# Marina Economic Impact Brief

City of Warsaw, Benton County, Missouri | May 2020

# **Summary**

The City of Warsaw, Missouri is submitting a U.S. Department of Transportation BUILD grant application for transportation improvements to the downtown area. If the grant is approved, a private developer will move forward with a multi-phased marina development that capitalizes on these transportation improvements and the increase in tourism the city has recently seen. This summary describes the expected long-term economic benefit the city and surrounding Benton county will realize if the marina is built and accommodates the rising demand for leisure boat activities and housing in Warsaw.

Over thirty-three years the multi-phased marina development will support:

Years	Avg. Annual New Jobs	Total Labor Income	Total Gross Domestic Product	Total Local Taxes
2020-2052	37	\$42,122,667	\$67,394,181	\$4,863,686

In nominal dollars. Jobs are annual average and cannot be summed. Taxes include local sales and property taxes.

The new spending, associated with the marina development, will support an average of 37 jobs over the analysis period. Labor income will average \$34,400 and support jobs in a variety of industries. Over 80 percent of employment will be in construction and related sectors in the early investment years, as workers build the marina, apartments, and retail space. Jobs over the long-term will be more diversified in retail, restaurants, lodging, and other services as the marina and apartments become operational.

Cumulatively the new spending will add \$42 million in labor income and \$67 million in gross domestic product to Benton county over the thirty-three years. Total local sales and property taxes of \$4.9 million would also generated.

# **Investment Activity Impacts**

The marina development will occur in three construction phases over years 2020 to 2025. The first phase will begin in late 2020, the second phase in 2021, and the third phase in 2025 assuming the U.S. Corp of Engineers approves a levee access project. The total construction cost over these six years is estimated at \$20.35 million and 70 percent of that spending will occur in year 2025. Accompanying this large amount of initial investment is an estimated \$50,000 increase in typical downtown business maintenance spending, for exterior/interior updates, signage, etc., beginning in year 2022 and continuing annually through year 2052.

The average annual jobs supported during the first six investment years is 48, with an employment peak in year 2025 of 189 jobs. Eighty-four percent, or 158 jobs in 2025, would be in construction and related industries. The additional downtown business maintenance supports less than one job annually and brings the thirty-three-year average to nine jobs per year. The average income is \$41,700 per job for these construction-focused workers.

Over thirty-three years the marina development investments and additional maintenance will support:

Years	Avg. Annual New Jobs	Total Labor Income	Total Gross Domestic Product	Total Local Taxes
2020-2052	9	\$12,537,086	\$15,138,501	\$394,166

In nominal dollars. Jobs are annual average and cannot be summed. Taxes include local sales and property taxes.

# **Operation Activity Impacts**

The marina development includes the phased construction of boat slips, apartments, and retail space to accommodate increasing tourism demand. A minimum of 25 new boat slips will be available in 2021 and could be expanded to 250 by the end of 2025. Annual per boat slip spending on items like gas, maintenance, food, retail goods, lodging, and other services is estimated at \$7,290. By year 2026 the total annual spending by non-local boating tourists, using these slips, would reach \$1.82 million. Boat slip spending estimates are based on a prior survey and study by the U.S. Corp of Engineers.

In addition to boaters, the marina development includes apartments that can be rented to seasonal tourists or retirees wishing to live year-round in Warsaw. A total of 45 apartments will be built by 2026 and, using an average household income and 90 percent occupancy rate, is expected to bring \$2.31 million in new spending to the area on an annual basis.

The combined spending of new boating tourists and apartment residents will create economic benefits for local residents and businesses. An average of 9 new jobs are supported each year in the initial investment phase (2021-2025), as new marina and related developments are scaling up. From years 2026-2052, the fully operational marina and apartment resident spending will support an annual average of 33 jobs. Income per job will average \$32,000 with the majority of employment in retail businesses. Thirty percent of new jobs will be in retail (10 jobs), followed by restaurants/food services (6 jobs) and lodging (5 jobs). Remaining employment will be spread across a variety of industries in Benton county.

Over thirty-three years the marina boat slips, stores, and apartment renter spending will support:

Years	Avg. Annual New Jobs	Total Labor Income	Total Gross Domestic Product	Total Local Taxes
2020-2052	28	\$29,585,581	\$52,255,681	\$4,469,520

In nominal dollars. Jobs are annual average and cannot be summed. Taxes include local sales and property taxes.

#### **Methodology and Sources**

The IMPLAN input/output economic model, provided by the IMPLAN Group, LLC, was used for this analysis. The model is commonly used by universities, consultants, and economic development organizations to understand the economic impact of business projects and is updated annually with data from a variety of U.S. statistical agencies.

The IMPLAN model provides job, income, sales, and tax estimates based on typical consumer and industry spending patterns within an area. This brief highlights the expected new jobs, gross domestic product (GDP or the value of final sales that goes to pay labor income, profits, rents, etc.), labor income (a subset of GDP that counts wages, benefits, and owner pay), and local taxes (sales and property) for Benton county, Missouri.

The key assumptions, developed by the MU Extension Exceed team in consultation with the project sponsor, are described in the investment and operation activity impacts. The assumptions were developed using the following sources:

- Marina phase I, II, and III investment assumptions from construction and timing estimates, along
  with building functions, were provide by the project architect. Total building construction cost is
  estimated at \$18.5 million over the six years with an additional \$1.85 million in parking, landscape,
  and related activities spending (totaling \$20.35 million). Additional construction activities estimated
  at ten percent of building construction estimates.
- Additional annual investments for downtown building maintenance are assumed if the BUILD grant and new marina development occur. A \$50,000 annual investment assumption in building exterior/interior updates, above normal maintenance levels, is based on analysis of downtown Warsaw building permits data in recent years following downtown improvements.
- Operations assumptions of the range of new boat slips was provided by the project sponsor and
  this brief describes the maximum estimate of 250 total boat slips by 2026. Spending estimates per
  new boat slip were developed from the report *Economic Impacts from Spending by Marina Slip*Renters at Harry S. Truman Dam and Reservoir, February 2008, U.S. Army Corp of Engineers ERDC/EL
  TR-08-07. Accessed at: <a href="https://apps.dtic.mil/dtic/tr/fulltext/u2/a477875.pdf">https://apps.dtic.mil/dtic/tr/fulltext/u2/a477875.pdf</a>
- Operations assumptions of new resident spending based on U.S. Census Bureau American
  Community Survey 2014-2018 estimates of average household income and rental vacancy rates for
  Benton county. Additional context on vacancy rates from the 2016 Lake of the Ozarks Regional
  Housing Study accessed at: <a href="https://loredc.com/wp-content/uploads/2019/01/2016\_10-19-Lake-of-the-Ozarks-Housing-Study\_Web.pdf">https://loredc.com/wp-content/uploads/2019/01/2016\_10-19-Lake-of-the-Ozarks-Housing-Study\_Web.pdf</a>
- Inflation adjustments for figures prior to 2020 use the U.S. Bureau of Labor Statistics Consumer Price Index calculator. Future inflation projections from the U.S. Congressional Budget Office 2020-2030 personal consumption expenditure estimates. Resources can be accessed respectively at: <a href="https://data.bls.gov/cgi-bin/cpicalc.pl">https://data.bls.gov/cgi-bin/cpicalc.pl</a> and <a href="https://www.cbo.gov/publication/56073">https://data.bls.gov/cgi-bin/cpicalc.pl</a> and <a href="https://www.cbo.gov/publication/56073">https://www.cbo.gov/publication/56073</a>

Author: Alan Spell, Assistant Extension Professor, University of Missouri, alan.spell@missouri.edu



