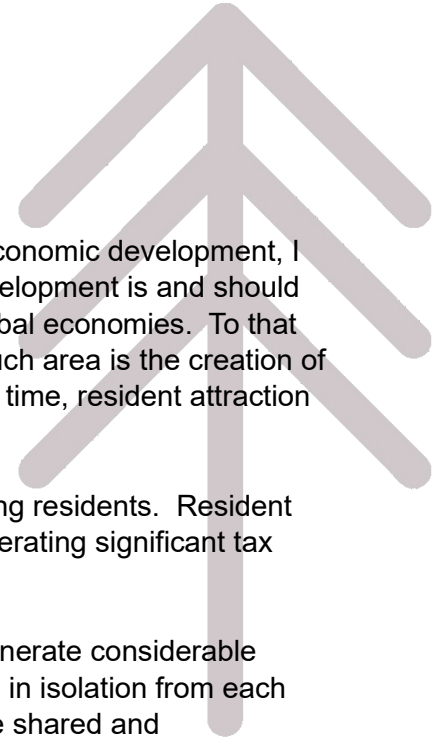


Adding Jobs & Residents

Creating Complimentary Economic Outcomes



Having spent the last 15 years of my career on both the public and private sides of economic development, I have become a curious observer of and participant in this ecosystem. Economic development is and should always be adapting to the opportunities and challenges within local, national, and global economies. To that end, we often see new areas of focus emerge within economic development. One such area is the creation of tools and programs to attract new residents. While the concept has existed for some time, resident attraction programs have proliferated in the last few years.

I conducted some research in order to better understand the fiscal impacts of attracting residents. Resident attraction programs appear to require modest investments on the front end while generating significant tax revenue for state and local governments.

The data show that resident attraction programs and job attraction programs each generate considerable positive return on investment. However, in my experience the two are often operated in isolation from each other. It seems there is an opportunity to connect the two efforts in order to maximize shared and complimentary results. States and communities that couple successful job attraction tools with burgeoning resident attraction tools should see not only direct positive fiscal effects but also broader advancements associated with growing job markets and growing populations driven by ripple effects that extend well beyond the direct impacts.

States and communities recognize that there is value (both economic and societal) in being the home to both residents and jobs. Where people live and where people work are inextricably linked. Communities and companies fail to exist without people. As such, states and communities have developed tools to encourage – incentivize – the attraction of jobs and residents.

- Incentive tools to encourage job creation date back to 1979^a when Maine enacted a job creation tax credit. Over the following decades, such tools have become widespread throughout the U.S.
- Incentives to attract residents are much newer. Reports of such programs can be found in the early 2010s. The most well-known program began in Tulsa, Oklahoma in 2018.

In a time of unprecedented worker mobility, flexible work arrangements, and emerging industries, it is critical that states and communities align efforts and tools to attract both jobs and people. Like most things in economic development, this is strategy of ‘and’ not ‘or’. Attracting new jobs and attracting new residents, respectively and collectively, create positive outcomes and generate significant economic value. When both are done well, communities can realize outcomes that increase economic output, enhance tax revenues and tax bases, grow school enrollments, and diversify neighborhoods.

Existing research allows us to estimate the fiscal impacts of attracting both jobs and residents. In order to standardize the estimates here, we will use wages as the basis for calculating the fiscal effects.

- A new **resident** who earns wages naturally creates a fiscal impact on state and local governments by paying income, property, sales, and other taxes. Research suggests that U.S. households pay on average 7.2% – 11.4%^b of their income in state and local taxes each year (paid to the state/locality of residence). Households earning between \$80,400 and \$138,300 annually average 10.3%, which we will use for the calculations here.
- Research indicates that a **business** in a “base” industry (those that create wealth by principally selling goods/services outside of the area in which they are produced) pays taxes to state and local governments that equate to a present value^c of approximately 4.74%^d of the company’s value-added

(paid to the state/locality where the business facility is located). Value-added is a measure of the economic value that a company adds to its products and services before offering them to customers; put another way, value-added is the company's contribution to gross domestic product (GDP).

- Fortunately, we can connect value-added to wages. Wages are known to represent approximately half of company value-added^e. Therefore, multiplying the wages of a business by 2 produces an estimated value-added amount for the company.

These estimates do not account for secondary indirect and induced impacts. They capture only the direct fiscal impacts – taxes paid – by the resident and business operation respectively.

The following table displays the estimated state & local taxes paid over a 20-year period by residents and a business, respectively, using the same inputs: 100 residents/jobs with annual wages of \$100,000.

		Total Annual Wages based on scenario assumptions		Value-Added estimated at 2x ^e wages		Resident State & Local Taxes paid estimated at 10.3% ^b of wages		Business State & Local Taxes paid per Bartik ^d model (w 3% discount rate)	
		Gross	Present Value	Gross	Present Value	Gross	Present Value	Gross	Present Value
		Yr 1	\$ 10,000,000	\$ 10,000,000	\$ 20,000,000	\$ 20,000,000	\$ 1,030,000	\$ 1,030,000	\$ 1,598,000
Yr 2	\$ 10,000,000	\$ 9,708,738	\$ 20,000,000	\$ 19,417,476	\$ 1,030,000	\$ 1,000,000	\$ 860,000	\$ 834,951	
Yr 3	\$ 10,000,000	\$ 9,425,959	\$ 20,000,000	\$ 18,851,918	\$ 1,030,000	\$ 970,874	\$ 860,000	\$ 810,632	
Yr 4	\$ 10,000,000	\$ 9,151,417	\$ 20,000,000	\$ 18,302,833	\$ 1,030,000	\$ 942,596	\$ 860,000	\$ 787,022	
Yr 5	\$ 10,000,000	\$ 8,884,870	\$ 20,000,000	\$ 17,769,741	\$ 1,030,000	\$ 915,142	\$ 860,000	\$ 764,099	
Yr 6	\$ 10,000,000	\$ 8,626,088	\$ 20,000,000	\$ 17,252,176	\$ 1,030,000	\$ 888,487	\$ 860,000	\$ 741,844	
Yr 7	\$ 10,000,000	\$ 8,374,843	\$ 20,000,000	\$ 16,749,685	\$ 1,030,000	\$ 862,609	\$ 858,000	\$ 718,561	
Yr 8	\$ 10,000,000	\$ 8,130,915	\$ 20,000,000	\$ 16,261,830	\$ 1,030,000	\$ 837,484	\$ 858,000	\$ 697,633	
Yr 9	\$ 10,000,000	\$ 7,894,092	\$ 20,000,000	\$ 15,788,185	\$ 1,030,000	\$ 813,092	\$ 858,000	\$ 677,313	
Yr 10	\$ 10,000,000	\$ 7,664,167	\$ 20,000,000	\$ 15,328,335	\$ 1,030,000	\$ 789,409	\$ 858,000	\$ 657,586	
Yr 11	\$ 10,000,000	\$ 7,440,939	\$ 20,000,000	\$ 14,881,878	\$ 1,030,000	\$ 766,417	\$ 856,000	\$ 636,944	
Yr 12	\$ 10,000,000	\$ 7,224,213	\$ 20,000,000	\$ 14,448,426	\$ 1,030,000	\$ 744,094	\$ 856,000	\$ 618,393	
Yr 13	\$ 10,000,000	\$ 7,013,799	\$ 20,000,000	\$ 14,027,598	\$ 1,030,000	\$ 722,421	\$ 856,000	\$ 600,381	
Yr 14	\$ 10,000,000	\$ 6,809,513	\$ 20,000,000	\$ 13,619,027	\$ 1,030,000	\$ 701,380	\$ 856,000	\$ 582,894	
Yr 15	\$ 10,000,000	\$ 6,611,178	\$ 20,000,000	\$ 13,222,356	\$ 1,030,000	\$ 680,951	\$ 856,000	\$ 565,917	
Yr 16	\$ 10,000,000	\$ 6,418,619	\$ 20,000,000	\$ 12,837,239	\$ 1,030,000	\$ 661,118	\$ 856,000	\$ 549,434	
Yr 17	\$ 10,000,000	\$ 6,231,669	\$ 20,000,000	\$ 12,463,339	\$ 1,030,000	\$ 641,862	\$ 856,000	\$ 533,431	
Yr 18	\$ 10,000,000	\$ 6,050,164	\$ 20,000,000	\$ 12,100,329	\$ 1,030,000	\$ 623,167	\$ 856,000	\$ 517,894	
Yr 19	\$ 10,000,000	\$ 5,873,946	\$ 20,000,000	\$ 11,747,892	\$ 1,030,000	\$ 605,016	\$ 856,000	\$ 502,810	
Yr 20	\$ 10,000,000	\$ 5,702,860	\$ 20,000,000	\$ 11,405,721	\$ 1,030,000	\$ 587,395	\$ 856,000	\$ 488,165	
		\$ 200,000,000	\$ 153,237,991	\$ 400,000,000	\$ 306,475,982	\$ 20,600,000	\$ 15,783,513	\$ 17,890,000	\$ 13,883,904

This modeling suggests 100 new residents will pay \$20.6 million in state and local taxes over a 20-year period, or a present value of \$15.8 million. Over that same period, a business with 100 employees will pay \$17.9 million or a present value of \$13.9 million.

Now let us assume the state/local government provided incentives to catalyze the attraction of 100 new residents and the creation of 100 new jobs, respectively.

- For residents, we will assume the incentive is a cash payment of \$5,000^f made to each individual in Year 1.
- For jobs, we will rely on existing research^d to estimate incentives over the 20-year period. This research attempts to accurately allocate the incentives over the 20-year period for a “standard deal” in the U.S. The components of the 20-year incentives package present value are:
 - job creation tax credits 43% of total present value
 - property tax abatements 28%
 - investment tax credits 13%
 - customized job training 4%
 - research & development tax credits 11%

The table below displays the effects (reduction) in fiscal impacts for state and local taxes due to the deployment of incentives to create the outcomes.

Resident State & Local Taxes paid after incentives						Business State & Local Taxes paid after incentives			
incentive = \$5,000 per new resident						incentive = per Bartik ^d			
		Gross	Incentive	Net	Net Present Value	Tax PV	Incentive PV	Net Present Value	
Yr 1		\$ 1,030,000	\$ (500,000)	\$ 530,000	\$ 530,000	\$ 1,598,000	\$ (708,000)	\$ 890,000	
Yr 2		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 1,000,000	\$ 834,951	\$ (328,155)	\$ 506,796	
Yr 3		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 970,874	\$ 810,632	\$ (309,171)	\$ 501,461	
Yr 4		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 942,596	\$ 787,022	\$ (289,185)	\$ 497,837	
Yr 5		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 915,142	\$ 764,099	\$ (266,546)	\$ 497,553	
Yr 6		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 888,487	\$ 741,844	\$ (232,904)	\$ 508,939	
Yr 7		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 862,609	\$ 718,561	\$ (216,071)	\$ 502,491	
Yr 8		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 837,484	\$ 697,633	\$ (196,768)	\$ 500,864	
Yr 9		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 813,092	\$ 677,313	\$ (184,722)	\$ 492,591	
Yr 10		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 789,409	\$ 657,586	\$ (174,743)	\$ 482,843	
Yr 11		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 766,417	\$ 636,944	\$ (59,528)	\$ 577,417	
Yr 12		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 744,094	\$ 618,393	\$ (56,349)	\$ 562,044	
Yr 13		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 722,421	\$ 600,381	\$ (42,083)	\$ 558,298	
Yr 14		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 701,380	\$ 582,894	\$ (40,857)	\$ 542,037	
Yr 15		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 680,951	\$ 565,917	\$ (39,667)	\$ 526,250	
Yr 16		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 661,118	\$ 549,434	\$ (32,093)	\$ 517,341	
Yr 17		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 641,862	\$ 533,431	\$ (31,158)	\$ 502,273	
Yr 18		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 623,167	\$ 517,894	\$ (30,251)	\$ 487,643	
Yr 19		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 605,016	\$ 502,810	\$ (29,370)	\$ 473,440	
Yr 20		\$ 1,030,000	\$ -	\$ 1,030,000	\$ 587,395	\$ 488,165	\$ (28,514)	\$ 459,651	
		\$ 20,600,000	\$ (500,000)	\$ 20,100,000	\$ 15,283,513	\$ 13,883,904	\$ (3,296,136)	\$ 10,587,768	

Each scenario generates significant state and local tax payments with positive return on investment. The investment in new residents appears to be more efficient, driven primarily by the lower incentive amount.

	Present Value of Incentives ("Investment")	Present Value of State & Local Taxes after Incentives ("Net Return")	Return on Investment (Net Return / Investment)
Residents	\$ 500,000	\$ 15,283,513	30.57
Jobs	\$ 3,296,136	\$ 10,587,768	3.21

(The present value of the resident incentive is the same as the gross amount because the incentive is assumed to occur in year 1.)

As noted above, this discussion should be viewed through the lens of ‘and’ not ‘or’. Rather than attracting residents and jobs irrespective from each other, what if the efforts were focused on the same event – a state/community uses incentives to attract new jobs and also uses incentives to attract new residents to grow the area’s labor market to support the increased demand for employees? The positive returns noted above are specific to the resident and the business; therefore, they can be combined. Research indicates that when the number of available jobs in an area increases, so does the population of the area. Within a few years of the new job creation, the local population goes up (in-migration) by over 80 percent⁹ of the number of new jobs in order to meet the increased labor demand. Thus, we will assume 85% of the new residents can be tied to the specific event. In order to be consistent, we will also assume that 85% of the business’s positive tax impact. The use of resident and business incentives for this specific event yield a combined return of nearly 6x.

		Present Value of Incentives ("Investment")	Present Value of State & Local Taxes after Incentives ("Net Return") at 85% direct effect	Return on Investment (Net Return / Investment)
Percent of jobs filled by new residents	85%	\$ 500,000	\$ 12,990,986	25.98
Percent of jobs created due to incentives	85%	\$ 3,296,136	\$ 8,999,603	2.73
Combined		\$ 3,796,136	\$ 21,990,589	5.79

The scenarios above measure only fiscal effects – the state and local government dollars deployed as incentives and the dollars expected to be paid via state and local taxes. The scenarios do not account for ripple effects – indirect and induced impacts in the economy. The following information provides general context concerning the order of magnitude of ripple effects:

- **Residents** create value in myriad ways^h beyond simply paying taxes. While estimating a general dollar value per resident is difficult, we can make some inferences. On average, Americans spend 80%ⁱ of their total income on “consumption” (buying goods and services). Of that expenditure, much of it is presumably spent locally, which creates local economic impact through the demand for and purchase of public and private goods and services. A few examples^j of these consumer expenditures include: healthcare (20% of dollars spent), recreation (9%), groceries – food & beverage (8%), restaurants (6%), utilities (3%), clothing (3%), and professional services (1%). Additionally, there is evidence that new residents who participate in a resident attraction program demonstrate an increase in valuable social actions that have indirect economic value, such as volunteering^k.
- For **businesses**, the presence of a company/industry in a location has a multiplier effect. Operations in base industries are known to have the highest multipliers. Jobs multipliers for manufacturing industries are commonly found to be in the range of 2 - 3; some high-tech industries can have multipliers as high as 6^l. A jobs multiplier of 2.5 would mean for one job created at the company, the broader economy would add 1.5 new jobs.

The data indicate that on average incentive programs to attract jobs and residents are successful. From a return on investment perspective, each type of effort generates state and local tax revenues that far exceed the value of the incentives applied. The success of any economic development program is always determined by smart and strategic design and implementation. It is clear that an opportunity exists to make these successful programs even more successful by finding ways to align and integrate the efforts to generate increasingly robust outcomes.

About the author

Jacob Everett is the Founder of [Corsa Strategies](#), which provides site selection and incentive advisory services across North America as well as leadership in renewable energy. Jacob is a Certified Economic Developer (CEcD) accredited by the International Economic Development Council and has nearly 15 years of experience working at the intersection of the public and private sectors. Focused on all forms of private sector growth and investment, Corsa Strategies provides advisory services to businesses to optimize location strategies, maximize financial performance of facilities and investment activities, and facilitate engagement with the public sector to enable growth. Jacob’s work consulting private sector clients spans North America and has included companies of all sizes and industries. He writes and speaks nationally on site selection, real estate, economic development, and energy.

Endnotes

This paper looks at the investment made to catalyze (incentives) the attraction of residents/jobs and the state & local tax revenues directly generated, respectively, by those residents and the facility at which the workers are employed. This analysis does not attempt to evaluate the effectiveness of state and local tax systems; in other words, government’s “cost to serve” (public safety, infrastructure, education, etc.) is not contemplated here. We’ll leave that debate to others.

For ease of demonstration, the wage level (and by extension the value-added level) is held static over the 20-year period. Realistically, wages would naturally migrate upward over time. Applying annual wage increases would certainly increase the ROI level for resident attraction programs. The appropriateness of applying similar annual increases to the jobs attraction modeling is unclear due to the complexity of the underlying research that this paper relies upon; it is expected that annual increases (if appropriate) to undiscounted value-added would either slightly increase jobs attraction ROI or leave it the same.

