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ST. LOUIS RIVERFRONT STADIUM

COST BENEFIT ANALYSIS

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Purpose and Scope of Analysis

The Associated Industries of Missouri (AIM) engaged Missouri Wonk to conduct an economic analysis of the construction and operation of a new stadium on the riverfront north of downtown St. Louis.

The scope of the analysis is limited to the State of Missouri.

AIM asked Missouri Wonk to answer two questions:

1. How does the state fare if the Rams stay in Missouri and a new stadium is built?
2. How does the state fare if the Rams leave Missouri and a new stadium is not built?

To conduct the analysis, Missouri Wonk relied on the following information:

- Information provided by representatives of the St. Louis NFL Stadium Task Force relating to direct impacts regarding construction costs and existing activities resulting from having an NFL team in the state;
- Available public information relating to the St. Louis Rams organization, economic impact analyses on stadium projects, information relating to existing state obligations of the current Edward Jones Dome and new state obligations associated with the new stadium; and
- IMPLAN, economic impact analysis data and software.

To calculate benefits, Missouri Wonk assumed that direct impacts relating to the construction of the stadium and the activity of NFL games occur in the City of St. Louis and the direct impacts of the Rams coaches and staff and players' spending occur in St. Louis County (the Rams corporate and training facility is located in St. Louis County). Indirect and induced benefits will occur in these respective areas as well as the rest of the state.

For purposes of this analysis, Missouri Wonk chose the construction period (2016-2019) and thirty-two years of operations after completion of construction, encompassing the entirety of the period of bond repayment. Missouri Wonk conducted separate analyses of construction impacts and ongoing impacts.



How does the state fare if the Rams stay in Missouri and a new stadium is built?

To answer this question, Missouri Wonk identified:

- The direct benefits to Missouri;
- The indirect and induced benefits to Missouri; and
- The state costs.

Direct State Benefits

The direct benefits include:

- The personal income taxes of the workers hired to construct the stadium facility;¹
- The NFL players' personal income taxes (taxes on salaries as well as the income taxes collected in relation to the athletes and entertainers tax);²
- The personal income taxes from coaches and staff of the St. Louis Rams;³
- The team owner's income taxes;⁴
- The state general revenue (GR) sales taxes on tickets purchased by out-of-state attendees of Rams games;⁵
- The state GR sales taxes on concessions and novelty items purchased by out-of-state attendees of Rams games;⁶ and
- The state GR sales tax on other expenditures of out-of-state attendees of Rams games.⁷

Table 1: Present Value⁸ Estimates of Direct Benefits

Direct Tax Benefit	Estimated Amount
Construction Workers' Income Taxes	\$13,996,062
NFL Players' Income Taxes	\$363,055,541
Rams Coaches' and Staffs' Income Taxes	\$23,757,436
Rams Owners' Income Taxes	\$37,901,940
GR Sales Tax from Out-of-State Attendees' Ticket Purchases	\$10,149,538
GR Sales Tax from Out-of-State Attendees' Concessions and Novelty Purchases	\$2,856,907
GR Sales Tax from Out-of-State Attendees' Expenditures	\$25,968,757
Total	\$477,686,182



Indirect and Induced State Benefits

The indirect and induced benefits include:

- The state taxes associated with the economic activity from construction of the stadium;
- The state taxes associated from players spending their salaries in Missouri;⁹
- The state taxes associated with the economic activity from Rams coaches and staff;
- The state taxes associated with the economic activity from out-of-state attendees' purchases of concessions and novelty items;
- The state taxes from economic activity from the expenditures of out-of-state attendees of Rams games;
- The state taxes on corporate profits and dividends associated with construction activities; and
- The state taxes on corporate profits and dividends associated with ongoing activities of having an NFL team in Missouri.

Table 2: Present Value Estimates of Indirect and Induced Benefits

Indirect and Induced Tax Benefit	Estimated Amount
Economic Activity from Stadium Construction	\$7,753,442
Economic Activity from Rams Players Spending	\$12,053,816
Economic Activity from Rams Coaches and Staff	\$16,598,008
Economic Activity from Concessions and Novelty Items Sales	\$1,972,130
Economic Activity from Out-of-State Attendees Expenditures	\$14,679,201
Taxes on Corporate Profits and Dividends from Stadium Construction Activity	\$622,554
Taxes on Corporate Profits and Dividends from Ongoing NFL Activities	\$3,021,668
Total	\$56,206,104



State Costs

The state costs include:

- The annual bond payments toward existing and new stadiums for fiscal years (FY) 2016 through 2051;
- State tax credits awarded under the MDFB Infrastructure Contribution Program;¹⁰ and
- State tax credits awarded under the Brownfield Remediation Program.¹¹

Table 3: Present Value Estimates of State Costs

Cost	Estimated Amount
Annual Bond Payment	\$278,347,978
MDFB Infrastructure Tax Credit	\$44,990,126
Brownfield Remediation Tax Credit	\$40,506,069
Total	\$363,844,172

Summary of State Benefits and Costs

Table 4 below contains a summary of the benefits and costs previously described.

Table 4: Summary of State Benefits and Costs

Type	Amount
Direct Benefits	\$477,686,182
Direct, Indirect and Induced Benefits	\$533,892,286
Costs	\$363,844,172
Direct Benefit to Cost Ratio	1.31:1
Direct, Indirect and Induced Benefits to Cost Ratio	1.47:1

The benefit to cost ratio for the direct benefits relative to costs is 1.31 to 1, meaning for every \$1 the state spends on the project it will receive \$1.31 back in state taxes.

The benefit to cost ratio for the direct, indirect and induced benefits relative to costs is 1.47 to 1, meaning for every \$1 the state spends on the project it will receive \$1.47 back in state taxes.



How does the state fare if the Rams leave Missouri and a new stadium is not built?

To answer this question, Missouri Wonk identified the existing obligations of Missouri relating to the Edward Jones Dome.¹²

The state of Missouri is obligated to make a payment of \$12,000,000 each fiscal year from FY 2017 through FY 2022. Additionally, Missouri is obligated to pay an additional \$2,000,000 toward the maintenance of the Edward Jones Dome from FY 2023 through FY 2025.

Table 5: Scheduled GR Appropriated Bond Payments for Existing Stadium

Fiscal Year	Total
2017	\$12,000,000
2018	\$12,000,000
2019	\$12,000,000
2020	\$12,000,000
2021	\$12,000,000
2022	\$12,000,000
2023	\$2,000,000
2024	\$2,000,000
2025	\$2,000,000
Total	\$78,000,000
Net Present Value (2.6% Discount Rate)	\$68,971,054

These payments have a total nominal value of \$78,000,000 and a net present value of \$68,971,054.

However, not building a new stadium also means that Missouri will not realize the direct benefits of taxes from players' salaries, coaches and staff salaries, and team owners' incomes as well as out-of-state visitors' expenditures associated with current Rams games as the Rams staying in St. Louis is predicated upon building a new stadium.

Currently, the annual bond payments are more than offset by the taxes directly resulting from the Rams playing in St. Louis, primarily from the personal income taxes paid by NFL players.

Not building a new stadium and the Rams leaving Missouri will result in a loss of state taxes and economic activity that more than offsets the \$69 million (in net present value) of state general revenue payments obligated toward the existing Edward Jones Dome.



¹ Missouri Wonk assumed \$100 million of the construction would occur in 2016, \$341.2 million would occur in 2017, \$341.1 million would occur in 2018, and \$155.6 million would occur in 2019.

² These include NFL players' state income taxes which include athletes and entertainers taxes. In FY 2016, Missouri Wonk estimates them to be \$9.9 million per an analysis by the Missouri Department of Economic Development (DED) that includes figures provided by the Department of Revenue. Taxes from players' incomes were expected to increase by 3% each year.

³ Missouri Wonk totaled the number of players and coaches (162) listed on the St. Louis Rams website and estimated labor income using Sector 381 (Management of Companies and Enterprises). Missouri Wonk estimated Rams coaches and staff salaries are \$15.8 million and estimated the average effective state tax rate on such income was 4%. Salaries were expected to grow by 3% each year.

⁴ For this estimate, Missouri Wonk relied on a document compiled by Missouri DED entitled "Direct State Cash Flow Estimate for New St. Louis Football Stadium" that pegged state taxes from owner income at \$486,675 in FY 2016 and was expected to grow by 3% until the completion of the new stadium at which point the state taxes from owner income would be \$1.205 million. This analysis assumes such tax payments would grow by 3% per year for the remaining time frame of the analysis.

⁵ For this calculation and all other calculations involving out-of-state attendees of Rams games, Missouri Wonk assumed 20% of the attendees at Rams games traveled to attend from out-of state; a similar estimate was provided by the Vikings for the 2009 study, "Economic and Jobs Impact of Metrodome Next Multipurpose Facility," conducted by Conventions Sports and Leisure (CSL). Missouri Wonk used recent attendance estimates (57,000 per regular season game and 28,500 per preseason game) to calculate the number of individuals that come from outside the state of Missouri to watch Rams games at the Edward Jones Dome. This analysis estimates that 102,600 of the tickets to Rams games each year are purchased by out-of-state attendees. Additionally, multiple sources estimated that ticket sales for the most recent year were \$45 million.

⁶ Information used to calculate this estimate was provided by the St. Louis NFL Stadium Task Force.

⁷ To develop estimates for the spending habits of out-of-state attendees, Missouri Wonk relied on a 2010 analysis, "The Economic Impact of Minnesota Vikings Game Attendees: A Playoff Example," which surveyed non-local attendees of a playoffs Vikings game. Missouri Wonk adjusted these figures to reflect current values.

⁸ For this and all other Net Present Value estimates, Missouri Wonk used a 2.6% discount rate, the historical average of inflation over the past 25 years.

⁹ Missouri Wonk assumed that NFL players spent 27% of their salaries in the Show Me State; a similar assumption was used in the CSL analysis of the Vikings Metrodome Next facility. To calculate total spending in Missouri, Missouri Wonk used the 2015 player salary obligations, subtracted the "Dead Cap," and multiplied the result by 27%. Information on the St. Louis Rams 2015 player salary obligations is available at <http://www.spotrac.com/nfl/st.-louis-rams/>.

¹⁰ Missouri Wonk assumed \$15,000,000 in MDFB Infrastructure Tax Credits would be issued in FY 2016 and an additional \$35,000,000 would be issued in FY 2017. Missouri Wonk relied on historical data pertaining to tax credit redemptions of similarly structured tax credit programs to project the timing and extent of redemptions for both the MDFB Infrastructure Tax Credits and the Brownfield Remediation Tax Credits.

¹¹ Missouri Wonk assumed \$33,375,000 in Brownfield Remediation Tax Credits would be issued in FY 2017 and an additional \$11,125,000 would be issued in FY 2018.

¹² These were provided by the St. Louis NFL Stadium Task Force.

