CASE STUDY

Incubating Impacts

The Economic Emergence of the Research Park at the University of Illinois

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IMPLAN

Building a better economic climate.

Learn how one university's research park catapulted rural college town communities across the State of Illinois into economic prosperity.

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Introduction

If you've never heard of the Research Park at the University of Illinois at Urbana-Champaign, remember the name. It's a big deal.

Approved in 1999, the Research Park was granted a 200-acre plot adjacent to the University of Illinois's central campus and opened its first building in 2001. Only two years later, in 2003, the State of Illinois provided additional funding for the park to construct a 43,000-square-foot startup business incubator called EnterpriseWorks. The first tenants of EnterpriseWorks officially moved into the space in early 2004.

Providing a unique environment in which startup tech companies and university faculty and students could operate in a collaborative capacity, the Research Park aimed to further the university's regional economic development efforts.

Fast-forwarding to 2017, the Research Park is operating at its highest ever level. The park is the largest it's ever been in every aspect: the number of buildings on the property, the square footage the park covers, the number of companies it hosts, and the number of university faculty and students employees whose collaborations it fosters. On top of that, the future of the Research Park looks to hold even greater leaps in growth than what's already been experienced.

So, how did the Research Park become so successful? What actions has it taken to encourage such consistent prosperity? While many factors have certainly contributed, in recent years, one practice has proven especially helpful: economic impact analysis.

The **Problem**

While the Research Park garnered support almost immediately, as evidenced by the land, funding, and encouragement its development effort received early on, its benefits and value, while felt, went largely unmeasured. Though the park continued to add more buildings; nurture more startups; and provide a cohesive, resource-rich environment for all parties; the community-wide value of those benefits was difficult to quantify.

However, publicizing the dollars provided by the private sector, by the university, and by the public sector to fund the project's construction was far easier.

Relying almost entirely on the trust of the University of Illinois and of the surrounding Urbana-Champaign community for an entire decade, but with few true metrics to show for the impact it knew it was having, the park felt a pressure to make its value known. Yes, it could publicize the continually growing number of startups hosted, buildings added, student employees hired, and more, but what exactly did those numbers show? What sorts of benefits were existing independent businesses and other economic entities throughout the community experiencing? Why should they support county spending going to the Research Park or become a local proponent of the park's success themselves?

> From the park's perspective... the heat was on.

With all of that considered, from the park's perspective…the heat was on. And understandably so. It wanted nothing more than to be able to turn around and provide the public, and all contributing parties, with metrics which revealed returns that were just as impressive as their initial contributions. The need for objective, data-devised evidence of the park's value in terms of both dollars and jobs grew increasingly urgent with each new year of operations. This is where economic impact analysis really entered the picture.

During the park's first 10 years, continued construction efforts totaled **$101,785,249.**

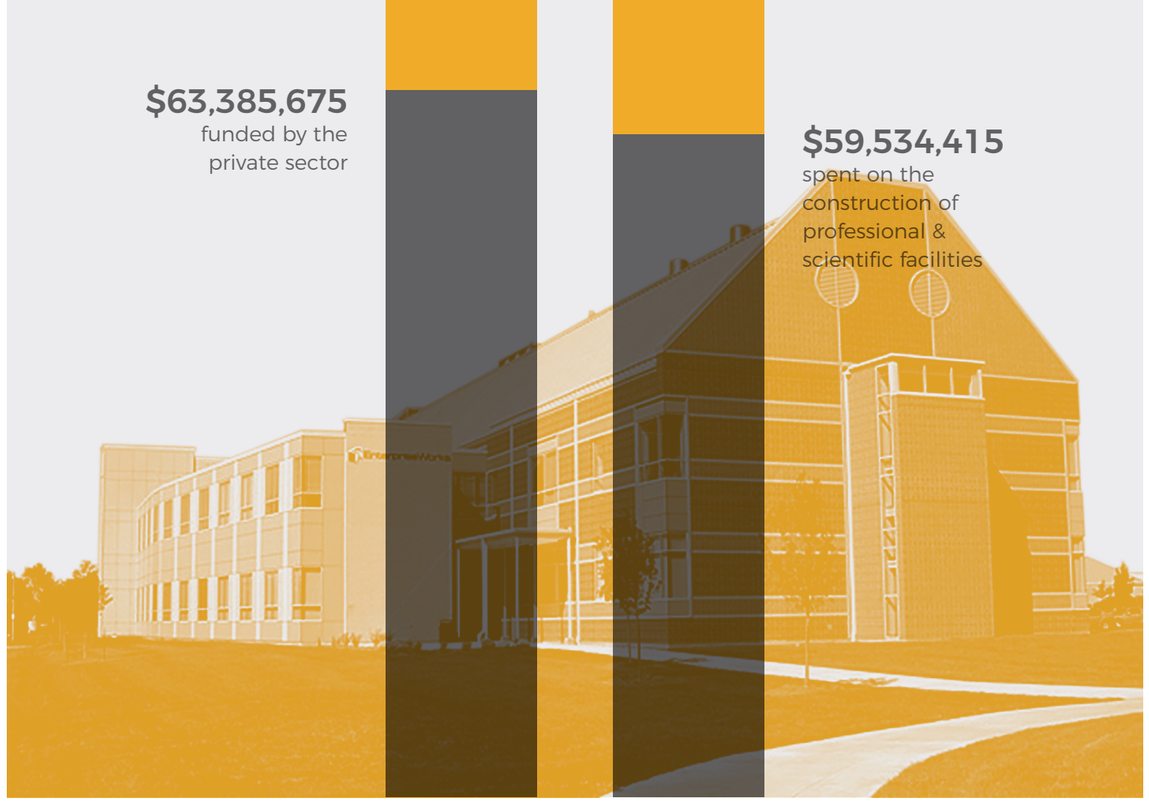
$38,399,574
funded by the university and by the public sector

$63,385,675
funded by the private sector

$13,406,687
spent on the construction of educational facilities

$28,844,147
spent on accommodations

$59,534,415
spent on the construction of professional & scientific facilities



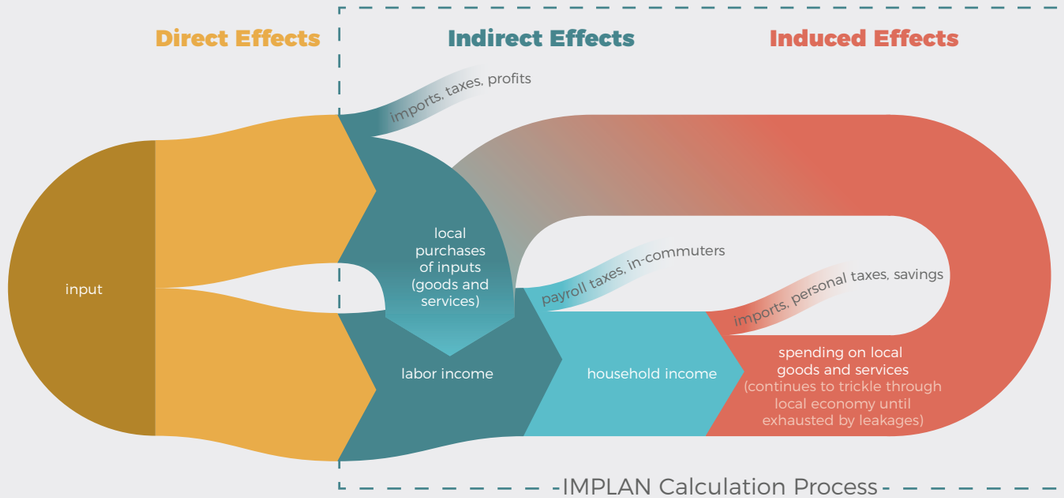
The **Solution**

In 2011, after ten years of operations, the Research Park decided to perform an economic impact analysis to gain a data-backed understanding of its role in supporting the local economy.

The location of the Research Park, in Champaign County, Illinois, made measuring its economic value to the region particularly interesting given the abundance of farmland surrounding the university and the scarcity of other large economic contributors in the area. From informing citizens of Champaign County and the areas surrounding the campus, to incentivizing state & local legislators, the park knew that publicizing the degree to which the local economy relied on it held the potential to open doors for growth that had previously remained closed.

Using regional economic data and an analytical software tool from IMPLAN, the worldwide leader in automated input-output modeling, the Research Park was able to input all of its known costs of construction, operations, employee compensation, and more, over the course of its 10-year presence and quantify the local economic activity it had stimulated during that time. Having known that its contributions were valuable all along, the combination of IMPLAN's economic data and software were able to actually put proof in the park's hands.

HOW DOES AN ECONOMIC IMPACT STUDY COME TOGETHER?



Direct Effects: The set of expenditures applied to the predictive model (i.e., I/O multipliers) for impact analysis.

It is a series of production changes or expenditures made by producers/consumers as a result of an event, activity, or policy. Applying these initial changes to the multipliers in an IMPLAN model displays how the region will respond economically to them.

Indirect Effects: The impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money leaks from the local economy. The impacts are calculated by applying Direct Effects to the Type I Multipliers.

Induced Effects: The response by an economy to an initial change (Direct Effect) that occurs through re-spending of labor income (employee compensation + proprietor income) throughout that region. IMPLAN's default multiplier assumes that labor income (employee compensation and proprietor income components of value added) is not a leakage from the regional economy. This money is recirculated through the household spending patterns causing further local economic activity.

The **Results**

The results of the Research Park's study were staggering. Its findings finally revealed what the park had been specifically contributing to the local economy and workforce over the previous decade.

The study separated the park's impacts into two main categories: Construction and Operations.

IMPACTS OF INVESTMENTS IN INFRASTRUCTURE AND CONSTRUCTION

The study found that, since 2001, the University of Illinois has invested over $100 million in the Research Park's infrastructure and in the construction of its facilities. Of that $100+ million investment, the study estimated that…

- 889 jobs were directly created in the region.
- 636 jobs were indirectly created or induced throughout the region.

The study then approximated that the 1,525 jobs attributed to that $100+ million investment, combined with the costs of necessary construction materials, contributed nearly $160 million of total economic output to the local economy.

The study estimated nearly $7.5 million in state tax revenue to have been generated by the construction efforts, while another $2.1 million was estimated to have been generated for Champaign County alone.

The study also revealed that wages directly attributable to the 10 years of continued construction efforts throughout the park totaled almost $45 million and averaged over $48,000 in compensation per worker. The study then measured an additional $23 million in indirect and induced wages throughout the local economy as being attributable to those efforts.

Finally, the study revealed five additional counties in the surrounding region of the economic model—Douglas County, Ford County, Iroquois County, Piatt County, and Vermillion County—as having experienced a $30,000 increase in generated wages thanks to indirect and induced jobs attributable to the activity within Champaign County.

IMPACTS OF THE PARK'S OPERATIONS

In addition to the impacts of investments in construction and infrastructure, the study analyzed the impacts of the Research Park's combined 1,235 full- and part-time employees, even quantifying dollars attributable to specific functions throughout the park's collection of employees.

The breakdown of the park's 1,235 combined employees revealed…

- 963 employees in Professional and Technical Services.
- 151 employees in Educational Services.
- 121 employees in Accommodations.
- 241 indirect jobs created throughout the region.
- 508 induced jobs created throughout the region.

The study found the annual payroll of the Research Park to be $54,503,179, which contributed an economic benefit of over $100 million locally, while indirect and induced jobs contributed an additional impact of over $68 million.

The study estimated that, since 2001, the park's operations yielded over $4 million in state tax revenue, nearly $1.5 million in tax revenue for Champaign County, and over $25,000 in taxes for the economic model's surrounding five counties: Douglas County, Ford County, Iroquois County, Piatt County, and Vermillion County.

Finally, the study revealed that the park's 10 years of operations had ultimately…

- created a total of 1,983 combined direct, indirect, and induced jobs throughout the region across both full-time employees and part-time student employees.
- generated $81,220,179 of combined direct, indirect, and induced wages across both full-time employees and part-time student employees.
- generated $169,549,000 of combined direct, indirect, and induced economic output across both full-time employees and part-time student employees.

So, armed with these figures, the Research Park demonstrated its value to the community and continued operating successfully, right? Well, yes…but that's so not the whole story. The *first* study was just the turning point.

. . .

The *follow-up* study in 2015 really drove the point home.

Since it took up residence in the Research Park, Yahoo! has become one of the largest employers in the park, employing more than 90 full-time staff members. The quality and consistency of the region's professional workforce is one reason why Yahoo! continues making strong and committed investments in the Champaign location, regardless of its distance from the California headquarters.

The (Other!) Results

The economic impact analysis performed in 2011 proved to be everything the Research Park had originally sought.

It was the exact vehicle the park had needed in order to secure its standing as both a publicly and institutionally recognized economic driver in the region. In fact, it became such a valuable asset in cultivating support, increasing funding, and bolstering the park's reputation as a regional economic power player that it decided to perform and publish another study in 2015, a mere 4 years after unveiling the first.

So, the Research Park turned once more to IMPLAN in order to assess the park's economic impact on the region between 2011 and 2015. These new metrics, in conjunction with the findings of the original study, which analyzed the park's impact between 2001 and 2011, would effectively paint a complete picture of the park's economic role from its inception to the current day.

As was the case with the original study, the 2015 report separated the park's impacts into two main categories. Unlike the original study, however, the 2015 report took an additional step and made a point to model the specific impacts attributable to EnterpriseWorks, the park's startup business incubator. EnterpriseWorks's economic impacts were also separated into the same two parent categories. Again, the study exposed a myriad of compelling figures.

IMPACTS OF INVESTMENTS IN INFRASTRUCTURE AND CONSTRUCTION

The study found that since the park opened in 2001, investments in infrastructure and construction have totaled $116 million, $16 million of which was invested in the past 5 years alone.

The study estimated that between 2012 and 2015, investments in infrastructure and construction have created 125 direct jobs, and 75 indirect and induced jobs. It then approximated that the combination of those 200 total jobs and the costs of necessary construction materials had created an economic impact of $25 million on the regional economy of East Central Illinois.

Combining its newfound data with that from the original 2011 study, the 2015 report also revealed that since 2001, the investments in infrastructure and construction have generated more than $184 million in economic output.

The study revealed that wages directly attributable to the park's continued construction efforts since 2001 have totaled almost $50 million, with an additional $25 million in indirect and induced wages also rippling throughout the region as a result.

Finally, the study measured the tax revenues generated from construction efforts since 2001 to be nearly $8.5 million at the state level and nearly $2.5 million for Champaign County alone.

IMPACTS OF INVESTMENTS IN INFRASTRUCTURE AND CONSTRUCTION IN ENTERPRISEWORKS

Delving deeper into the specific contributions of EnterpriseWorks, the park's 43,000-square-foot startup business incubator, the 2015 study found that, since 2012, the $835,000 investment in infrastructural improvements to EnterpriseWorks has:

- Created 8 jobs
- Paid $240,000 in direct wages
- Generated an additional $117,000 in indirect and induced wages
- Generated $61,000 in State tax revenues
- Generated $13,000 in tax revenues for Champaign County, IL
- Had a total impact of $1 million throughout the regional economy of East Central Illinois

IMPACTS OF THE PARK'S OPERATIONS

Of those 1,618 employees, 1,285 were working in Professional and Technical services, 168 were working in Educational Services, and 165 were working in Accommodations.

The study estimated a total annual economic output; attributable to the park's direct, indirect, and induced operations in East Central Illinois; of $319 million.

The study revealed that, between 2012 and 2015, employees of the Research Park have averaged $160 million in annual contributions to the regional economy of East Central Illinois, totaling nearly $650 million over the course of that time.

The study also found that, between 2012 and 2015, indirect and induced jobs resulting from the park's operations have averaged $136 million in annual contributions to East Central Illinois's economy, totaling nearly $545 million over the course of that time.

Finally, the study measured the tax revenues generated from the park's operations between 2012 and 2015 to be $7.5 million at the state level and $1.4 million for Champaign County alone.

IMPACTS OF ENTERPRISEWORKS'S OPERATIONS

Regarding the specific contributions of EnterpriseWorks's operations, the 2015 study found that the startup incubator:

- Was employing (at the time of publication) 173 full- and part-time employees in Professional and Technical Services
- Generated $38 million in annual economic output from direct, indirect, and induced operations in East Central Illinois
- Totaled $6.8 million in annual yearly wages of direct staff members
- Generated $802,000 in State tax revenues
- Generated $150,000 in tax revenues for Champaign County, IL

The study also found that in just the past two years, EnterpriseWorks employees have contributed $41 million directly to the regional economy of East Central Illinois, while employees working indirect and induced jobs resulting from its operations have contributed an additional $35 million during that span.

WHAT CHANGED?

Economic Output and Impact of Research Park Infrastructure Investment:

Years	Investment	Economic Output*	State Impact	County Impact
2001 - 2011	$100,000,000	$159,000,000	$7,200,000	$2,100,00
2012 - 2015	$16,000,000	$25,000,000	$1,200,000	$259,000
Total	$116,000,000	$184,000,000	$8,400,000	$2,359,000

Economic Output and Impact of Research Park Infrastructure Investment:

Years	Total Jobs*	Total Wages**	Total Economic Output**
2001 - 2011	1,983	$81,220,179	$169,549,000
2012 - 2015	2,926	$109,165,000	$319,281,000

*Total economic output impact figures include direct, indirect, and induced impacts.
**Total wages and economic output impact figures include direct, indirect, and induced impacts.

The Takeaway

Both of the Research Park's studies, in 2011 and again in 2015, objectively demonstrated that over the course of its years of operations (and propelled by consistent investments in expansion and growth), the collective benefits of the Research Park's presence in the region were reaped by everybody from local business owners in Champaign County to tax-paying residents throughout both surrounding counties and the whole of the State of Illinois.

Many non-numeric results of the study also proved to be useful to the park. While IMPLAN and economic impact analysis offered the park a plethora of facts and figures, the interpretation of those numbers (by the park itself), proved to be valuable in allowing it to share its value in a prose-style platform of communication.

In addition to promoting how many jobs it created, how many dollars of wages it paid, and how many dollars of output it contributed to the local economy, the park was able to publicize more comprehensible benefits like the attraction of a higher level of education to the area, the provision of a large number of high quality jobs in the region, and a power to afford local employees higher wages than those paid prior to the park's presence.

Ultimately, the park itself benefitted simply from having quantified, and then shared, its own economic impact. With increased media attention scattering its newly-acquired reputation as a regional driver for economic development, the Research Park received greater financial contributions than it had in the past. Plus, given the role it proved to play in contributing to the economic condition of both Champaign County and the State of Illinois, the park developed a public backing the likes of which it had never experienced, even during its most supported times.

Using economic impact analysis with IMPLAN, organizations like the Research Park at the University of Illinois at Urbana-Champaign are finally given the tools, and the power, to assert themselves with data-devised evidence of the degree to which their local economies rely on them. If the Research Park's experience with IMPLAN reveals anything to other groups like it, it's that impact analysis is an invaluable tool (and still a secret one!) that organizations of all sizes, locations, causes, and influences should be practicing right now.

SINCE PUBLISHING THE STUDIES

ASSOCIATION OF UNIVERSITY RESEARCH PARKS

The Association of University Research Parks (AURP) named the Research Park at the University of Illinois at Urbana-Champaign 2011's Most Outstanding Research Park of the Year.

"Over the last 10 years, the Research Park has had a significant impact on its community by incubating new startups, attracting large corporations to the region and creating jobs."

Inc.

In 2011, Inc.com named EnterpriseWorks, the park's business incubator, one of 10 Start-up Incubators to Watch.

"For tech firms that need some time to get their business in order, a residency at EnterpriseWorks provides office and lab space, meetings with the incubator's three entrepreneurs in residence, and the option to hire student employees from the University of Illinois's student body."

Inc.

Inc. Magazine also named EnterpriseWorks as one of 3 College-Town Incubators to Watch in 2013.

"EnterpriseWorks has nurtured 145 businesses, many in IT and biotech, since its founding 10 years ago. In addition to offering entrepreneurs legal assistance and payroll services, the incubator hosts six entrepreneurs-in-residence and an industrial-designer-in-residence to help start-ups bring their products to life."

Forbes

Forbes named the Research Park at the University of Illinois at Urbana-Champaign in its list of 12 Business Incubators Changing the World in 2013.

"The facility is unique in that it combines established firms and startups under one roof…The companies here employ more than 400 student interns."

techie.com

Techie.com named the park one of the Most Promising Tech Hubs to Watch in 2014.

"Research Park at the University of Illinois has some impressive tenants, including Yahoo, Dow, Anheuser-Busch, and Citrix."

POPULAR MECHANICS

Urbana, IL was listed as one of the 14 Best Startup Cities in America by Popular Mechanics in 2015.

"Sometimes it takes only one institution to fire an entire town's imagination. In the case of Urbana, that institution is the University of Illinois at Urbana-Champaign (UIUC), which graduated the engineering and technological talent that started Netscape, PayPal, Tesla Motors, and YouTube."

Take the first step now! To start your economic impact analysis today, visit IMPLAN.com.

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