Northwestern University



The Economic Impact of Rebuild Ryan Field

Trìpp Umbach

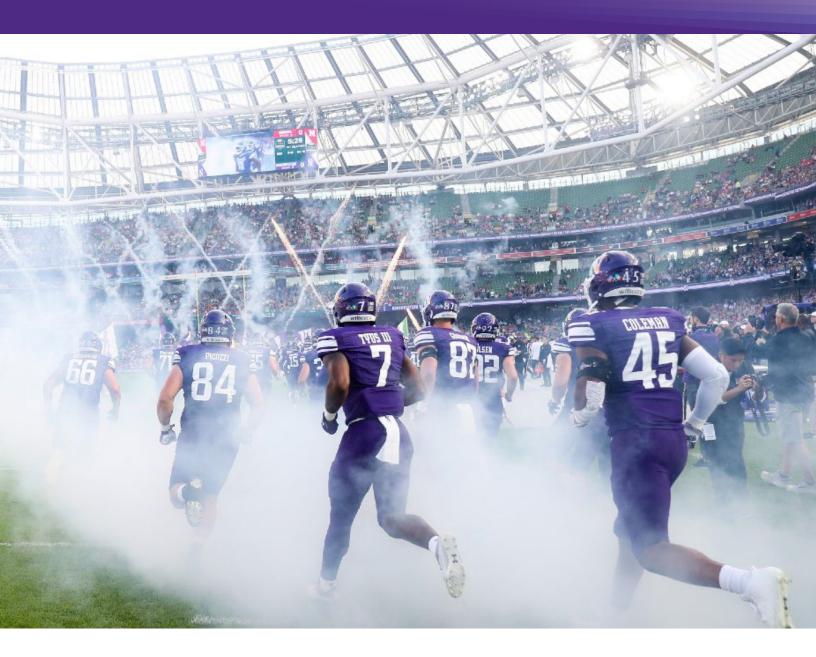


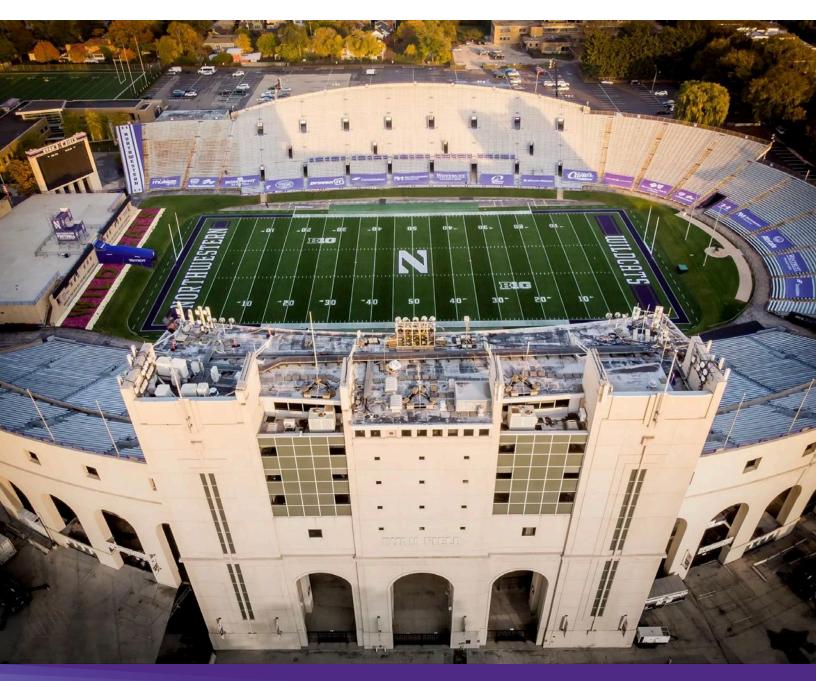
Table of Contents

| Introduction | 3 |
|---|----|
| About the Project | 4 |
| Economic Impact | 5 |
| Community Focus Groups | 10 |
| Appendix A: Complete Economic Impact Findings | 12 |
| Appendix B: IMPLAN Methodology | 15 |
| Appendix C: FAQs Regarding Economic Impact Assessment | 17 |

Introduction

Tripp Umbach, an independent, nationally recognized consulting firm, was retained by Northwestern University to quantify the economic impacts associated with the Ryan Field Rebuild project. Tripp Umbach also worked with the Office of Neighborhood and Community Relations to conduct listening sessions focused on understanding the community's expectations, ambitions, and concerns with a potential stadium rebuild and to inform the design process.

The findings presented in this report represent conservative economic impact projections based on the capital expenditures that would be required to complete the project, revenue generated from stadium operations for intercollegiate athletics, and visitor spending. Additionally, in exploring the opportunity for hosting special events at Ryan Field, the annual economic impact of such events was projected for hosting events throughout the year.



About the Project

Rebuild Ryan Field¹

In September 2021, esteemed Northwestern alumni Patrick G. Ryan and Shirley W. Ryan committed the largest philanthropic gift in Northwestern history to accelerate breakthroughs in biomedical, economic, and business research and to begin the process to rethink and rebuild Ryan Field. The multi-year project will create a state-of-the-art venue that the Wildcats football program and the Northwestern community will call home for generations.

The new Ryan Field will offer cutting-edge technology and modern amenities; accessibility for all; and an exceptional home-field experience for students, alumni, fans, and the surrounding community, all within its existing footprint at Central Street and Ashland Avenue.

Integral to the plans will be making the stadium dramatically more accessible, utilizing the principles of universal design, and committing to environmental sustainability, including Leadership in Energy and Environmental Design (LEED) gold certification.

Northwestern has played football in a stadium at Central Street and Ashland Avenue in Evanston for nearly a century. Although modern for 1926, architect James Gamble Rogers designed a structure that resembled great Roman baths surmounted by medieval towers that reflected the collegiate gothic style on the main Northwestern campus. The crescent shape provided the best possible view to the most possible spectators, with the rise of the grandstands designed for maximum comfort and optimal sightlines.

Renovations to the stadium in 1997 included the addition of a new press box, new seating, lowering of the field, and conversion of the playing surface from artificial turf to grass. In recognition of the leadership gift to the Campaign for Athletic Excellence by Patrick G. and Shirley W. Ryan, the stadium was renamed Ryan Field.

Now, catalyzed by the unparalleled generosity of the Ryan family, Northwestern embarks upon the next evolution of its largest gathering place: a new Ryan Field, a world-class venue for the Wildcats community for University Commencement, football game days, and more.

The multi-year construction project will provide an economic boost for the City of Evanston through job creation and increased revenues. Northwestern will prioritize local hiring with a focus on diversity and inclusion as part of the University and Evanston collaborative Workforce Development Program, targeting 35% MWBE participation.

Economic Impact

Tripp Umbach developed an economic impact analysis that measures the effect of direct, indirect, and induced business volume (economic and employment) as well as the government tax revenue impacts of Northwestern rebuilding Ryan Field. It also analyzed the ongoing impacts of operating the stadium and hosting Northwestern football games and other special events. The methodology employed in the calculation of these impacts is IMPLAN.² Primary data utilized to conduct the analysis was collected from Northwestern University including annualized capital expenditures, operating expenditures, employment figures, payroll and benefits figures and certain tax information, among other information. The approach taken in this analysis was purposely conservative.³

Tripp Umbach's study captures the direct economic impact of spending by Northwestern University to operate and host events at Ryan Field, plus additional indirect and induced spending in the economy resulting from direct spending. Visitors also create an economic impact when they attend Northwestern's home football games. The models show the moneys that enter Evanston's economy because of home games from out-of-area fans, visiting teams, bands, spirit squads, and media.

Total economic impact measures calculated by Tripp Umbach show the dollars that are generated within Evanston because of the presence of Ryan Field and the events that are hosted there, most notably, Northwestern football. This measure includes not only the direct spending by Northwestern Athletics and visitors on goods and services with a variety of businesses within the state but also the downstream effects (indirect and induced effects) on the business volume generated by other secondary businesses because of that initial direct spending.

Furthermore, this measure includes Northwestern's direct spending on payroll and the effects that employment has on the economy as individuals spend their earnings. This analysis takes into account that certain dollars spent by Northwestern do not remain in the city as such dollars "leak" out in the form of purchases from out-of-area vendors. The multipliers utilized in this study are derived from the IMPLAN software. Tripp Umbach's independent analysis aims to demonstrate the value of Ryan Field's current operations, the rebuilding project, and future operations economic impact as an important aspect of Northwestern University's total impact on its community.

² Minnesota IMPLAN Group Inc. (MIG) is the corporation that is responsible for the production of IMPLAN (IMpact analysis for PLANning) data and software. IMPLAN is a micro-computer-based, input-output modeling system. With IMPLAN, one can estimate input-output models of up to 528 sectors for any region consisting of one or more counties. IMPLAN includes procedures for generating multipliers and estimating impacts by applying final demand changes to the model. See Appendix B for a complete methodology.

² See Appendix C for economic impact FAQs.

Key Findings

Construction of the New Ryan Field will generate \$1.3 billion in economic impact in Cook and Lake counties.



In addition, it will generate \$659 million in economic impact within the City of Evanston during the construction period.

The total economic impact of football and gameday visitors at Ryan Field on the City of Evanston will grow from \$50.4 million in 2021 to \$65 million annually by 2031 because of the rebuild.

Based on assumptions that include ten full-capacity concerts, a small number of other ticketed amateur events, and third-party rentals/catering, the addition of special events held at Ryan Field will contribute another \$35 million in new annual economic impact to the City of Evanston. The economic impact driven by special events could be higher or lower than that amount, depending on the exact uses that materialize.





Direct and indirect tax revenue to the city attributable to stadium-based events will grow from \$1.4 million in 2021 to over \$5.0 million annually by 2031 because of the rebuild and additional uses. The new stadium will also generate additional new tax revenue for other taxing bodies outside of the City of Evanston.

Current operational impacts of Ryan Field

Ryan Field's primary tenant is Northwestern University football, hosting, on average, seven home games per year. Ryan Field has a seating capacity of 47,130, and the Wildcats have seen average attendance over the last three-years⁴ hover around 37,000.

In quantifying the economic impact of sporting events, we consider two main inputs. The first is the cost of operating the stadium itself. This includes spending related to personnel to staff the facility, utilities, facilities management and upkeep, insurance, and supplies. In addition, for those seven home games each year, there is additional spending related to having fans at the stadium. Additional operations staff, security, and hospitality costs are all incurred to keep a facility operational and ready to host, along with the hosting duties themselves.

The second input when considering the economic impact of sporting events is fan and visitor spending. Northwestern is a member of the Big Ten Conference and hosts teams such as Nebraska and Wisconsin in divisional play, along with perennial college football powerhouses such as the University of Michigan, Ohio State University, and Penn State University during interdivision play. These popular teams bring attract a lot of fans to their games. Along with fans for visiting teams, Northwestern alumni from all over the country travel to Evanston to support the Wildcats. All fans spend money in Evanston when they travel to support their team.

These two inputs produce individual economic impacts that can be added together to produce an annual economic impact of Ryan Field in its current event-hosting capacity. Annually, Ryan Field currently generates \$50.4 million in economic impact for the City of Evanston. The operations of Ryan Field support 376 jobs and generate \$1.4 million in total tax payments to the city.



⁴ Attendance averages include 2018, 2019, 2021. 2020 was excluded because of reduced or eliminated fan attendance at sporting events during COVID-19.

Rebuilding Ryan Field

Capital investments such as stadium reconstruction or renovation take significant coordination, collaboration, and effort across many sectors. The economic impacts associated with capital projects like Rebuild Ryan Field are best quantified and visualized as "point-in-time" impacts. While the planning, construction, and associated economic impacts will occur over several years, the impact figures themselves are best displayed as single, point-in-time, all-inclusive impacts. Thus, it should not be considered additive to the total economic impact of Ryan Field operations.

The rebuild of Ryan Field is a large undertaking that will generate a significant economic impact. Tripp Umbach estimates cumulative impacts over the life of the project to be \$659.9 million in economic impact to the City of Evanston. The design, planning, and construction will support 2,924 jobs and generate \$1.5 million in indirect tax revenue, with an additional \$11 million in permit-related fees payable to the city.

During the project, the below industries are projected to have the most industry growth by percentage. Industry nomenclature is derived from IMPLAN. IMPLAN's Industry scheme is based largely on the U.S. Bureau of Economic Analysis's (BEA's) benchmark.

| Industry | Est. Growth |
|---|-------------|
| Construction of other new non-residential structures | 24.89% |
| Maintenance and repair construction of non-residential structures | 18.23% |
| Concrete pipe manufacturing | 4.38% |
| Asphalt shingle and coating materials manufacturing | 3.14% |
| Other concrete product manufacturing | 2.86% |
| Stone mining and quarrying | 2.62% |
| Concrete block and brick manufacturing | 1.96% |
| Retail - Building material and garden equipment and supplies stores | 1.81% |
| Prefabricated wood building manufacturing | 1.77% |
| Miscellaneous non-metallic mineral products manufacturing | 1.72% |

Future operational impacts of Ryan Field

Rebuilding Ryan Field will change its design significantly, including a reduction in capacity from the current 47,000 to around 35,000. In the new stadium, premium box seating and additional hospitality options will be available.

A key element in rebuilding Ryan Field and assuring the project provides the greatest benefit to the Evanston community included the analysis of hosting special events in addition to Northwestern football games. The initial analysis was done by CSL,⁵ the leading advisory and planning firm for sports, entertainment, convention, and leisure industries. CSL provided market research and analysis to determine the best path forward for Ryan Field to host these special events.

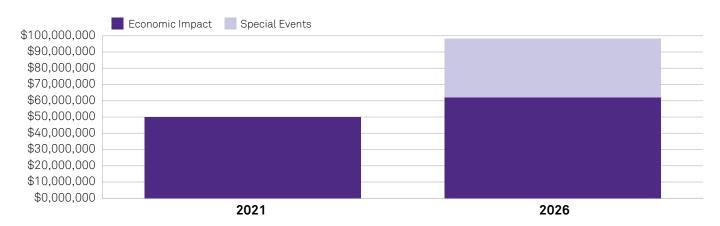
The economic impact model includes activity based on the following scenario outlined by CSL:

- Ten annual full capacity concerts;
- Additional ticketed events (primarily high school or intercollegiate sports) with 10,000 or fewer attendees
- Regular, small, non-ticketed private events

Assumed attendance at the events remained constant for the event type. Tripp Umbach used this analysis to develop economic impact modeling that shows the impacts these events can have on the City of Evanston.

These two elements of the future operational picture for Ryan Field can be added to gain a complete understanding of the economic impact Ryan Field will have on the City of Evanston. In this scenario for special events and the continued operation of Northwestern football at Ryan Field, post-renovation, the stadium will generate approximately \$98 million in annual economic impact to Evanston. The same assumptions will support **790 jobs** and generate approximately \$5.0 million in tax payments to the City of Evanston. See Appendix A for a full breakdown of economic impact figures.

Operational impacts, current and projected under planned special event assumptions one-year after stadium renovation.



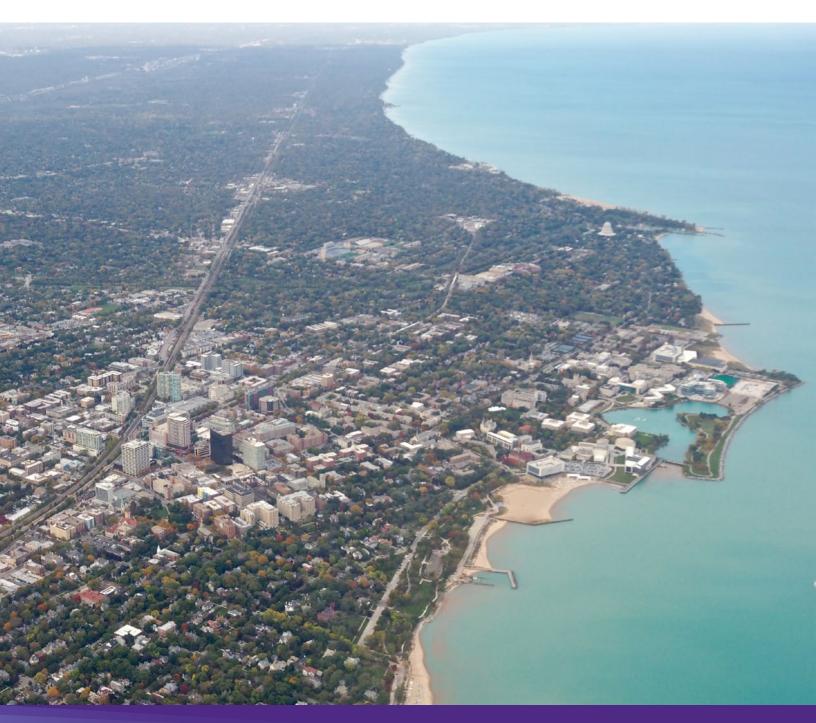
⁵ cslintl.com

Community Focus Groups

Community Observations

- There is an opportunity for Northwestern University to improve relationships with community members during the fall 2022 and spring 2023 sports seasons.
 - Resolving past issues raised by residents near Ryan Field should be the highest priority in the short term.
 - Notably, a comprehensive parking plan that involves the City of Evanston in partnership with the university is recommended for all events held at the rebuilt Ryan Field.
 - Northwestern should communicate the stadium design changes that were based on community feedback and should continue to develop mechanisms for community members to provide detailed recommendations for improved operations at the Central Street athletics facilities
- The economic benefits of the Ryan Field redevelopment project are extremely significant.
 - Many of the design elements seem to reduce negative sentiments that are often associated with the current stadium.
 - The project's sustainability, attractiveness, noise and visual controls, accessibility, and technology are all substantial improvements based on the concerns we heard during focus group meetings.
 - Additional benefits are associated with lower capacity, which should help with some parking and congestion concerns.
 - Economic benefits to the city and its residents from hosting additional special events at Ryan Field are real.
 - Local business leaders will benefit from the increased activity at the stadium and a new customer base that will travel to Evanston during other parts of the year, instead of only during football season.
 - Additional uses will increase local taxes that are generated by the university and will support the broader Evanston municipal budget. If the new stadium is truly utilized as a community asset aligned with the proposed use cases, the venue will bring together all residents of Evanston in a way that doesn't exist today.
 - Community stakeholders should be involved on an ongoing basis with respect to monitoring the impacts of any additional events and addressing any unexpected issues they may create.

- Northwestern University has a much broader economic impact on the City of Evanston and the Northshore region than many focus groups realized.
 - The university must clarify that its endowment is restricted to supporting academic and research programs that are vital to keeping the university strong. Maintaining its endowment and tax-exempt status allows the university to retain and grow its employment and academic programs that in turn drive economic impact at the local level.
 - The university and Evanston are interconnected. Both need to recognize that the strength and quality of life in Evanston and at the university remain strongest by working together. The theme "stronger together" Is an idea that could be pursued jointly as this project progresses.



Appendix A: Complete Economic Impact Findings

Four main areas of economic impact analysis exist independently but when appropriately added together provide a full picture of what Ryan Field and the Ryan Field rebuild project will mean to the City of Evanston. They include: 1) Rebuild Ryan Field, 2) Stadium Operations, 3) Gameday Visitors Impact, and 4) Special Events Impacts. With the exception of construction impacts related to Rebuild Ryan Field, the economic impacts are realized on an annual basis.

Impacts are presented across two geographies and are not cumulative. Impacts that occur within the City of Evanston are also occurring within Cook and Lake counties. Because dollars have more "bounce" in larger geographies, the impacts are higher. See Appendix B for IMPLAN methodology.

Impacts are presented in three time frames: 1) Current: current spending data (FY21) was used to generate impacts as Ryan Field exists in its current form and event-hosting capacity. 2) 2026: represents the first year of operation after the stadium rebuild is completed and fully operational. 3) 2031: represents five years after the newly redesigned stadium is operational. Spending and usage will increase but so will efficiencies created throughout the maturation of the facility and its staff.

These elements of economic impact analysis have been generated with data provided by Northwestern University and partners on the Rebuild Ryan Field project along with industry assumptions, where appropriate, made by Tripp Umbach.

Rebuild Ryan Field

These impacts are related to the planning, design, and construction of the Rebuild Ryan Field initiative.

| | Jobs | Economic Impact | Total Taxes Generated |
|--------------------|-------|-----------------|-----------------------|
| Cook/Lake Counties | 5,942 | \$1,341,380,127 | \$14,087,359 |
| City of Evanston | 2,924 | \$659,959,022 | \$12,518,981 |

Stadium Operations (annual):

| Jobs | | | |
|-----------------------|--------------|--------------|--------------|
| | Current | 2026 | 2031 |
| Cook/Lake Counties | 112 | 192 | 229 |
| City of Evanston | 55 | 95 | 112 |
| Economic Impact | | | |
| | Current | 2026 | 2031 |
| Cook/Lake Counties | \$13,612,705 | \$24,658,267 | \$27,899,048 |
| City of Evanston | \$6,697,451 | \$12,131,867 | \$13,726,331 |
| Total Taxes Generated | | | |
| | Current | 2026 | 2031 |
| Cook/Lake Counties | \$1,463,461 | \$1,974,276 | \$2,160,966 |
| City of Evanston | \$1,193,508 | \$1,250,566 | \$1,364,755 |

Gameday Visitors (annual):

| Jobs | | | |
|-----------------------|--------------|---------------|---------------|
| | Current | 2026 | 2031 |
| Cook/Lake Counties | 653 | 759 | 797 |
| City of Evanston | 321 | 374 | 392 |
| Economic Impact | | | |
| | Current | 2026 | 2031 |
| Cook/Lake Counties | \$88,888,951 | \$101,010,171 | \$106,060,680 |
| City of Evanston | \$43,733,364 | \$49,697,004 | \$52,181,855 |
| Total Taxes Generated | | | |
| | Current | 2026 | 2031 |
| Cook/Lake Counties | \$452,901 | \$514,660 | \$540,393 |
| City of Evanston | \$222,827 | \$253,213 | \$265,874 |

Special Events (annual):

| | Jobs | Economic Impact | Total Taxes Generated |
|--------------------|------|-----------------|-----------------------|
| Cook/Lake Counties | 657 | \$73,294,646 | \$5,023,736 |
| City of Evanston | 323 | \$36,060,966 | \$3,576,363 |

Total Economic Impact (annual)

Cook/Lake Counties

| | Current | 2026 | 2031 |
|---|---------|---------|---------|
| Economic Impact (millions) | \$102.5 | \$198.9 | \$207.3 |
| Total Taxes Generated (millions) | \$2.0 | \$7.4 | \$7.7 |
| Jobs | 765 | 1,608 | 1,683 |

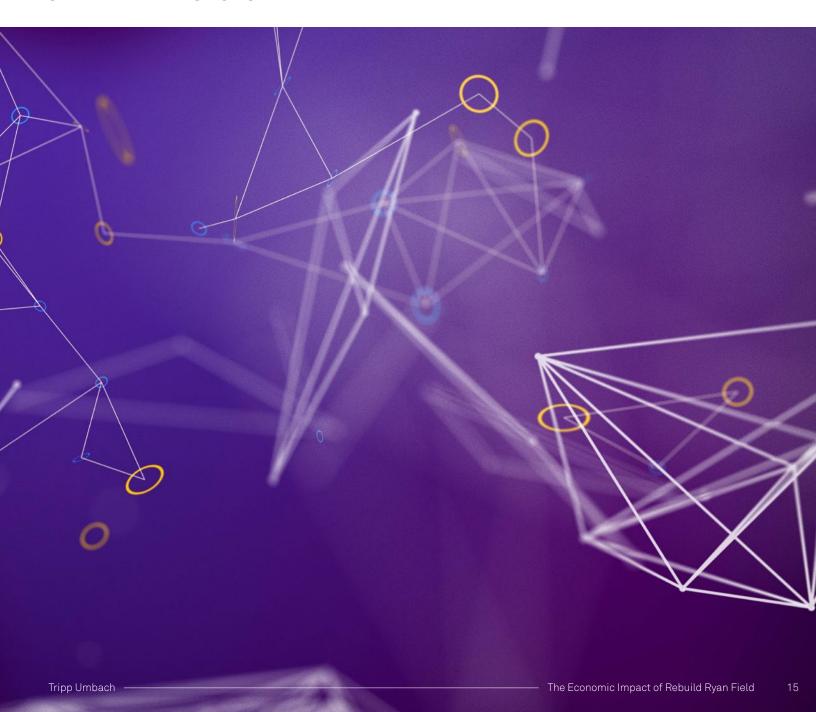
City of Evanston

| | Current | 2026 | 2031 |
|---|---------|--------|---------|
| Economic Impact (millions) | \$50.4 | \$97.9 | \$101.9 |
| Total Taxes Generated (millions) | \$1.4 | \$5.2 | \$5.3 |
| Jobs | 376 | 792 | 827 |

Appendix B: IMPLAN Methodology

Impact on state business volume and government revenue

Northwestern University is a major employer in Cook County and Evanston and, as such, a major generator of personal income for state residents. Businesses operating within Cook and Lake counties and Evanston in the wholesale, retail, service, and manufacturing sectors benefit from the direct expenditures of the institutions and their faculty, staff, students, physicians, and visitors on goods and services. Additionally, many of these "direct" expenditures are re-circulated in the economy as recipients of the first round of income re-spend a portion of this income with other businesses and individuals within Cook and Lake counties and Evanston. Government revenue is considered to be nested, as tax revenue generated in Evanston is a part of the total tax generated at the larger geography.



Methodology and data utilized for the estimation of the economic impact of Northwestern University's Ryan Field

The economic impact of Northwestern University's Ryan Field was estimated using IMPLAN (IMpact Analysis for PLANing), an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is used by more than 500 private consulting firms, university research centers, and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S BEA and follow a balanced account format recommended by the United Nations.

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices were used to construct state-level multipliers, which describe the response of the state economy to a change in demand or production as a result of the activities and expenditures of Northwestern University's Ryan Field. Each industry that produces goods or services generates demand for other goods and services, and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional, and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states as a consequence of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects of increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area, in this case, Cook and Lake counties and the City of Evanston. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area's particular characteristics. The RPC represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area's economic characteristics described in terms of actual trade flows within the area.

Model inputs and data sources

Model inputs included actual FY2021 expenditures and future projections provided by Northwestern University and its partners.

Appendix C: FAQs Regarding Economic Impact Assessment

What is economic impact?

Economic impact begins when an organization spends money. Economic impact studies measure the direct economic impact of an organization's spending, plus additional indirect spending in the economy as a result of direct spending. Economic impact has nothing to do with dollars collected by institutions, their profitability or even their sustainability, since all operating organizations have a positive economic impact when they spend money and attract spending from outside sources.



Direct economic impact measures the dollars that are generated within Cook and Lake counties and the City of Evanston because of the presence of Northwestern University's Ryan Field. This includes not only spending on goods and services with a variety of vendors within the state, and the spending of its employees and visitors, but also the business volume generated by businesses within the region that benefit from spending by Northwestern University. It is important to remember that not all dollars spent by Northwestern stay in the geographic area. Dollars that "leak" out of the state in the form of purchases from out-of-state vendors are not included in Ryan Field's economic impact on the defined area.

The total economic impact includes the "multiplier" of spending from companies that do business with Northwestern University. Support businesses may include lodging establishments, restaurants, construction firms, vendors, temporary agencies, etc. Spending multipliers attempt to estimate the ripple effect in the state economy where the spending occurs. For example: Spending by Northwestern to local vendors provides these vendors with additional dollars that they re-spend in the local economy, causing a "multiplier effect."

What is the multiplier effect?

Multipliers are a numeric way of describing the secondary impacts stemming from the operations of an organization. For example, an employment multiplier of 1.8 would suggest that for every 10 employees hired in the given industry, eight additional jobs would be created in other industries, such that 18 total jobs would be added to the given economic region. The multipliers used in this study range from 1.8 to 2.0.

The Multiplier Model is derived mathematically using the input-output model and Social Accounting formats. The Social Accounting System provides the framework for the predictive Multiplier Model used in economic impact studies. Purchases for final use drive the model. Industries that produce goods and services for consumer consumption must purchase products, raw materials, and services from other companies to create their product. These vendors must also procure goods and services. This cycle continues until all the money is leaked from the region's economy. Three types of effects are measured with a multiplier: the direct, the indirect, and the induced effects. The direct effect is the known or predicted change in the local economy that is to be studied. The indirect effect is the business-to-business transactions required to satisfy the direct effect. Finally, the induced effect is derived from local spending on goods and services by people working to satisfy the direct and indirect effects.

- Direct effects take place only in the industry immediately being studied.
- Indirect effects concern inter-industry transactions: Because Northwestern University's Ryan Field is in business, it has a demand for locally produced materials needed to operate.
- Induced effects measure the effects of the changes in household income: employees of Northwestern University's Ryan Field and suppliers purchase from local retailers and restaurants.
- Total Economic Impacts the total changes to the original economy as the result of the operations of Northwestern University's Ryan Field. I.e., Direct effects + Indirect effects + Induced effects = Total Economic Impacts

What methodology was used in this study?

IMPLAN (Impact analysis for PLANning) data and software. Using classic input-output analysis in combination with regional-specific Social Accounting Matrices and Multiplier Models, IMPLAN provides a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, ZIP code, and federal economic statistics that are specialized by region, not estimated from national averages, and can be used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

What is employment impact?

Employment impact measures the direct employment (employees, staff, faculty, administration) plus additional employment created in the economy as a result of the operations of Northwestern University's Ryan Field.

Indirect and induced employment impact refers to other employees throughout the region that exist because of Ryan Field's economic impact. In other words, jobs related to the population – city services (police, fire, EMS, etc.), employees at hotels and restaurants, clerks at retail establishments, residents employed by vendors used by Ryan Field.

What is the difference between direct and indirect taxes?

Direct tax dollars include sales taxes and net corporate income taxes paid directly by the institution to the state, while indirect taxes include taxes paid to the state by vendors that do business with Ryan Field and individuals.

Is this a one-time impact or does the impact repeat each year?

The results presented in Northwestern University's Ryan Field economic impact study are generated on an annual basis. The economic impact in future years can either be higher or lower based on the number of employees, students, capital expansion, increases in external research, and state appropriations.

What are Tripp Umbach's qualifications to perform an Economic Impact Study for Northwestern University's Ryan Field?

Tripp Umbach is the national leader in providing economic impact analysis to leading health-care organizations, universities, and academic medical centers. Tripp Umbach has completed athletics-focused economic impact studies over the past 20 years for clients such as the University of Tennessee, University of Minnesota, Ohio State University, University of Washington, University of Iowa, University of Nebraska, University of Pittsburgh, University of Southern California, and the University of North Carolina.



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