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# Economic Contribution of a Proposed Veterans Home in Fillmore County, Minnesota

**A Report of the Economic Impact Analysis Program**

**Authored by Brigid Tuck and Maryam Moeinian**



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A REPORT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

October 2017

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# Table of Contents

- EXECUTIVE SUMMARY** **1**
  
- PROJECT BACKGROUND** **2**
  
- TOTAL ECONOMIC CONTRIBUTION** **2**
  - Construction Impacts 2
    - Direct Effect 3
    - Indirect and Induced Effects 4
    - Total Effects 4
  - Top Industries Impacted 5
  - Operation Impacts 6
    - Direct Effect 6
    - Indirect and Induced Effects 7
    - Total Effects 7
  - Top Industries Impacted 7
  
- EMPLOYMENT CONSIDERATIONS** **8**
  - Availability of Nursing Assistants 10
  - Availability of Registered Nurses 12
  - Availability of Licensed Practical and Licensed Vocational Nurses 13
  
- POTENTIAL VETERANS HOME IN CONTEXT OF THE FILLMORE COUNTY ECONOMY** **14**
  
- APPENDIX 1: METHODS AND TERMS** **16**
  
- APPENDIX 2: CURRENT VETERANS HOMES BUDGETS** **18**
  
- APPENDIX 3: ECONOMIC CONTRIBUTION IN FIVE-COUNTY REGION** **19**



## EXECUTIVE SUMMARY: ECONOMIC CONTRIBUTION OF A PROPOSED VETERANS HOME IN FILLMORE COUNTY, MINNESOTA

Fillmore County recognizes the need for long-term health care for veterans in the region. A recent needs assessment indicates nearly 23,000 veterans over the age of 65 live within an hour and a half of the county. As these veterans age, they will need ongoing health care. Several communities in Fillmore County are jointly exploring the idea of supporting a veterans home. They are interested in understanding the impact of a veterans home on the Fillmore County economy.

To help measure this impact, Fillmore County hired University of Minnesota Extension to conduct an economic contribution study.

**Proposed Veterans Home:** Fillmore County is proposing a 72-bed veterans home. Construction is expected to cost \$30 million. Once operational, the facility is projected to employ 140 workers (full- and part-time).

**Construction Impacts:** Construction of a 72-bed veterans home will generate an estimated \$35.8 million of economic activity, including \$9.5 million of labor income, in the county. It will create employment opportunities for an estimated 234 people. These figures include both site construction and the impact on industries supplying the construction firm and its employees.

Directly, construction is anticipated to cost \$30 million. The construction firms will employ an estimated 180 workers. The jobs will pay an estimated \$7.8 million in labor income.

Construction will impact the economy during the facility's building phase. Once construction is complete, the effects will dissipate.

**Operations Impacts:** The day-to-day operations of the facility will generate ongoing economic impacts. In total, veterans home operations in Fillmore County will generate an estimated \$10.2 million of economic activity annually. This includes \$6.8 million in labor income. The facility will support employment for an estimated 166 people. These figures include facility operations and the impact on industries supplying the facility and its employees.

Directly, the veterans home itself will spend \$7.3 million to operate in the county. The majority of this, \$6.2 million, will be labor payments. The facility will employ 140 people.

**Workforce Availability:** As of April 2017, Minnesota's unemployment rate was 3.8 percent. The fastest growing industry in the state is health care, expanding at a rate of 50 percent between 2001 and 2016. Knowing this, Extension explored the availability of skilled labor for a proposed veterans home in the region. Findings indicate there are health care workers with the necessary skills living in Fillmore County. On average, however, wages are lower in the county compared to the region. Thus, workforce recruitment may be an issue for the facility. Local colleges and universities have pledged support to train future workers for the veterans home.

**Study Notes:** The study area for this analysis is Fillmore County. Extension used the input-output model, IMPLAN, to conduct the analysis.



## PROJECT BACKGROUND

Fillmore County recognizes the need for long-term health care for veterans in the region. Based on a recent needs assessment, nearly 23,000 veterans over the age of 65 live within an hour and a half of the county.<sup>1</sup> As these veterans age, they will need ongoing health care. Several communities in Fillmore County are jointly exploring the idea of supporting a veterans home. They are interested in understanding the impact of a veterans home on the Fillmore County economy.

Fillmore County is proposing a 72-bed veterans home. Construction is expected to cost \$30 million. Once operational, the facility is projected to employ 140 workers (full- and part-time).

To help measure the impact of a veterans home, Fillmore County hired University of Minnesota Extension to conduct an economic contribution study. The study area for this analysis is Fillmore County. Extension used the input-output model, IMPLAN, to conduct the analysis. Input-output models trace the flow of goods and services through an economy. They are used to estimate how a change in one part of the economy will affect another. The IMPLAN model measures changes in output, employment, and labor income.<sup>2</sup>

## TOTAL ECONOMIC CONTRIBUTION

Economic contribution is comprised of direct, indirect, and induced effects (see Appendix 1 for definitions). The following section describes how each of these effects was quantified.

A new veterans home will create both short and long-term impacts on the economy. Initially, construction activity will impact the economy. Once construction is complete, these effects will dissipate. Following construction, the veterans home will begin daily operations. Operation effects will be long-term, occurring annually, as long as the home operates at projected levels.

Because of temporal differences, the contribution of construction and operations are analyzed separately.

## CONSTRUCTION IMPACTS

Estimates indicate constructing a 72-bed veterans home in Fillmore County will cost \$30.0 million.<sup>3</sup> Included in these cost estimates are design and oversight, site improvements, construction, and furnishing. Given ratios from previous veterans home projects<sup>4</sup>, an estimated \$23.9 million of the costs will be for direct construction (Table 1).

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<sup>1</sup> Retrieved from <http://www.house.leg.state.mn.us/comm/docs/cd78d9f7-76e2-460e-8bf1-19c36647cec0.pdf>

<sup>2</sup> IMPLAN version 3.0, with Type SAM multipliers was used in this study. Learn more at [www.implan.com](http://www.implan.com). Extension used the analysis-by-parts modeling technique for this analysis.

<sup>3</sup> Construction are costs based on cost recommendations provided by the Minnesota Department of Veterans Affairs.

<sup>4</sup> From personal communication with Wisconsin Department of Veterans Affairs

**Table 1: Proposed Construction Costs for a New Veterans Home in Fillmore County, Minnesota**

| Category             | Proposed Cost       |
|----------------------|---------------------|
| Design and oversight | \$2,850,000         |
| Site improvements    | \$1,650,000         |
| Construction         | \$23,850,000        |
| Furnishings          | \$1,650,000         |
| <b>Total</b>         | <b>\$30,000,000</b> |

Extension estimates are based on recommendations from the Minnesota Department of Veterans Affairs and data from the Wisconsin Department of Veterans Affairs.

### Direct Effect

The direct construction effect includes the expenditure, employment, and labor income required to build the facility. Total construction costs are estimated at \$30.0 million. However, not all expenditures will occur within Fillmore County. In input-output theory, all direct construction costs (design, improvements, and construction work) are considered local expenditures, regardless of firm headquarters. This is because construction occurs at the site location. Items like furnishings, however, are not necessarily considered local. In this instance, furnishings will not likely be purchased or manufactured in Fillmore County, as these items are highly specialized for medical facilities.

After removing furnishings from the direct effect, an estimated \$28.4 million will be spent in Fillmore County to construct the veterans home (Table 2). For the direct effect, total sales are equal to the expenditures for this project. Since labor payments are part of expenditures, by definition, output includes labor income.

**Table 2: Direct Effect of Proposed Construction of a Veterans Home in Fillmore County, Minnesota**

|                         | Direct Effect |
|-------------------------|---------------|
| Output (millions)       | \$28.4        |
| Labor Income (millions) | \$7.8         |
| Employment              | 180           |

Estimates by University of Minnesota Extension

Based on the IMPLAN model, spending of \$28.4 million will require an estimated 180 construction employees. Construction firms will pay an estimated \$9.5 million in labor income to complete the project.

**Indirect and Induced Effects**

Input-output models trace the flow of dollars throughout a local economy and capture the indirect and induced, or secondary, effects of an economic activity. To quantify the indirect and induced effects of construction for a veterans home, the direct effects were entered into the input-output model, IMPLAN.

**Indirect effects** are those associated with a change in economic activity due to spending for goods and services directly tied to the industry. In this case, these are the changes in the local economy occurring because construction firms purchase goods (e.g., cement, wood, and nails) and related services (e.g., landscaping, accounting, and legal). As construction firms make purchases, this creates an increase in purchases across the supply chain. Indirect effects are the summary of these changes across an economy.

**Induced effects** are those associated with a change in economic activity due to spending by the employees of businesses (labor) and by households. These are economic changes related to spending by people directly employed to construct the veterans home. Induced effects also include household spending related to indirect effects.

Indirect and induced impacts only reflect spending within the study area (in this instance, Fillmore County). Expenditures by the construction firm and its employees outside of Fillmore County do not create these effects in the county. The input-output model adjusts accordingly. A discussion of indirect and induced effects, as well as total effects, follows.

**Total Effects**

In total, constructing a 72-bed veterans home in Fillmore County would create an estimated \$35.3 million of economic activity (output) in the county (Table 3). Here, output includes total sales from both the construction and across supporting industries. Labor income is also considered part of output.

**Table 3: Total Economic Contribution of Construction of a Proposed Veterans Home in Fillmore County, Minnesota**

|                         | <b>Direct Effect</b> | <b>Indirect Effects</b> | <b>Induced Effects</b> | <b>Total Effect</b> |
|-------------------------|----------------------|-------------------------|------------------------|---------------------|
| Output (millions)       | \$28.4               | \$3.7                   | \$3.2                  | \$35.3              |
| Labor Income (millions) | \$7.8                | \$1.0                   | \$0.7                  | \$9.5               |
| Employment              | 180                  | 27                      | 27                     | 234                 |

Estimates by University of Minnesota Extension

Construction of the veterans home would support an estimated 234 jobs, paying a total of \$9.4 million in labor income.<sup>5</sup>

These effects would occur during the construction phase of the project. Once construction ends, the effects will dissipate.

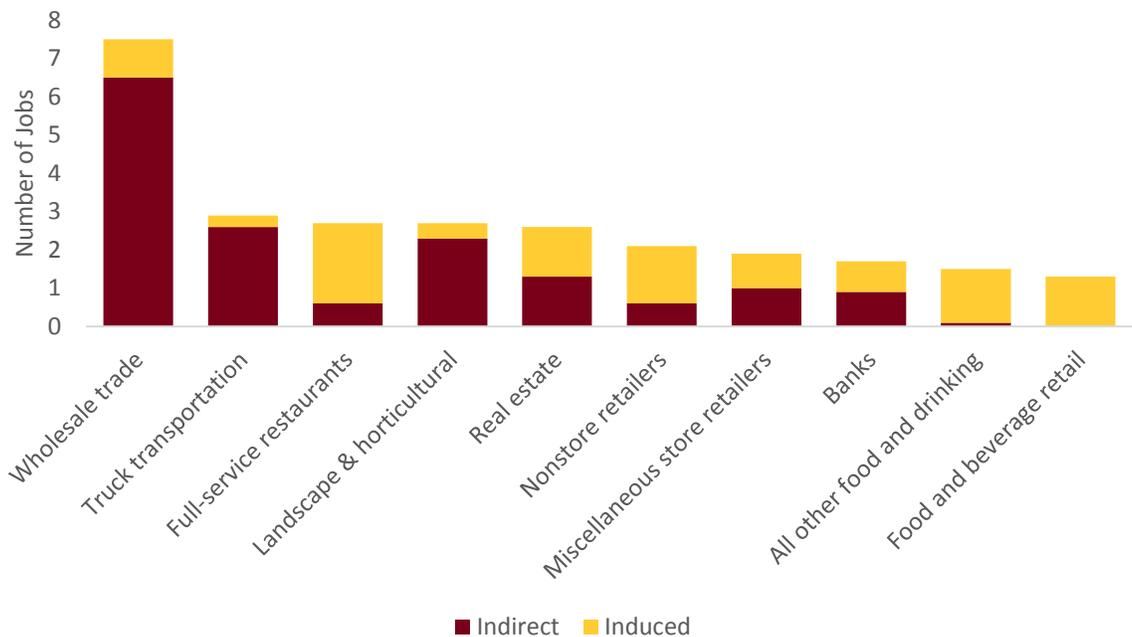
### Top Industries Impacted

Of the estimated 234 jobs generated during construction, 180 will be at the veterans home construction site. The other 54 jobs will be at industries across the economy. The highest ripple effects will be in the wholesale trade sector (Chart 1). Full-service restaurants and real estate are other industries with high potential impacts.

The wholesale trade sector “comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries such as publishing”.<sup>6</sup> Many construction inputs come from manufacturers through a wholesale trader to the construction firm.

Since workers may be temporarily residing in the area during the construction phase, impacts are noticeable on areas such as restaurants and real estate. Real estate would include temporary housing for workers.

**Chart 1: Top Ten Industries Impacted by the Potential Construction of a Veterans Home in Fillmore County, Minnesota**



<sup>5</sup> Jobs include the number of positions in the county. Workers from outside the county could fill the positions.

<sup>6</sup> United States Bureau of Labor Statistics, <https://www.bls.gov/iag/tgs/iag42.htm>

## OPERATION IMPACTS

Once construction is complete, the new veterans home will begin operations. Day-to-day operations will generate activity as the facility purchases goods and services and employees spend their wages in the county.

### Direct Effect

The direct effect of a new veterans home in Fillmore County is the facility's annual spending. As the facility is still in the design phase, operational projects have yet to be developed. However, several veterans homes currently operate in Minnesota. The Fillmore County project is anticipated to be similar in size and operation to both the Luverne (85 beds) and Silver Bay facilities (89 beds).

Given these anticipated similarities, the budgets for Luverne and Silver Bay were used to determine projected operational expenditures. Both facilities were subject to a financial audit in 2013 by the State of Minnesota's Office of the Legislative Auditor. During each facility's review, annual operating budgets were published (see Appendix 2).

Using these two budgets, Extension estimated operating costs per bed. This figure was then applied to Fillmore County's anticipated 72 beds to create a projected cost to operate a veterans home. In addition, since the budgets were for the 2012 fiscal year, the figures were adjusted to 2017 dollars using the Consumer Price Index (CPI).<sup>7</sup>

In 2008, Extension conducted a study on a proposed veterans home in Montevideo, Minnesota. In that project, Extension accessed the Luverne facility's 2007 budget. When comparing the 2007 budget to the 2012 budget, it was evident costs at the Luverne facility increased by slightly less than the CPI. This suggests the Consumer Price Index is an acceptable tool for measuring potential cost increases.<sup>8</sup>

Given the above budgets, a 72-bed veterans home in Fillmore County will cost an estimated \$7.3 million to operate annually (Table 4). Total payroll will be an estimated \$6.2 million.

**Table 4: Direct Effect of a Potential Veterans Homes Operations in Fillmore County, Minnesota**

|                         | Direct Effect |
|-------------------------|---------------|
| Output (millions)       | \$7.3         |
| Labor Income (millions) | \$6.2         |
| Employment              | 140           |

Estimates by University of Minnesota Extension

<sup>7</sup> Bureau of Labor Statistics. Available at <https://data.bls.gov/cgi-bin/cpicalc.pl>.

<sup>8</sup> Extension's 2008 study is available at <http://www.extension.umn.edu/community/economic-impact-analysis/reports/docs/2008-EIA-VeteransHome-Montevideo.pdf>

The budgets from the financial audit, however, did not include employment estimates. Based on conversations with the Minnesota Department of Veterans Affairs and other operations, the Spring Valley and Preston EDAs anticipate the facility would employ 140 full- and part-time employees.

### Indirect and Induced Effects

As explained previously, the indirect and induced effects in this study were calculated using the input-output model, IMPLAN.

### Total Effects

A proposed veterans home in Fillmore County would generate an estimated \$10.2 million in economic activity annually (Table 5). This includes \$6.8 million in labor income. In addition, the veterans home will support employment for 166 people in the county.

**Table 5: Total Economic Contribution of a Proposed Veterans Home Operation in Fillmore County, Minnesota**

|                         | Direct Effect | Indirect Effects | Induced Effects | Total Effects |
|-------------------------|---------------|------------------|-----------------|---------------|
| Output (millions)       | \$7.3         | \$0.16           | \$2.7           | \$10.2        |
| Labor Income (millions) | \$6.2         | \$0.03           | \$0.6           | \$6.8         |
| Employment              | 140           | 2                | 24              | 166           |

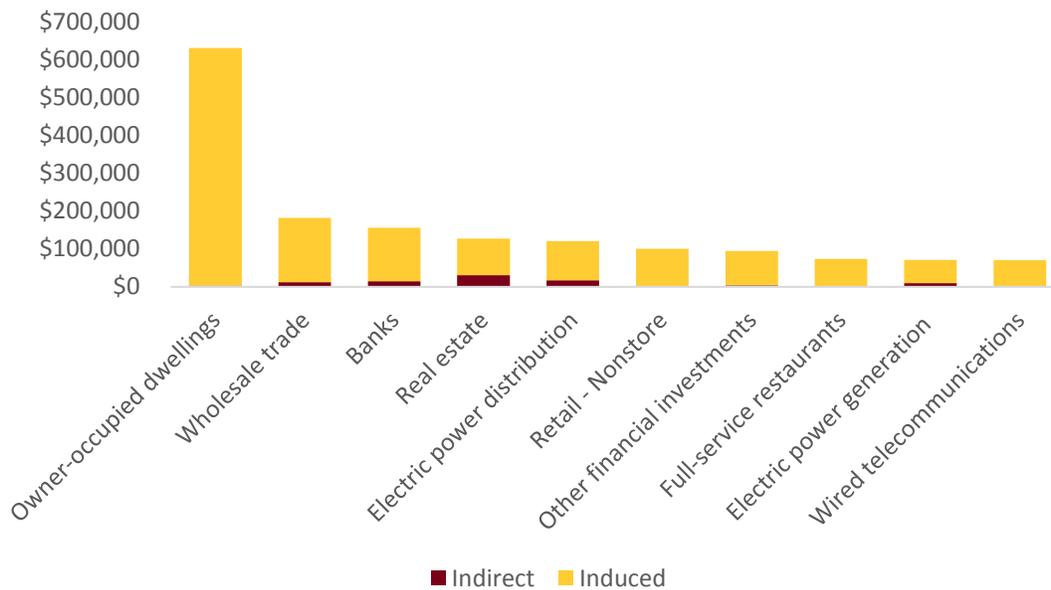
Extension by University of Minnesota Extension

### Top Industries Impacted

Of the \$10.2 million of annual economic activity created by potential veterans home, \$7.3 million will be generated by the veterans home itself. Thus, \$2.9 million will be generated at businesses across the county. The majority of these additional effects are induced in nature (Chart 2). This is because most of the spending by the veterans home will be on payroll, and consequently, most of the additional activity in the economy will be stimulated by employee spending.<sup>9</sup>

<sup>9</sup> As noted earlier, the indirect and induced effects are only those generated by spending within the county. The model accounts for leakages (or spending outside of the county).

**Chart 2: Top Industries Impacted by a Potential 72 Bed Veterans Home in Fillmore County Minnesota**



The largest impact is in the owner-occupied dwellings sector. This sector accounts for housing payments—essentially mortgages. Since housing is the largest portion of a typical household budget, it is not surprising to observe a significant impact in this sector. Other industries benefiting most directly from the veterans home include wholesale trade and banking.

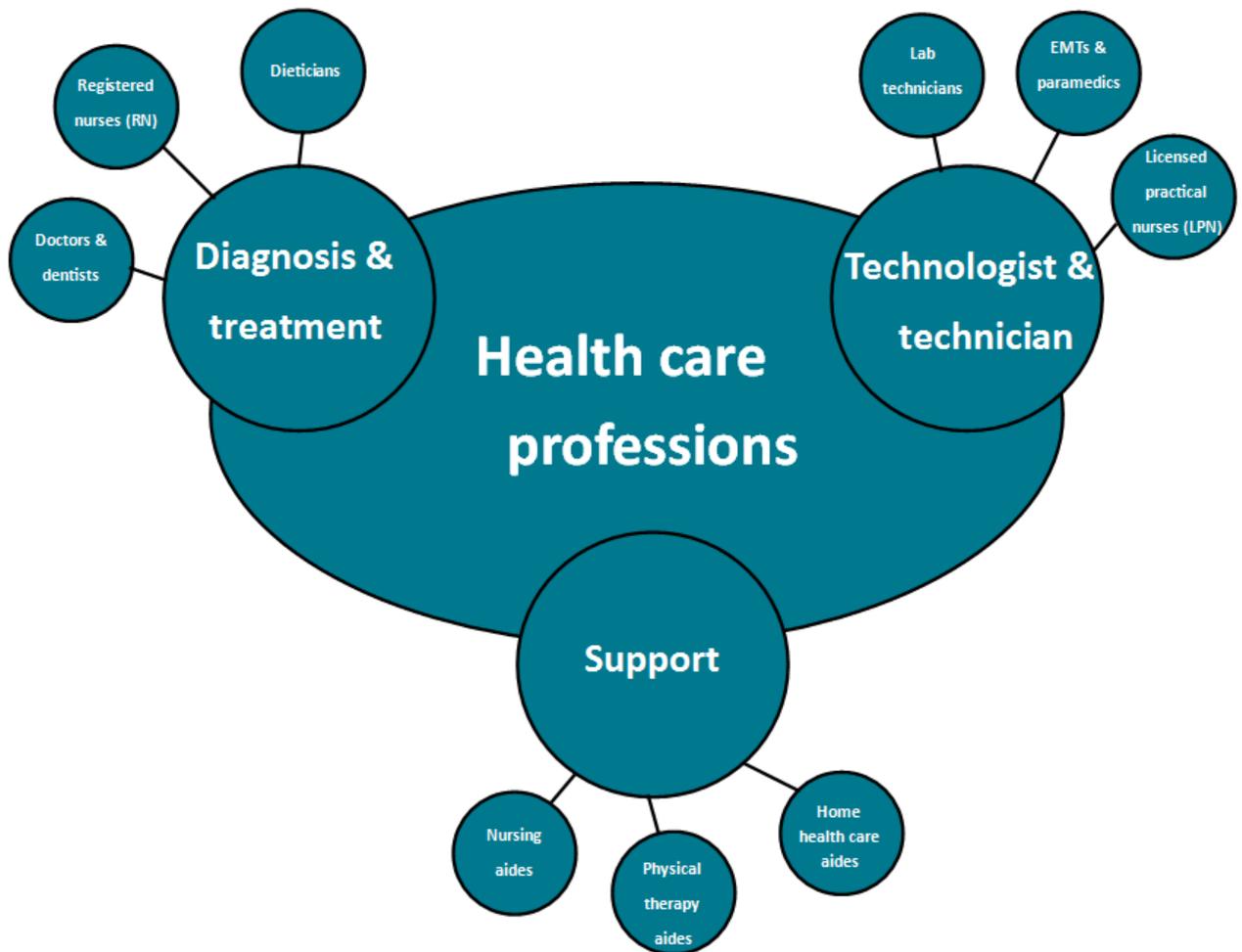
### EMPLOYMENT CONSIDERATIONS

As of April 2017, Minnesota’s unemployment rate was 3.8 percent.<sup>10</sup> The fastest growing industry in the state is health care. The industry added 155,000 jobs between 2001 and 2016, a 50 percent growth rate. Knowing this, Extension explored the availability of skilled labor for a proposed veterans home in the region.

Health care professions can be divided into three groups: diagnosis and treatment, technologists and technicians, and support (Chart 3). Included in diagnosis and treatment are doctors, dentists, dietitians, registered nurses, and nurse practitioners. Within the technologist and technicians group are lab techs, emergency medical technicians and paramedics, licensed practical nurses, and dental hygienists. Healthcare support encompasses nursing and home health aides and occupational and physical therapy assistants and aides.

<sup>10</sup> Unemployment rates are seasonally adjusted from the Department of Employment and Economic Development, <https://mn.gov/deed/data/current-econ-highlights/county-unemployment.jsp>

**Chart 3: Health Care Professions**



A proposed veterans home in Fillmore County would likely hire professionals from within each of the above categories. According to the EMSI database, the top five occupations employed by nursing and residential care homes are nursing assistants, registered nurses, food servers, and maids and housekeeping cleaners (Table 6).<sup>11</sup> Nursing assistants comprise the largest portion of jobs, accounting for 52 percent of the top five jobs. Registered nurses account for 16 percent.

The most critical positions to hire for a veterans home would likely be nursing assistants and registered nurses.

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<sup>11</sup> EMSI is a private subscription employment and occupational database. The occupational data is primarily drawn from the Bureau of Labor Statistics Occupational Employment Statistics. For more on the data sources, visit [www.economicmodeling.com](http://www.economicmodeling.com).

**Table 6: Top Five Occupations in Nursing and Residential Care Facilities**

| <b>Occupation</b>                      | <b>Number of Jobs in Five-County Region</b> | <b>Percent of Top Five Jobs<sup>12</sup></b> | <b>Potential Number of Employees Needed at Fillmore County VA Home</b> |
|--|---|--|--|
| Nursing assistants                     | 859   | 52%  | 65-75  |
| Registered nurses                      | 263   | 16%  | 20-25  |
| Licensed practical & vocational nurses | 222   | 14%  | 15-20  |
| Food servers, non-restaurant           | 182   | 11%  | 10-15  |
| Maids and housekeeping cleaners        | 118   | 7%   | 5-10   |
| <b>Total</b>                           | <b>1,644</b>                                | <b>100%</b>                                  | <b>115-145</b>   |

Source: EMSI, Inc.

In the following analysis, two workforce areas are considered. First, the analysis will show occupational trends in Fillmore County. Second, it will show trends in the five-county region (Fillmore, Houston, Mower, Olmsted, and Winona counties). Iowa and Wisconsin counties are not included in the analysis, as Extension does not have a subscription to access their data. Current commuting patterns, however, show a limited inflow of workers from these states into Fillmore County (2.4 percent of workers from Iowa and 0.6 percent from Wisconsin).<sup>13</sup> While it is possible workers may come from Iowa and Wisconsin counties, the primary labor shed for Fillmore County will be people from Minnesota counties.

### **Availability of Nursing Assistants**

Nursing assistants are classified as a health care support occupation. Table 7 provides the following insights for the availability of health care support workers in Fillmore County and the five-county region.

- The number of health care support jobs in Fillmore County has declined over time, and this is expected to continue. The total number of jobs is predicted to decrease by 23 percent between 2001 and 2026.
- Currently, competition is weak for health care support workers in Fillmore County. The number of times a position is advertised to fill one unique job is four. This is less than the average across all occupations, indicating employers are not working as hard to hire an employee. (In this case, the number of times/places a single job opening is advertised or posted is used as a

<sup>12</sup> Potential number of employees based on percent of top five jobs. There are more positions than the top five; these figures are provided to give a sense of the number of people that may need to be hired.

<sup>13</sup> On the Map, United States Census Bureau, <https://onthemap.ces.census.gov/>

measure of how difficult it is to find a qualified employee. More job postings are seen as a business having more difficulty in hiring).

- Skilled health care support workers do live in Fillmore County, but many work elsewhere. In 2016, 243 workers commuted to other counties to work. There are 250 jobs in health care support in the county.
- Within the five-county region, however, there is growth and competition in this occupation. The number of health care support jobs is expected to grow by 50 percent between 2001 and 2026. The region is also a net importer of workers, drawing people from other areas to work in the occupation.
- Wages are lower in Fillmore County than the five-county region. The county’s health support jobs pay an average of \$1.92 (12 percent) lower per hour.<sup>14</sup>
- A typical entry-level position requires post-secondary education and training but not a formal degree. There are local programs available to provide the necessary educational training. Several local schools and colleges have committed to increasing training opportunities in the region to meet the potential needs of a veterans home. For example, Spring Valley High School has proposed a nursing assistant training program within the school curriculum. Rochester Community and Technical College have also pledged to help train workers to meet the needs of veterans.

Based on this information, it appears there are skilled, available health care support workers in Fillmore County. It will be critical to recruit these workers for employment at a potential veterans home.

**Table 7: Health Care Support Occupations and Trends, Fillmore County and the Five-County Region**

|                            | Fillmore County | Five-County Region |
|----------------------------|-----------------|--------------------|
| Jobs, 2001                 | 298             | 5,545              |
| Jobs, 2016                 | 250             | 7,389              |
| Projected jobs, 2026       | 230             | 8,280              |
| Unique postings, 2011-2017 | 29              | 3,389              |
| Posting intensity*         | 4:1             | 13:1               |
| <b>2016 Net Commuters*</b> | <b>-243</b>     | <b>550</b>         |
| Median hourly earnings     | \$13.93         | \$15.85            |

<sup>14</sup> Median hourly earnings do not include benefits. A veterans home may offer different benefit packages than other residential and nursing care facilities.

| Typical entry level education | Postsecondary nondegree award |   |
|-------------------------------|-------------------------------|---|
| Occupational programs         | 0                             | 2 |

Source: EMSI, Inc.

\*Posting intensity is the number of times a job is posted for each unique job opening. The regional average across all jobs is 6:1.

\*A negative net commuting number indicates people commute out of the region for the occupation. A positive means they commute in.

### Availability of Registered Nurses

Registered nurses are classified as a diagnosis and treatment occupation. Table 8 provides the following insights for the availability of diagnosis and treatment workers in Fillmore county and the five-county region.

- The number of diagnosis and treatment jobs are declining in Fillmore County. Between 2001 and 2016, the job loss rate was 15 percent.
- Currently, competition for diagnosis and treatment workers is somewhat strong. On average, there are seven job postings for each unique position. This compares to a 6:1 ratio across all occupations, indicating it is slightly harder to hire someone in this category. Employers have to post or advertise a job in this field more frequently than other jobs.
- Skilled diagnostic and treatment workers do live in Fillmore County, but many work elsewhere. In 2016, 586 people commuted out of the county to work.
- Regionally, however, there is growth and competition in this occupation. The number of diagnosis and treatment jobs is expected to grow by 56 percent between 2001 and 2026. The region is also a net importer of workers, drawing people from other areas to work in the occupation.
- Wages are lower in Fillmore County than the five-county region. Fillmore County diagnostic and treatment jobs pay an average of \$11.08 (25 percent) lower per hour.
- A typical entry-level position requires a bachelor’s degree. Local programs are available that provide the necessary educational degree.

Fillmore County has nearly 600 skilled diagnosis and treatment professionals that leave the county to work. These individuals could provide a potential workforce for the veterans home. However, the relatively lower hourly wages in Fillmore County may make it difficult to recruit talent. Given the wage differential between the county and the five-county region, wage pressure is likely. Workers may be available, but higher wages may be required to recruit them to work in the county.

However, workers will consider the entire “package” when selecting a job—wages, salaries, benefits, commuting distance, and reputation of employer. The veterans home may be able to offset lower wages with more compelling incentives.

**Table 8: Diagnosis and Treatment Occupations and Trends, Fillmore County and the Five-County Region**

|                               | Fillmore County   | Five County Region |
|-------------------------------|-------------------|--------------------|
| Jobs, 2001                    | 175               | 10,617             |
| Jobs, 2016                    | 157               | 14,723             |
| Projected jobs, 2026          | 148               | 16,581             |
| Unique postings               | 1,838             | 52,984             |
| Posting intensity             | 7:1               | 7:1                |
| <b>2016 Net Commuters</b>     | <b>-586</b>       | <b>1,869</b>       |
| Median hourly earnings        | \$33.25           | \$44.33            |
| Typical entry level education | Bachelor's degree |                    |
| Occupational programs         | 0                 | 20                 |

Source: EMSI, Inc.

### Availability of Licensed Practical and Licensed Vocational Nurses

Licensed practical and licensed vocational nurses are classified as a technologist and technicians occupation. Table 9 provides an overview of the occupation in Fillmore County and the five-county region.

- The number of technologist and technicians jobs are declining in Fillmore County. Between 2001 and 2016, the job loss rate was 24 percent.
- Currently, competition for diagnosis and treatment workers is low. On average, there are three job postings for each unique position. This compares to a 6:1 ratio across all occupations, indicating it is comparatively easier to hire someone in this category. Employers do not have to advertise or post jobs as many times to attract a potential hire.
- Skilled technologist and technician workers live in Fillmore County, but many work elsewhere. In 2016, 280 people commuted out of the county to work.
- Regionally, however, there is growth and competition in this occupation. The number of diagnosis and treatment jobs is expected to grow by 48 percent between 2001 and 2026. The region is also a net importer of workers, drawing people from other areas to work in the occupation.

- Wages are lower in Fillmore County than the five-county region. Fillmore County technologist and technician jobs pay an average of \$5.92 (25 percent) less per hour compared to the regional wage.
- A typical entry-level position requires post-secondary training but not a formal degree. Programs are available in the region that provide the necessary training.

Fillmore County has 280 skilled technologist and technicians living in the county that commute out to work. These individuals could provide a potential workforce for the veterans home. However, the relatively lower hourly wages in Fillmore County may make it more difficult to recruit talent.

**Table 9: Technologists and Technicians Occupations and Trends, Fillmore County and the Five-County Region**

|                               | Fillmore<br>County            | Five County<br>Region |
|-------------------------------|-------------------------------|-----------------------|
| Jobs, 2001                    | 110                           | 5,155                 |
| Jobs, 2016                    | 84                            | 6,910                 |
| Projected jobs, 2026          | 78                            | 7,625                 |
| Unique postings               | 149                           | 14,467                |
| Posting Intensity             | 3:1                           | 6:1                   |
| <b>2016 Net Commuters</b>     | <b>-280</b>                   | <b>772</b>            |
| Median hourly earnings        | \$17.90                       | \$23.82               |
| Typical entry level education | Postsecondary nondegree award |                       |
| Occupational programs         | 0                             | 28                    |

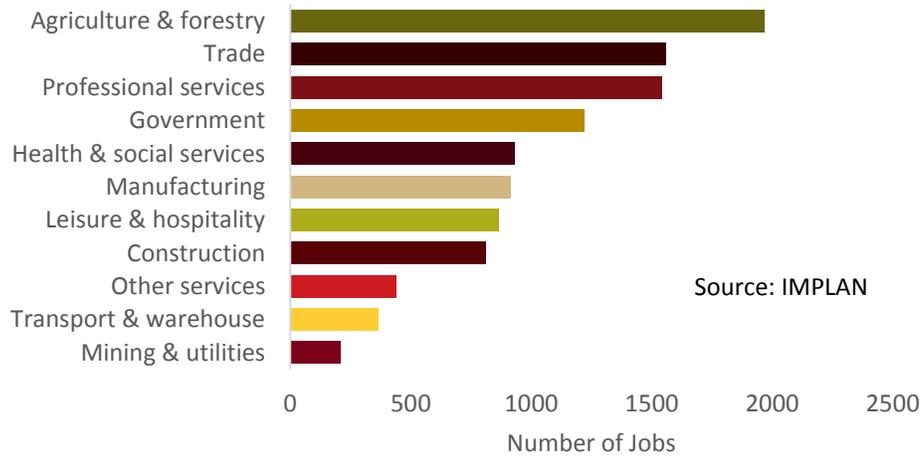
Source: EMSI, Inc.

## POTENTIAL VETERANS HOME IN CONTEXT OF THE FILLMORE COUNTY ECONOMY

In 2015, businesses and enterprises in Fillmore County employed 10,800 people.<sup>15</sup> Nearly 2,000 of those employed were in the agriculture and forestry industry (Chart 4). Other large industries include trade and professional services. Slightly more than 900 people were employed in the health care and social services industry (the industry in which a potential veterans home would operate).

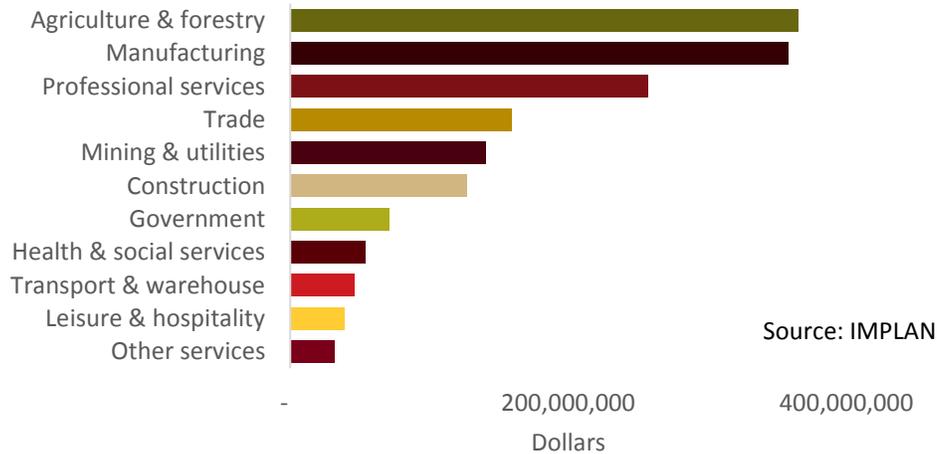
<sup>15</sup> 2015 is the most recent data available for the IMPLAN model.

**Chart 4: Employment by Industry, Fillmore County, 2015**



In 2015, businesses and enterprises produced \$1.7 billion of output. As with employment, the largest industry was agriculture and forestry (Chart 5). Manufacturing is the second largest industry, followed by professional services. Health and social services businesses produced \$54.2 million in output.

**Chart 5: Output by Industry, Fillmore County, 2015**



## APPENDIX 1: METHODS AND TERMS

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available, and IMPLAN (Impact Analysis for PLANning, MIG, Inc.) is one such model. Many economists use IMPLAN for economic contribution analysis because it can measure output and employment impacts, is available on a county-by-county basis, and is flexible for the user. While IMPLAN has some limitations and qualifications, it is one of the best tools available to economists for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations helps ensure the best results from the model.

One of the most critical aspects of understanding economic impact analysis is the distinction between the “local” and “non-local” economy. The local economy is identified as part of the model-building process. Either the group requesting the study or the analyst defines the local area. Typically, the study area (the local economy) is a county or a group of counties that share economic linkages. In this report, the study area is Fillmore County.

A few definitions are essential to properly interpret the results of an IMPLAN analysis. These terms and their definitions are provided below.

### Output

Output is measured in dollars and is equivalent to total sales. The output measure can include significant “double counting.” Think of limestone, for example. The value of limestone is counted when it is sold as a component in the manufacturing of cement, again when the cement is sold to the contractor, and yet again when the contractor charges the building owner. The value of the limestone is built into the price of each of these items, and then the sale of each of item is added to determine total sales (or output).

### Employment

IMPLAN includes total wage and salaried employees, as well as the self-employed, in employment estimates. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

### Labor Income

Labor income measures the value added to the product by the labor component. So, in the limestone example, when the limestone is sold to the cement manufacturing company, a certain percentage of the sale is for the labor to quarry the limestone. Then when the cement is sold to the contractor, it includes some markup for its labor costs in the price. When the contractor charges the building owner, he/she includes a value for the labor. These individual value increments for labor can be measured, which amounts to labor income. Labor income does *not* include double counting.

Labor income includes both employee compensation and proprietor income. It is measured as wages, salaries, and benefits.

### Direct Impact

Direct impact is equivalent to the initial activity in the economy. In this study, it is the construction and operational spending for a proposed veterans home.

### **Indirect Impact**

The indirect impact is the summation of changes in the local economy that occur due to spending for inputs (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase in output by the plant. As the plant increases output, it must also purchase more inputs, such as electricity, steel, and equipment. As the plant increases purchases of these items, its suppliers must also increase production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts derive from spending by the construction firms to purchase construction materials (lumber, cement, equipment, and so forth) and construction-related services (e.g., architectural and engineering).

### **Induced Impact**

The induced impact is the summation of changes in the local economy that occur due to spending by labor—that is, spending by employees in the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have more money to spend on housing, groceries, and going out to dinner. As they spend their new income, more activity occurs in the local economy. This can be quantified and is called the induced impact. In this study, the induced impacts include economic changes related to spending by construction workers hired to build a veterans home.

### **Total Impact**

The total impact is the summation of the direct, indirect, and induced impacts.

## APPENDIX 2: CURRENT VETERANS HOME BUDGETS

**Table A1: Minnesota Veterans Home at Luverne: Expenditures, July 1, 2011 to June 30, 2013**

|  | 2012               | 2013               |
|--|--------------------|--------------------|
| Payroll                                  | \$6,856,505        | \$7,241,633        |
| Supplies                                 | 486,962            | 538,482            |
| Space Rental, Maintenance, and Utilities | 232,227            | 259,149            |
| Professional/Technical Contracts         | 75,005             | 54,082             |
| Resident Trust Account Withdrawals       | 60,953             | 59,229             |
| Uses of Gifts and Donations              | 42,464             | 73,036             |
| Other Expenditures                       | 286,221            | 537,525            |
| <b>Total Expenditures</b>                | <b>\$8,040,337</b> | <b>\$8,763,136</b> |

Source: State of Minnesota, Office of the Legislative Auditor<sup>16</sup>

Notes: Other expenditures include travel, printing and advertising, employee development, computer and system services, communications, agency indirect costs, statewide indirect costs, claims, equipment, building improvements, repairs and maintenance, and other operating costs.

**Table A2: Minnesota Veterans Home at Silver Bay: Expenditures, July 1, 2011 to June 30, 2013**

|  | 2012               | 2013               |
|--|--------------------|--------------------|
| Payroll                                  | \$7,290,340        | \$7,522,962        |
| Supplies                                 | 457,326            | 649,797            |
| Professional/Technical Contracts         | 374,737            | 429,635            |
| Space Rental, Maintenance, and Utilities | 187,391            | 200,892            |
| Resident Trust Account Withdrawals       | 66,700             | 50,400             |
| Uses of Gifts and Donations              | 75,235             | 102,117            |
| Other Expenditures                       | 206,457            | 256,187            |
| <b>Total Expenditures</b>                | <b>\$8,658,186</b> | <b>\$9,211,990</b> |

Source: State of Minnesota, Office of the Legislative Auditor<sup>17</sup>

Notes: Other expenditures include travel, printing and advertising, employee development, computer and system services, communications, agency indirect costs, statewide indirect costs, claims, equipment, building improvements, repairs and maintenance, and other operating costs.

<sup>16</sup> State of Minnesota, Office of the Legislative Auditor. (2013). *Minnesota Veterans Home At Luverne: Internal Controls and Compliance Audit*. (OLA Report 13-23). St. Paul, Minnesota. Retrieved from <http://www.auditor.leg.state.mn.us/fad/pdf/fad1323.pdf>

<sup>17</sup> State of Minnesota, Office of the Legislative Auditor. (2013). *Minnesota Veterans Home At Silver Bay: Internal Controls and Compliance Audit*. (OLA Report 13-23). St. Paul, Minnesota. Retrieved from <http://www.auditor.leg.state.mn.us/fad/pdf/fad1323.pdf>

### APPENDIX 3: ECONOMIC CONTRIBUTION IN FIVE-COUNTY REGION

The primary study area for the analysis was Fillmore County. However, the construction and operations will also contribute to the economy of the five-county region. Supplies and labor are likely to be brought in from the surrounding counties. Thus, Extension performed an analysis of the economic contribution to the five-county region (Fillmore, Houston, Mower, Olmsted, and Winona counties).

**Table A3: Total Economic Contribution of Construction of a Proposed Veterans Home in Fillmore, Houston, Mower, Olmsted, and Winona Counties, Minnesota**

|                         | Direct Effect | Indirect Effects | Induced Effects | Total Effect |
|-------------------------|---------------|------------------|-----------------|--------------|
| Output (millions)       | \$28.4        | \$4.1            | \$5.8           | \$38.3       |
| Labor Income (millions) | \$8.7         | \$1.4            | \$1.8           | \$11.9       |
| Employment              | 180           | 30               | 50              | 260          |

Estimates by University of Minnesota Extension

**Table A4: Total Economic Contribution of a Proposed Veterans Home Operation in Fillmore, Houston, Mower, Olmsted, and Winona Counties, Minnesota**

|                         | Direct Effect | Indirect Effects | Induced Effects | Total Effects |
|-------------------------|---------------|------------------|-----------------|---------------|
| Output (millions)       | \$7.3         | \$0.2            | \$3.6           | \$11.1        |
| Labor Income (millions) | \$6.2         | \$0.07           | \$1.1           | \$7.4         |
| Employment              | 140           | 2                | 30              | 172           |

Extension by University of Minnesota Extension