There is money to be made in filling high-demand jobs.

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...a look at the public and private sector financial benefits of strategic, competitive, and sustainable workforce recruitment and retention

2020

- *The number of children in the workforce "pipeline" is insufficient to replace retirees.*

- *Between 2015 and 2020, Wisconsin in-migration fell more than 100,000 short of the officially projected workforce needs.*

- *The WDWD identified in excess of 60,000 high-demand job openings (i.e., Top 50 Hot Jobs categories).*

Provide examples of the quantifiable financial value-added to the public sector when a high-demand job is filled in Wisconsin.

Deloitte profiled* three specific job categories

ADN Nurse

Sector: Health Care

Role Description:
The ADN nurse archetype has attained a 2-year associates degree in nursing and has passed a national licensing exam to become a registered nurse (RN). Note that "ADN" is not their job title as their 2-year degree only represents a pathway taken to become a RN. Many hospitals will not differentiate between RNs with associates degrees and those with bachelors degrees

Welder

Sector: Advanced Manufacturing

Role Description:
The Welder archetype represents an individual who has received up to 2 years of training through technical colleges or other training programs, such as boot-camps, independent certificate programs, or an employer's own training course. On an ongoing basis welders can demonstrate improved skills through length of experience or additional certification tests

Network Engineer

Sector: STEM

Role Description:
The Network Engineer archetype represents an individual who has achieved a 4 year degree in computer science or highly related fields, and has the ability to plan, implement, and oversee the computer networks for a corporation. This archetype works in a company's internal IT function and ensures availability of data, video, voice, and wireless network services
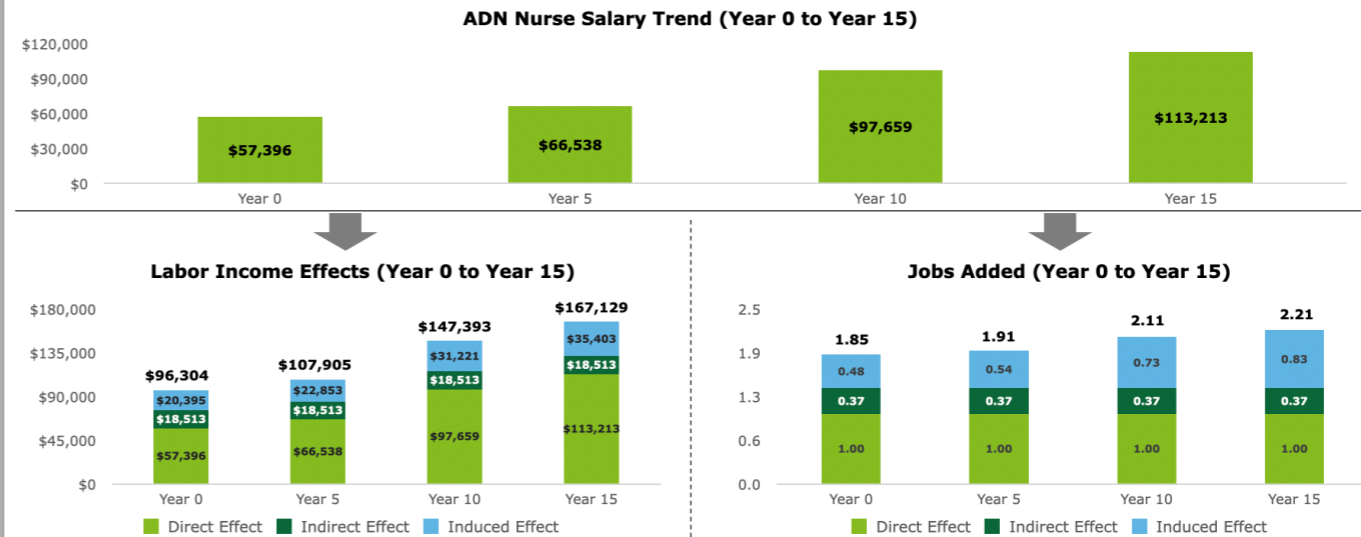
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*. Based on interviews with Wisconsin business and community leaders Deloitte identified the following 3 types of representative archetypes.

Deloitte quantified economic impact/value to the public sector

Economic Impact Analysis – ADN Nurse (Healthcare Archetype)
By year 15 each ADN Nurse resource will bring Wisconsin $167,129 / year in additional labor income and create 2.21 jobs (including the Nurse's own job)
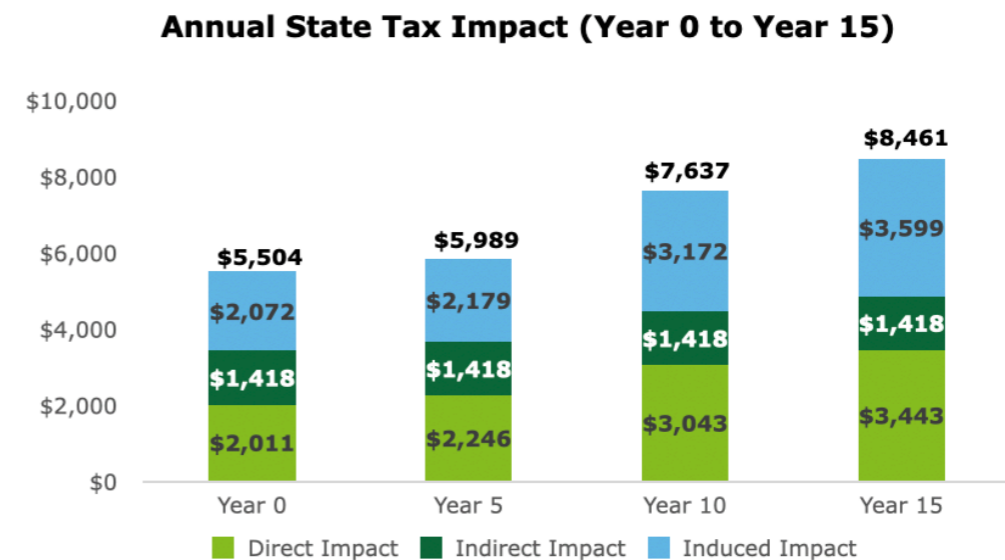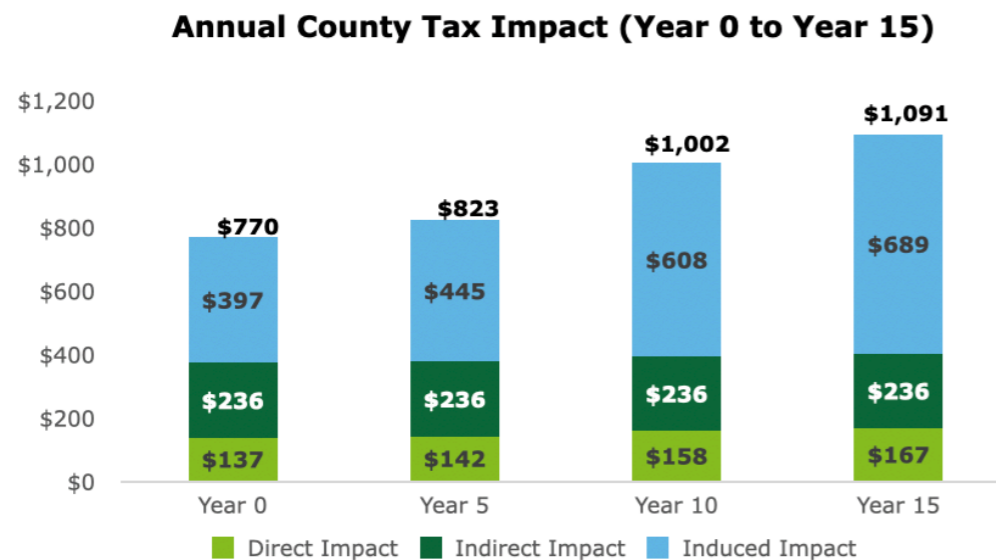
ADN Nurse Salary Trend (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
	$57,396	$66,538	$97,659	$113,213

Labor Income Effects (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$96,304	$107,905	$147,393	$167,129
Induced Effect	$20,395	$22,853	$31,221	$35,403
Indirect Effect	$18,513	$18,513	$18,513	$18,513
Direct Effect	$57,396	$66,538	$97,659	$113,213

Legend: Direct Effect, Indirect Effect, Induced Effect

Jobs Added (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	1.85	1.91	2.11	2.21
Induced Effect	0.48	0.54	0.73	0.83
Indirect Effect	0.37	0.37	0.37	0.37
Direct Effect	1.00	1.00	1.00	1.00

Legend: Direct Effect, Indirect Effect, Induced Effect

Sources: Business and Community Leader Interviews; IMPLAN, Deloitte Analysis, ERI.net, Bureau of Labor Statistics

Note: Values for Years 5, 10, and 15 are not discounted

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Economic Impact Analysis – ADN Nurse (Healthcare Archetype)

From a fiscal impacts perspective, by year 15 each ADN Nurse will allow for an incremental $1,091 in annual county-level taxes and $8,461 in annual state-level taxes

Annual County Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$770	$823	$1,002	$1,091
Induced Impact	$397	$445	$608	$689
Indirect Impact	$236	$236	$236	$236
Direct Impact	$137	$142	$158	$167

Legend: Direct Impact, Indirect Impact, Induced Impact

Annual State Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$5,504	$5,989	$7,637	$8,461
Induced Impact	$2,072	$2,179	$3,172	$3,599
Indirect Impact	$1,418	$1,418	$1,418	$1,418
Direct Impact	$2,011	$2,246	$3,043	$3,443

Legend: Direct Impact, Indirect Impact, Induced Impact

Deloitte quantified economic impact/value to the public sector

Economic Impact Analysis – Welder (Advanced Manufacturing Archetype)

By year 15 each Welder resource will bring Wisconsin $142,907 / year in additional labor income and create 2.3 jobs (including the Welder's own job)

Welder Salary Trend (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Salary	$41,385	$55,000	$65,000	$75,353

Labor Income Effects (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$99,806	$117,081	$129,770	$142,907
Induced Effect	$21,137	$24,798	$27,486	$30,270
Indirect Effect	$37,283	$37,283	$37,283	$37,283
Direct Effect	$41,385	$55,000	$65,000	$75,353

Legend: Direct Effect, Indirect Effect, Induced Effect

Jobs Added (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	2.09	2.17	2.24	2.30
Induced Effect	0.5	0.58	0.65	0.71
Indirect Effect	0.59	0.59	0.59	0.59
Direct Effect	1.00	1.00	1.00	1.00

Legend: Direct Effect, Indirect Effect, Induced Effect

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Economic Impact Analysis – Welder (Advanced Manufacturing Archetype)
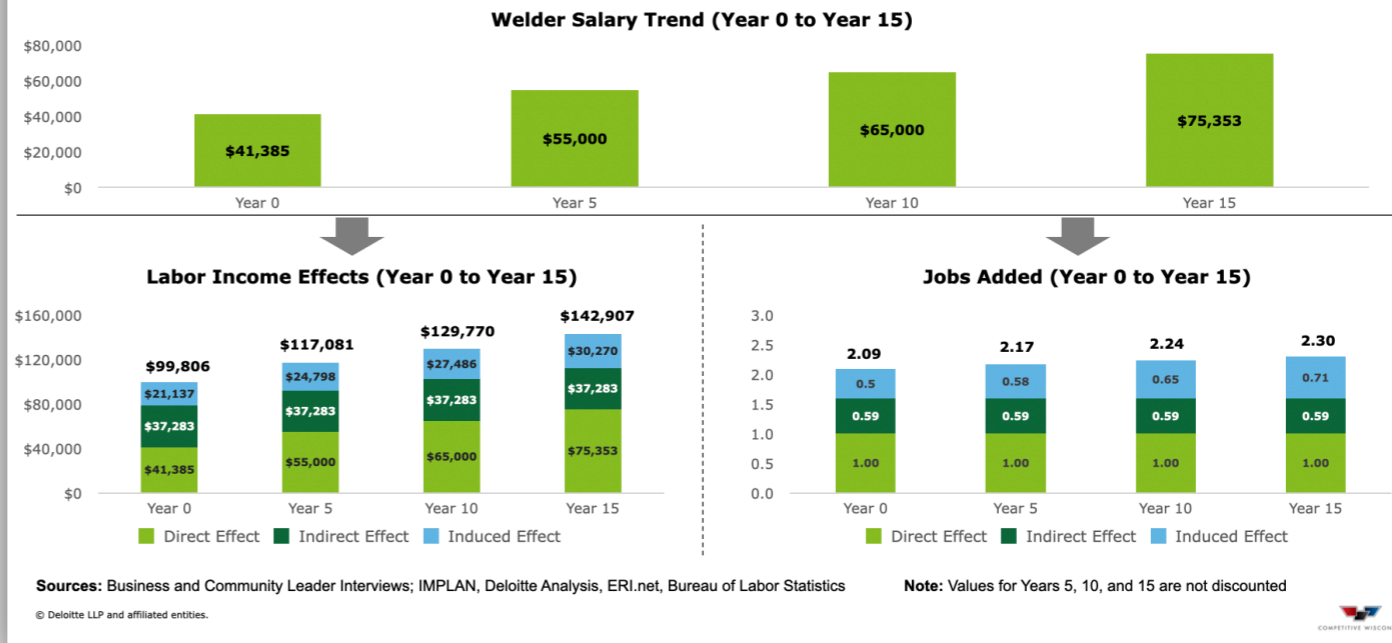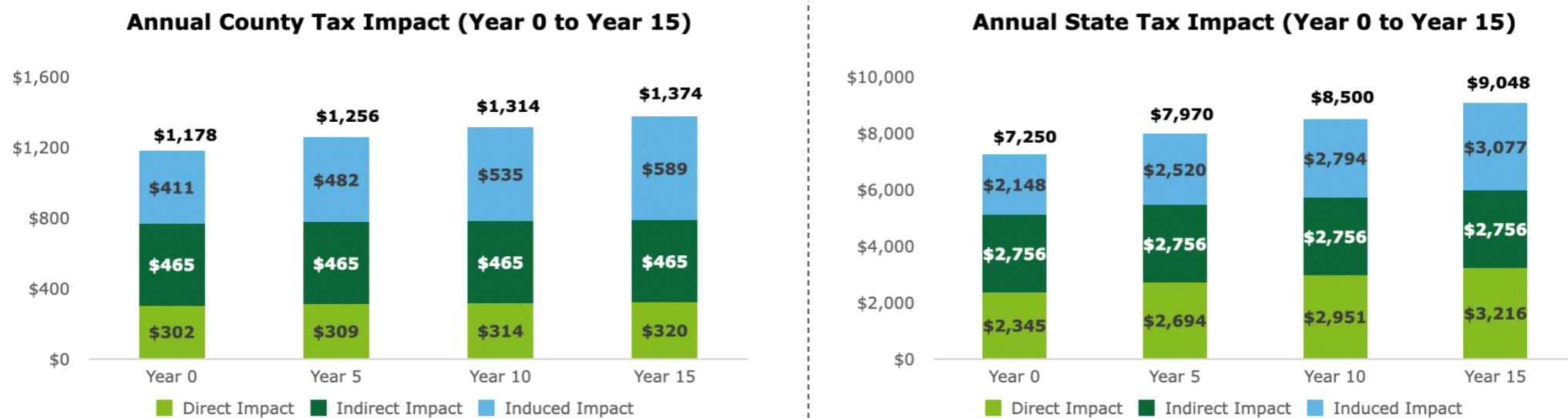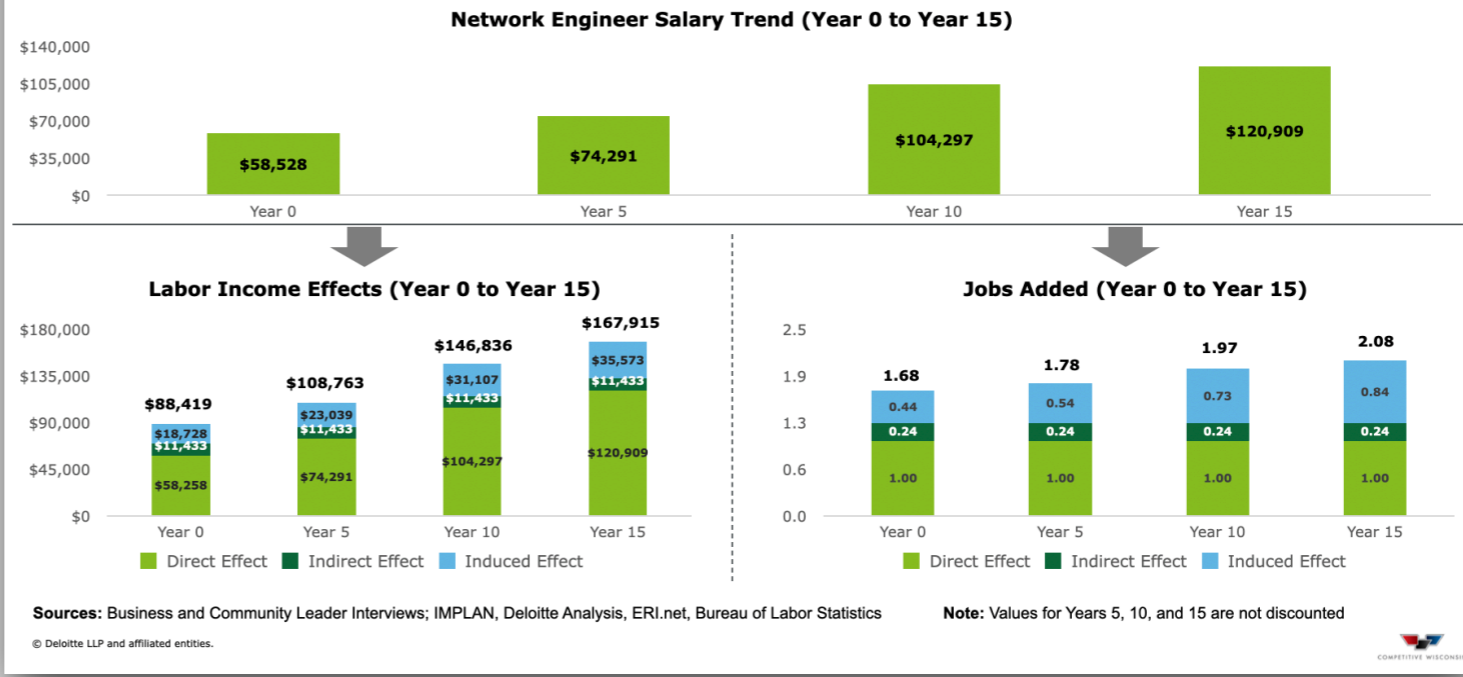
From a fiscal impacts perspective, by year 15 each Welder will allow for an incremental $1,374 in annual county-level taxes and $9,048 in annual state-level taxes

Annual County Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$1,178	$1,256	$1,314	$1,374
Induced Impact	$411	$482	$535	$589
Indirect Impact	$465	$465	$465	$465
Direct Impact	$302	$309	$314	$320

Legend: Direct Impact, Indirect Impact, Induced Impact

Annual State Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$7,250	$7,970	$8,500	$9,048
Induced Impact	$2,148	$2,520	$2,794	$3,077
Indirect Impact	$2,756	$2,756	$2,756	$2,756
Direct Impact	$2,345	$2,694	$2,951	$3,216

Legend: Direct Impact, Indirect Impact, Induced Impact

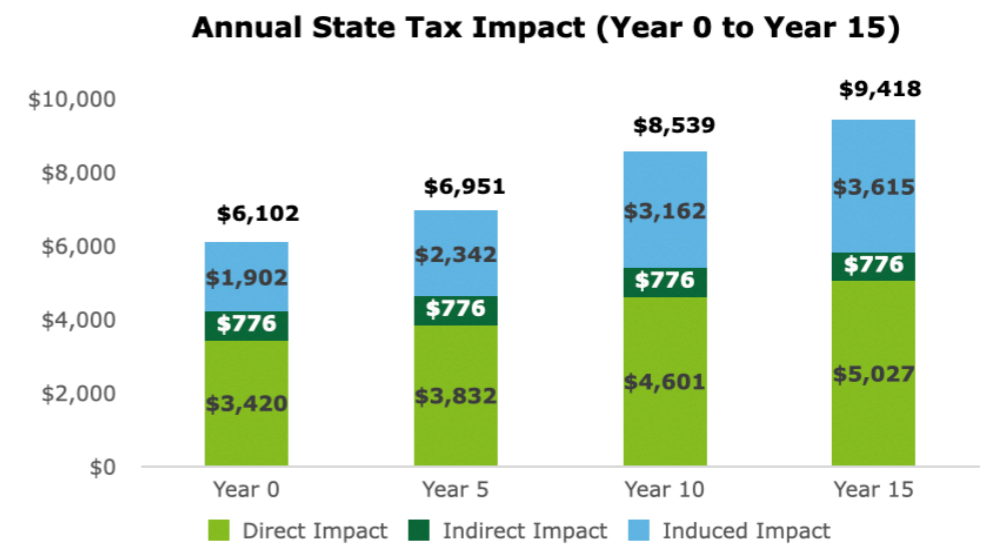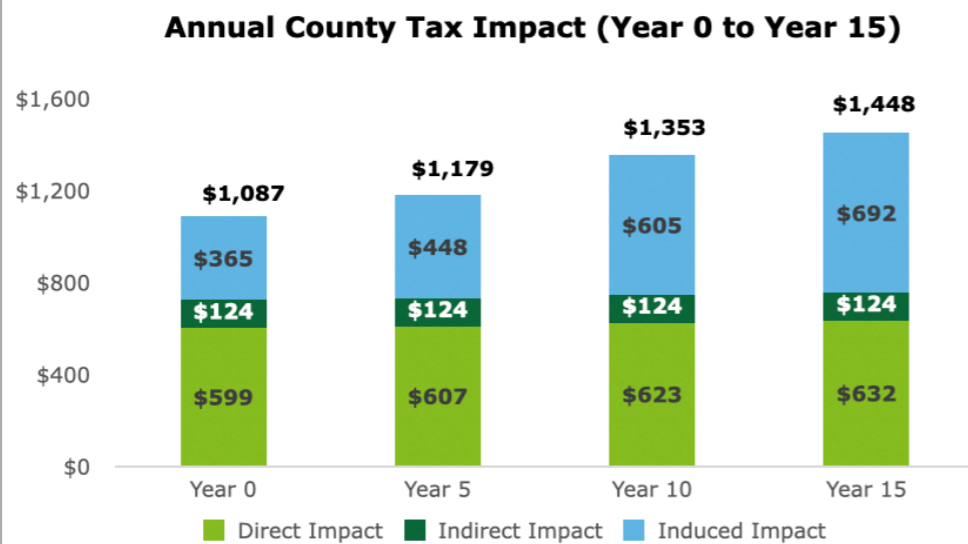# Deloitte quantified economic impact/value to the public sector

Economic Impact Analysis – Network Engineer (STEM Worker Archetype)

By year 15 each Network Engineer will bring Wisconsin $167,915 / year in additional labor income and create 2.08 jobs (including the Network Engineer's own job)

Network Engineer Salary Trend (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Salary	$58,528	$74,291	$104,297	$120,909

Labor Income Effects (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$88,419	$108,763	$146,836	$167,915
Induced Effect	$18,728	$23,039	$31,107	$35,573
Indirect Effect	$11,433	$11,433	$11,433	$11,433
Direct Effect	$58,258	$74,291	$104,297	$120,909

Legend: ■ Direct Effect ■ Indirect Effect ■ Induced Effect

Jobs Added (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	1.68	1.78	1.97	2.08
Induced Effect	0.44	0.54	0.73	0.84
Indirect Effect	0.24	0.24	0.24	0.24
Direct Effect	1.00	1.00	1.00	1.00

Legend: ■ Direct Effect ■ Indirect Effect ■ Induced Effect

Sources: Business and Community Leader Interviews; IMPLAN, Deloitte Analysis, ERI.net, Bureau of Labor Statistics   **Note:** Values for Years 5, 10, and 15 are not discounted

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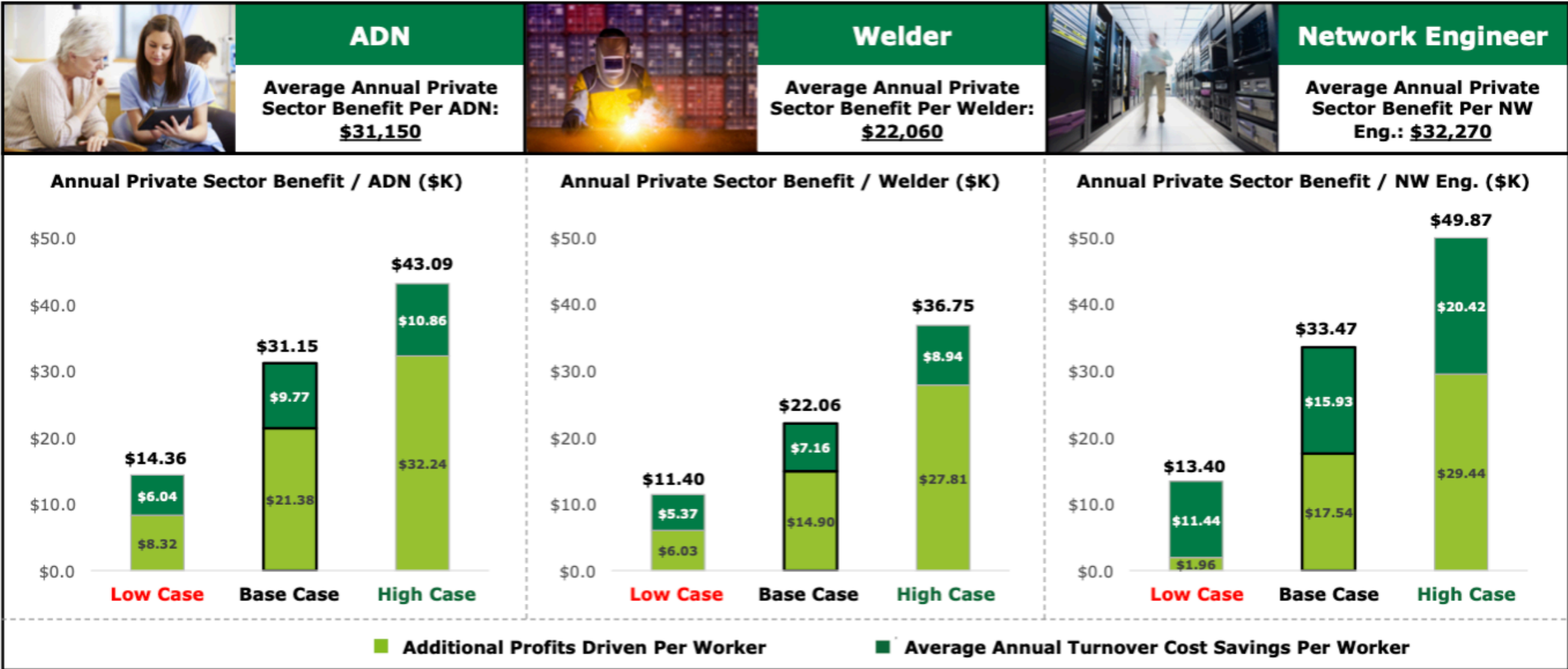
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Economic Impact Analysis – Network Engineer (STEM Worker Archetype)

From a fiscal impacts perspective, by year 15 each Network Engineer will allow for an incremental $1,448 in annual county-level taxes and $9,418 in annual state-level taxes

Annual County Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$1,087	$1,179	$1,353	$1,448
Induced Impact	$365	$448	$605	$692
Indirect Impact	$124	$124	$124	$124
Direct Impact	$599	$607	$623	$632

Legend: ■ Direct Impact ■ Indirect Impact ■ Induced Impact

Annual State Tax Impact (Year 0 to Year 15)

	Year 0	Year 5	Year 10	Year 15
Total	$6,102	$6,951	$8,539	$9,418
Induced Impact	$1,902	$2,342	$3,162	$3,615
Indirect Impact	$776	$776	$776	$776
Direct Impact	$3,420	$3,832	$4,601	$5,027

Legend: ■ Direct Impact ■ Indirect Impact ■ Induced Impact

Deloitte quantified economic impact/value to the **private** sector

Deloitte quantified economic impact/value to the private sector

Executive Summary

Context: In evaluating workforce recruitment and retention topics as part of Be Bold IV, we have previously explored the public sector value of workers from three key archetypes. As a follow-up, the following is an analysis of the private sector value of those same three archetypes (shown below)

Objective: Quantify additional profits / cost savings brought by each worker archetype, assuming that workers are incentivized (through a workforce program) to remain with employers for a period of 5 years

ADN Summary Results

+ Additional Annual Profitability Driven Per Worker	$21.4 K
+ Annual Turnover Cost Savings Per Worker	$9.8 K
Total Annual Private Sector Benefit Per Worker	$31.1 K
× Workforce Program Duration	5 Years
Five Year Private Sector Benefit Per Worker	$155.7 K

Welder Summary Results

+ Additional Annual Profitability Driven Per Worker	$14.9 K
+ Annual Turnover Cost Savings Per Worker	$7.2 K
Total Annual Private Sector Benefit Per Worker	$22.1 K
× Workforce Program Duration	5 Years
Five Year Private Sector Benefit Per Worker	$110.3 K

Network Engineer Summary Results

+ Additional Annual Profitability Driven Per Worker	$16.3 K
+ Annual Turnover Cost Savings Per Worker	$15.9 K
Total Annual Private Sector Benefit Per Worker	$32.3 K
× Workforce Program Duration	5 Years
Five Year Private Sector Benefit Per Worker	$161.3 K

Note: Values shown are round to the nearest hundred, resulting in slight rounding errors for the "Private Sector Benefit" values shown on this page

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After accounting for the proposed workforce recruitment and retention investments, the NET public and private revenues generated by filling the three high-demand job openings driven by growth and exits exceeds a half a billion dollars.

IDENTIFY FUNDING STREAMS

TARGETED INVESTMENT-DRIVEN SUSTAINABLE

		5 Year Net ROI per Job Filled	2018 Job Openings: Growth & Exits
	Public	$ 34,320	
	Private	$145,750	2,178
	Total	$ 180,070	
	Public	$ 50,070	
	Private	$100,300	500
	Total	$ 150,370	
	Public	$ 44,270	
	Private	$157,350	379
	Total	$ 201,620	

Five Year Grand NET Total for just three of the 50 Hot Jobs

$582 MILLION