to be \$7.9 million. We estimate the regional direct contribution to be \$22.1 million.

¹⁰ The capital expenditures were estimated with a one-year time horizon. This may cover part of 2017 and 2018, with the economic contribution and tax payments split between tax years. If the construction spans more than one year, the total number of jobs created could be lower because one job may exist for two years as opposed to two jobs in one year. All values are reported in 2016 dollars.

Statewide

Construction spending, combined with other capital expenditures, will directly contribute \$38.4 million to the state's economy in 2017. Of the total economic output, \$23.9 million is in labor income for the 466 jobs created.¹¹ In addition, an estimated \$2.3 million will be paid in state and local taxes. The total economic contribution of NWNA capital expenditures, including the indirect and induced effects, is outlined in Exhibit 10 below:

EXHIBIT 10. Statewide Economic Contribution, Capital Expenditures for 2017

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	269	\$14.3	\$38.4
Indirect Effect	75	\$4.3	\$12.6
Induced Effect	122	\$5.3	\$16.6
Total Effect	467	\$23.9	\$67.6

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Region

After adjusting for the percentage of construction spending estimated to have occurred in the region, these expenses were combined with other capital expenditures for a total direct contribution of \$22.1 million to the region's economy. Of the total economic output, \$12.5 million is in labor income for the 240 jobs created. In addition, an estimated \$1.1 million will be paid in state and local taxes. The total contribution, including indirect and induced effects, is outlined in Exhibit 11 below:

EXHIBIT 11. Regional Economic Contribution, Capital Expenditures for 2017

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	152	\$8.1	\$22.1
Indirect Effect	37	\$2.0	\$5.6
Induced Effect	52	\$2.3	\$6.7
Total Effect	240	\$12.5	\$34.4

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

Local Community

After adjusting for the percentage of construction spending estimated to have occurred in the region, these expenses were combined with other capital expenditures for a total direct contribution of \$7.9 to the two-county region's economy. Of the total economic output, \$3.5 million is in labor income for the 73 jobs created. In addition, an estimated \$306,000 in taxes will be paid in state and local taxes. The total contribution, including indirect and induced effects, is outlined in Exhibit 12 below:

¹¹ If the construction spans more than one year, the total number of jobs created could be lower because one job may exist for two years as opposed to two jobs in one year.

EXHIBIT 12. Local Economic Contribution, Capital Expenditures for 2017

Contribution Type	Employment	Labor Income (millions of \$)	Economic Contribution (millions of \$)
Direct Effect	55	\$2.9	\$7.9
Indirect Effect	7	\$0.3	\$0.8
Induced Effect	11	\$0.4	\$1.3
Total Effect	73	\$3.5	\$10.1

Analysis by Public Sector Consultants Inc. Note: Totals may not sum due to rounding.

CONCLUSION

NWNA contributes employment, wages, economic output, and taxes to Mecosta and Osceola Counties, the broader region in which it resides, and the state overall. The planned expansion will more firmly establish NWNA as an employment base in the region. Statewide, NWNA will have an ongoing annual contribution of 805 employees with a total income of \$45.6 million, an economic output of \$167.4 million, and a \$5.1 million contribution in state and local taxes each year. The construction and capital expenditures related to the Stanwood facility expansion total \$38.4 million and contribute 467 jobs, \$23.9 million in employee income, \$67.6 million in economic output, and \$2.3 million in state and local taxes for 2017, statewide.¹²

¹² The capital expenditures were estimated with a one-year time horizon. This may cover part of 2017 and 2018, with the economic contribution and tax payments split between tax years. If the construction spans more than one year, the total number of jobs created could be lower because one job may exist for two years as opposed to two jobs in one year. All values are reported in 2016 dollars.



**PUBLIC SECTOR
CONSULTANTS**

230 N. Washington Square
Suite 300
Lansing, Michigan 48933