

RESEARCH REPORT

State Economic Development Strategies

A Discussion Framework

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Executive Summary

States invest in economic development to encourage job growth, increase wages, and raise the standard of living for their residents. State economic development efforts, however, typically encompass many programs administered by several agencies at different levels of government, making it difficult to coordinate investments across the state. States can better leverage scarce resources by coordinating investments across agencies and incorporating executive or legislative mechanisms for interagency communication, data sharing, program evaluation, and long-term planning.

State investment in economic development falls into three categories: investment in the marketplace, in the workforce, and in the community. Marketplace investment includes general business support and finance assistance, small-business procurement programs, and tax incentives. Most evidence shows, however, that government actions are not the primary driver of firm siting and operation decisions. Thus, governments should target their resources toward gaps in support that businesses cannot fill through the private marketplace.

Workforce and community investments can help create the conditions for sustainable economic growth. Workforce programs develop and train the local labor force, connecting workers to family-sustaining jobs while meeting firm demands for skilled labor. Investment in the workforce includes occupational and job training, customized training programs, and the use of intermediaries to help coordinate firm demands with the needs of the local workforce. State investments in communities are motivated by a need to create efficient marketplaces. Investment in the community includes broader investment in public goods such as transportation, electricity, telecommunications, and K-12 and higher education.

Successful economic development strategies coordinate all three types of investment. But because the missions and mandates of the agencies that administer these programs differ, aligning resources efficiently is difficult. Moreover, deficiencies in data collection and evaluation make it difficult for states to weigh the costs and benefits of specific policies as part of a holistic economic development strategy. States should seize opportunities to unify their economic development strategy by collaborating with different agencies to set state priorities, foster communication, encourage program evaluation and data gathering, and create single destinations where firms and employees can access state economic development resources. Although unifying the state strategy and three types of investments is a complex endeavor, increasing coordination and collaboration can help states invest their scarce resources in programs that achieve the desired economic outcomes.

Introduction

What is economic development, and what do state policymakers mean when they say they want to encourage it? State economic development policy strives to create the conditions for a growing economy that provides jobs and opportunities for a state's residents. States make investments to encourage these outcomes, including investment in the marketplace, investment in the workforce, and investment in the community. Successful economic development strategies coordinate all three types of investment. Each investment has both short- and long-term costs and benefits that states must balance to maximize resources and encourage economic progress.

The state legislature's job is not only to propose and enact legislation for creating new economic development programs, but to monitor the state's economic development tool kit and decide if it's working or not and, if required, how to fix it. (Schweke 2009, 3)

Every state has an economic development strategy composed of several program tools. In fact, most states have more than one strategy with actions formulated, funded, and implemented by different agencies at different levels of government. Coordination can be difficult because of the different focus and mission of each agency. For example, most states have both an economic development and workforce development agency. Both would like to see businesses and workers in the state prosper, but each focuses on different policies and priorities. Moreover, local economic development agencies often have narrower missions than the state agency. Although difficult, it is nonetheless important to understand how different agencies and actions contribute to a state or locality's economic well-being and how a state's investments translate into a better future for its population.

States prioritize economic development tools in myriad ways. Some states emphasize low business costs; others emphasize skilled workforces. On their respective economic development landing pages, for example, Mississippi highlights industry concentrations while Vermont showcases financing programs.¹ Typically, such choices are influenced by a state's history and culture. But they also come from a desire to grow new industries, replace contracting ones, or diversify (Felix 2012). Every state has

a natural or built advantage that it can exploit for economic development (Holman et al. 2008). For example, deepening a port to accommodate higher-capacity ships, as was done in Savannah, Georgia, is not an economic development investment that landlocked states have available to them.²

FIGURE 1

State Economic Development Investments



A first step toward developing an integrated economic development strategy would be for states and localities to recognize areas of existing or potential competitive advantage and focus their incentives accordingly. A state that has an existing industry concentration, for example, does not need to provide cash incentives to that industry, but it may consider other strategies, such as marketing the state or investing in workforce training to maintain a pool of skilled labor. At the same time, the state may wish to identify complementary industries that can leverage the talent and resources of the existing labor force and target those companies with relocation incentives. States that understand how existing and desired industrial development corresponds to their current assets and population, and that recognize the importance of investing in complementary training and educational programs, will have more successful economic development strategies.

State Economic Development Tools

States have many tools available to diversify the economy, support existing businesses, and build a competitive labor force. Their goal is to create an environment that supports high-quality jobs, expands the skills of the labor force, and improves residents' quality of life. To accomplish that goal, states should focus on increasing both the demand for and supply of skilled labor (Bartik 2009). Tools that increase the demand for labor include business support and firm-attraction programs, which reduce costs to firms either directly through subsidies or indirectly through better infrastructure. To increase the supply of labor, states should invest in workforce development and education tools, which can be versatile. A competitive training program, for example, may supply an existing demand for skilled labor, but it may also attract other companies that rely on trained workers in that sector.

Many states, for example, target “high-technology” or “advanced-manufacturing” sectors. In some cases, such as Colorado’s Innovation Network, multiple programs are linked for a comprehensive approach.³ That network partners with “government, business, and civil society to foster collaboration around the four pillars of Talent, Ideas, Capital, and Entrepreneurship.” By coordinating programs aimed at a particular economic sector or industry, a state can better dispatch its resources to increase chances of success, often measured by the number of new companies and firm expansions in the state.

The tools that states use often dovetail with firm-reported business location factors that show the importance of customer base, infrastructure, labor markets, and business climate to expanding or relocating firms. These firm-siting priorities have been fairly constant over time. In 1967, the Advisory Commission on Intergovernmental Relations wrote that “raw material, market, and labor factors” drove plant location decisions, noting that tax considerations were not a deciding factor (ACIR 1967). Despite consistent reports that taxes do not drive interstate location decisions, many states view tax incentives as a major part of their strategy to attract firms. Drawing from studies as early as 1988, the Appalachian Regional Commission identified site location factors that align with the broader economic development strategies discussed in this report (table 1; Economic Development Research Group 2007).

TABLE 1

Matching Site Location Factors with Investment Strategies

Business site location factors	Investment strategy
Ready sites	Community
Workforce skill and availability	Workforce/community
Consumer demand	Marketplace
Infrastructure	Community
Quality of life	Community
Cost of doing business	Marketplace/community

Sources: Economic Development Research Group 2007; authors.

Note: Site location factors are not ranked in order; they have been edited by the authors from the original for clarity and context.

Evidence

State policymakers make economic development investments to grow their state’s economy and improve their residents’ lives. Although the tools that states use, such as business assistance and financing, are widely known, information about their effectiveness relies more on anecdotal successes than on rigorous evaluation. Great strides have recently been made in the reporting and documenting of tax incentives and, as a result, a body of research exists around those programs. But far less evidence exists to support other tools, such as business assistance or infrastructure as it relates to development.

Identifying successful programs requires access to good data. However, there are significant barriers both to compiling such data and to effectively coordinating those efforts among programs. The readily available sources of data are not reliable for evaluation, and reliable data are difficult to access for researchers and policymakers. Moreover, program assessments often focus narrowly on successes rather than failures, making the information incomplete for policymakers.

Efforts are underway, however, to mitigate these challenges, including information sharing across agencies and “deep dive” reviews of programs. Moving beyond case studies, researchers or policymakers can use statistical techniques to evaluate the economy-wide effects of policies. Many programs may simply not be big enough to measure economy-wide effects, so a narrower approach would be still be required (Bartik 1991).

Coordination

The evidence on coordination among tools is particularly sparse. A business may take advantage of several state and local economic programs, but reporting, if performed, is often program specific and lacks acknowledgement of other contributing programs. States have recently pushed to coordinate workforce and economic development activities (Eyster and Briggs 2016). By coordinating the strategy, policymakers can maximize the use of state resources. Further, coordination across agencies, governments, and programs leads to a more thorough understanding of how state governments can help foster a dynamic and sustainable economy for their residents.

Investment in the Marketplace

The goals of economic development in its simplest form are more jobs and higher wages. Investment in businesses may seem like the most direct way to achieve these goals and is often prioritized over other state expenditures. After the Great Recession, many states cut their budgets, including for capital spending (infrastructure) and education, but maintained tax incentives and economic development spending. States invest in businesses either through direct assistance (such as technical assistance or start-up loans) or tax incentives, which reduce the cost of establishing and operating a business. Many such functions are coordinated by a state's economic development agency, but some states have also created regional councils composed of local economic development agencies. Ultimately, these investments' productivity is measured by their influence on the location and operation decisions of businesses and whether they have helped firms succeed. Most evidence shows that government actions are not the primary driver of firm siting and operation decisions, but governments can play a supporting role and should target their scarce resources toward gaps in support not filled by the private marketplace.

Business Assistance

States provide an array of services to help businesses of all sizes succeed. Overall, states appropriate about \$4 billion annually to economic development agencies, the primary agent for business assistance (Francis 2016c). Government plays a role in building up existing business, launching new businesses, and increasing demand for state products and services. Activities range from minimal engagement, such as arranging networking events, to more substantial intervention, such as directly investing in companies.

Three types of business assistance (other than tax incentives, which are discussed separately) are typically targeted toward small and medium-sized businesses: general business support, financing, and state procurement programs. Those programs are typically not attractive to larger businesses, which are looking to lower costs through financial incentives, such as tax credits and abatements.⁴ This economic development strategy encourages and supports many local businesses, and it focuses on helping those businesses find markets and operate smoothly. For example, most states look for opportunities to help local companies participate in foreign trade missions organized by the US Department of Commerce.⁵ Business assistance programs can also promote businesses that are owned

by or employ groups that have been historically disadvantaged or discriminated against, encouraging more inclusive economic development.

General Business Support

States invest significant resources in helping small businesses survive, start-ups launch, and successful businesses expand. Some states primarily provide funding to local economic development agencies, which then actively engage with businesses; others play a more active role. The federal government, through the Small Business Administration and economic development divisions in the Departments of Agriculture, Energy, and Transportation, provides technical business assistance and grants to state and local governments. One such program helps small manufacturers with technical, marketing, and operational assistance (box 1). These federal, state, and local programs provide direct services, such as financial planning and marketing assistance.

Many small businesses need marketplace and planning assistance in addition to financial assistance, and states offer several technical assistance programs with such focuses. The National Center for Economic Gardening, for example, has a robust program wherein participating states identify businesses that are poised to grow. The selected companies then receive a comprehensive and precise analysis of their business and market from experts at the National Center for Economic Gardening.⁶ Similarly, New York's Business Mentor NY program is a social network that matches volunteer mentors with entrepreneurs.⁷ This type of assistance can sometimes be more valuable than cash assistance and is an effective tool of economic development (Bartik 2002; Fryberger 2015). Early entrepreneurship training can help young small businesses plan better.

Other programs are place-based and focus on developing corridors of local business. Downtown and main street programs, for example, reinvigorate central districts, where clusters of retail, light industry, and service businesses help create a vibrant marketplace. The Main Street program, a federal Housing and Urban Development grant program for state and local governments, supports revitalization of downtown areas.⁸

BOX 1

Manufacturing Extension Programs

Extension services for manufacturing, similar to those in agriculture, are found in every state because of the National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership (MEP).^a Bartik (2009) identifies manufacturing extension services as one of the most effective programs a state can implement because it produces one of the highest returns on investment. Such services include everything from basic business planning to sponsoring research or development. Unlike the agriculture extension programs, which are funded by the US Department of Agriculture and run out of the state universities, MEP is administered differently in each state; sometimes it is affiliated with a community college (as in Delaware) and sometimes with a state agency (as in Arizona).^b

Metrics for evaluating the success of extension programs include increased production (or productivity) and the number of expansions in the targeted industry. MEP is a business assistance program that is usually free to the business, rather than a cash incentive program, and it provides businesses with technical assistance designed to improve productivity. Research suggests that MEP increases labor productivity and, for single-unit companies, reduces the rate of closure (Jarmin 1998; Jarmin 1999).

^a Since the land grant universities were established, states have had extension services for agriculture that can be adapted for any type of business development, such as marketing, basic research, and process improvement. For state MEP programs see "Quick-List MEP Centers," National Institute of Standards and Technology, accessed February 28, 2017, <http://ws680.nist.gov/mepmeis/ReferenceDocuments/MEPQuickList.pdf>.

^b Delaware MEP is housed at Delaware Technical Community College, and Arizona RevAZ is housed in the Arizona Commerce Authority.

The National Governors Association highlights the importance of fostering partnerships between economic development agencies and local businesses (Rood, Moore, and Schwartz 2016). This engagement could be an effective, low-cost strategy if conditions are right for business growth. Networking meetings and trade fairs sponsored by the federal Economic Development Administration, for example, are forms of assistance that connect local vendors with customers. In a recent *Entrepreneur* interview, one business networking professional noted that the return on investment from business-to-business networking can be significant.⁹

Technical assistance that promotes innovation among suppliers can address a market failure where formerly vertically integrated companies now rely on a complex supply chain (Helper 2016). By assisting suppliers (which tend to be smaller, local firms) with processes and technology adoption, state programs can help make these supply networks more visible, increasing their attractiveness to larger companies.

Financing Assistance

For businesses large and small looking to start new ventures, expand existing ones, or relocate facilities, access to financing is crucial. Small businesses and entrepreneurs sometimes need credit beyond what they have direct access to (largely home equity loans and credit cards; Shane 2008). Small businesses often rely on community banks that understand local conditions and can assess risk based on personal relationships (Berger and Udell 2002). Start-ups with growth potential have a very different profile than other small businesses and have more complex financing needs. And although large companies have more access to public capital markets and large banks, they still look for ways to reduce their financing costs. When cost-effective financing is unavailable for worthy projects, state governments can and do step in to help.

LOANS

States can help companies, especially small businesses, access capital (Francis 2016a). Depending on the firm's stage (start-up, small business, or expanding) states have programs to support short-term cash flow as well as long-term industrial bonding. Many programs are funded through federal agencies, and the states complement them with additional programs tailored to the state's targeted industries and economic development goals. For example, the federal Small Business Administration loaned \$29 billion to small businesses in 2014 and has an outstanding portfolio balance of over \$100 billion.¹⁰ Many of those loans, however, are administered through state and local agents (e.g., government agencies, nonprofits, or community banks). States may target their loan programs to specific industries or types of business. For example, Alaska has a loan assistance program specifically for commercial fisheries, while Minnesota offers short-term loans to small businesses affected by military reserve call-ups.

An advantage to state loan programs, particularly those funded by federal grants such as the federal State Small Business Credit Initiative (SSBCI), is that they are either revolving loans or guarantees rather than outright loans. Under revolving loans, interest income can be loaned out again in the next period without any increase in appropriations; guarantees only require a reserve fund to cover defaults. Loan programs also fill gaps in private financing, amplifying the impact of the government program as they are leveraging investment. Banks have incentives to participate in these programs: in some cases they are required by the Federal Reserve or, more generally, by their banking regulator to invest in local communities;¹¹ they may also see the value in partnering with public agencies. Participating with the public sector reduces risk either by reducing the loan amount that the bank is responsible for or by having the public agency underwrite or guarantee the loan. The public partner also provides a valuable service by helping the business prepare the loan application (Robinson 2013).

Although access to credit is frequently described as a problem by politicians and business advocates (and has been for some time), evidence does not suggest that it is a growing problem. A survey of business owners found that access to credit was not an issue that resonated with them, partly because few of them wanted or needed to borrow money (Dunkelberg and Wade 2016). Other research has shown that the funding needs of small businesses and their desire to incur debt are much lower than many think (Shane 2008; Bates, Lofstrom, and Servon 2011; Robinson 2013). Business cycles also affect access to credit, tightening credit markets and increasing the demand and need for credit assistance. The Great Recession, for example, closed down access to credit for all but the safest borrowers. States, helped by the federal government, were able to step in with financing programs, but that also meant taking on additional risk.

EQUITY

States can also help finance new and growing businesses through direct equity investment. Similar to loan programs, direct equity investment is an effort to provide more options to new businesses to address perceived gaps in adequate funding resources. Although states have developed local programs, a big push came from the federal government in 2010 when SSBCI was established, providing \$1.5 billion to state governments for small-business financing programs.

SSBCI allowed and encouraged states to set up venture capital programs with a portion of their SSBCI allotment. In the most recent report, 38 states allocated some of their allotment to venture capital. Most states used the funds to invest in very-early-stage companies rather than more mature companies (Cromwell and Schmisser 2013). By coinvesting directly in specific companies, states share or reduce risk for other private investors.

Another federal program operated by the Small Business Administration is the Small Business Investment Company program, which provides funds (\$4 billion in 2015) to certified venture capital companies (Askari 2015). The Small Business Investment Company program also allows banks to fulfill their community investment obligation (referenced above) through investments in the certified companies, increasing the size of the fund available.

States with large pension funds or funds from mineral extraction have experimented with leveraging those funds for economic development. Even though pension fund investments are restricted because the goal and fiduciary obligation is to maximize investment returns, some states have set aside small shares of their pension fund investments for local investments with an economic development goal. New York Common Retirement Fund's In-State program, for example, is authorized (though not required) to invest in New York State-focused private equity funds (New York State

Common Retirement Fund 2013). The CalPERS California Initiative, which has been in place since 2001, “has sought to discover and invest in opportunities that may have been bypassed or not reviewed by other sources of investment capital” (CalPERS 2016). Both pension funds limit the share of the investment portfolio that can be invested in economic development-oriented investments. New Mexico’s investment policy for its severance tax permanent fund allows for equity investment in local companies.¹² The investments are made in privately managed funds that specialize in New Mexican companies.

Some states have gone further and directly appropriated money to investment funds specializing in local start-ups. Maryland is the latest to join the group of states with equity investment funds. The University System of Maryland recently set up a \$25 million fund, partially funded with state dollars, to invest in local companies started by faculty, students, and recent alumni.¹³ Wisconsin established 4490 Ventures, a private equity fund that is capitalized by the State of Wisconsin Investment Board, which manages the investments of the pension fund and other state-controlled funds, and the University of Wisconsin Alumni Research Foundation, to invest in local information technology companies.¹⁴

DIRECT SUBSIDIES

Over the past decade, states have established “deal-closing” funds to provide discretionary subsidies to attract business investment. Such funds are usually distributed through loan programs that charge little or no interest and may have built-in write-downs if the beneficiary meets targets. For example, the Oregon Strategic Reserve Fund is set up as a forgivable loan rather than a grant. This creates a “claw back,” or a method for the state to recoup incentives from noncompliant businesses: the loan is only forgiven when the terms of the application are met (OECD 2008).

State Government Procurement and Facilities

Another way states can provide assistance is to use their own spending to encourage the economy and the growth of local businesses. State and local governments spend \$2 trillion annually on programs and capital investments.¹⁵ Although most state and local government spending is for state employee compensation, public and higher education, or infrastructure such as highways, funds are also spent on goods and services necessary for government operations, which can affect the local economy. State set-aside programs, such as the District of Columbia’s certified business enterprise program, use state purchases of goods and services to promote and support local businesses. Most of these programs are specifically targeted at minority- and women-owned businesses and small businesses. Texas, for

example, has a program for “historically underutilized businesses” that instructs state agencies to contract with businesses “that are at least 51 percent owned by an Asian Pacific American, Black American, Hispanic American, Native American, American woman and/or Service Disabled Veteran.”¹⁶

Just as a factory brings economic development, the placement of state buildings and facilities is a highly competitive intrastate decision because their presence can benefit surrounding businesses. For example, state correctional facilities are large employers and can have a significant effect on a local community (Cherry and Kuncze 2001).¹⁷ In 1998, Oregon established through executive order a state facility siting policy that specifically mentions regional economic development as one of the considerations when planning new facilities.¹⁸

State projects can sometimes be much larger and more complicated than private projects, but states use this size and complexity to push innovation and technology. Similar to large customers agreeing to purchase power from a utility, states can use their market power to advance certain sectors or goals. This is taking place in the energy industry, for example, where many states have adopted renewable energy portfolios, requiring some share of electricity generation to come from non-fossil fuel sources. Unlike natural gas and coal, the two primary sources for electricity generation, renewables such as solar and wind energy do not consistently produce electricity without a way to store electricity for peak usage periods. State regulations that advance these sectors have created incentives for innovation, particularly in storage but also in efficient management of resources.¹⁹ Moreover, retail industry trade groups have reported that access to innovative, renewable energy sources “can directly influence where corporations choose to invest in renewable projects, and in which states they decide to expand their operational footprint.”²⁰ State rankings on the ease of corporate access to renewable energy sources showcase one way that state procurement and investment in renewable energy facilities can contribute to economic growth. Similarly, New York uses competitive grants to private companies to come up with new and more efficient ways to manage its energy portfolio, ultimately aiming toward a more efficient system for consumers. The competition benefits the state by reducing risk of outages and ensures that electricity from renewables is optimized. The state also benefits by generating research around power grid management.²¹

Tax Incentives

Tax incentives are a key part of states' economic development strategy. In 2012, the *New York Times* estimated state and local tax incentives cost about \$80 billion.²² Other estimates have the value at around \$45 billion (Bartik 2017). Although tax incentives can be used to achieve goals beyond economic growth or job creation, such as distributing economic activity throughout the state (through geographic targeting) and focusing on perceived high-value industries, they are mainly used to compete with other states for business investments that promise jobs and increased economic activity.²³ Economists generally favor lowering overall tax rates rather than narrowing the tax base with relatively narrow incentives for specific companies and industries. Some economic models suggest that specialized tax breaks can efficiently encourage export-based industries, if well designed and targeted (Bartik and Erickcek 2014). In economic development, researchers have examined the increase or decrease in local business activity relative to the price of doing business in an area (i.e., tax rates). This body of research on economic development elasticities suggests that economic activity is fairly unresponsive to changes in taxes (Bartik 1991; Gale, Krupkin, and Rueben 2015). But the allure of tax incentives can be overwhelming because they usually have a higher short-term political return than longer-term policies, such as investments in education or infrastructure. The “ribbon-cutting effect” highlights that incentives are a tool squarely within a governor’s control (Bartik 2009). Likewise, the risk of losing a major company to another state drives the popularity of tax incentives that have already been paid out.

Bartik (2009) concludes that well-designed, targeted incentives are effective economic development tools. And because of the time value of money, incentives that can be used early are much more valuable and thus more effective. Refundable and transferrable credits provide the greatest benefit to companies and are potent enough that low- or no-tax states (such as Nevada and Texas) find them irresistible, but they should be designed with an understanding of the program cost. Incentives target business inputs, transaction and property costs, and training and hiring activities. Unlike other forms of business assistance, tax incentives reduce business costs directly by reducing tax liability, sometimes leading to a rebate if they are refundable. Tax incentives that are not refundable or transferable (meaning a firm can sell them to another taxpayer) are incentives only for companies with tax liability, so they are not a very effective tool to encourage small new companies that more often have losses. Carry forwards, the ability to use the credit against future tax liability, can also help a company unless the company needs the value of the incentive earlier. On the other hand, nonrefundable incentives protect the government if the company does not live up to its commitment (absent strong, enforceable contracts to recoup incentives).

As noted, the decision on where to locate facilities for major companies is based first on such factors as access to markets and availability of skilled labor. But abatements, credits, and deductions are still valuable to relocating companies. The companies that are relocating are likely expanding companies that already have revenue and thus are likely to have taxable income in the new state. In 2015, surveys of site selection consultants reported that, although taxes are not the highest priority for site selection, of the aforementioned incentives they were more important than cash grants or financing programs for large firms.²⁴ Most states' economic development agency will structure a package for a sufficiently large company. For example, General Electric's move to Massachusetts from Connecticut involves different credits and abatements from both Boston and the Commonwealth (See appendix A for more details about General Electric).

For larger companies, particularly recruited companies, tax incentives are often offered as a contract under which the company agrees to invest a certain amount or hire a certain number of workers in exchange for tax credits and cash incentives. If the specific level of investment or hiring doesn't occur, the state may be able to demand repayment. For example, the Minnesota Job Creation Fund requires applicants to list the types of jobs created and wages paid.²⁵ Similarly, Tesla's contract with Nevada requires that the company maintain its investment and employment to qualify for many of the abatements. The transferrable tax credits, which will cost Nevada \$195 million over seven years, are awarded based on each new job. New jobs are counted as the difference between two audit periods, and the contract contains a provision for the state to claw back prior awards if conditions are not met.²⁶

Expanding businesses are the source of most new jobs in a state (Mazerov and Leachman 2016). In its 2014 annual report, the Georgia Department of Economic Development highlighted that 69 percent of the total projects receiving assistance were expanding businesses.²⁷ The tools to support such businesses are different than the ones used for start-ups or small businesses. Expanding companies necessarily have a proven product; otherwise they would not need to expand. They are expanding to take advantage of unfulfilled demand. Such companies may need low-cost financing to afford expanding their facilities and equipment, and they may need additional training for new employees.

Expanding companies have infrastructure and skill requirements that could force them to relocate out of state or delay expansion if not addressed. Because expanding businesses typically have positive income, credits and deductions become much more important as they grow. But they may also have loyalty to the community and find that their success comes from the community circumstances (such as taxes, workforce, and infrastructure) as well as local demand for their product. Such businesses face a high hurdle to moving out of state completely but a lower one to expand operations to another state.

Designing the right set of incentives can be challenging, so states use other tools, such as infrastructure investments, to retain and support local companies.

Geography-based programs, such as enterprise zones, can highlight the benefit of coordinating programs from different agencies. States may adopt enterprise zone programs to even out economic development geographically, or they may target specific areas of the state for enhanced programs to try to mitigate lagging economic conditions. Business taxpayers within designated boundaries may pay a reduced tax or receive abatements, and residents may be targeted for increased training and wraparound social services like housing, public transit, and child care. As a report prepared by the Minnesota House of Representatives Research Department suggests, “job training services, good roads, good schools, low crime rates, scenic amenities, and other public services may help pave the way for development” and lead to successful enterprise zones (Hirasuna and Michael 2005).

Investment in the Workforce

Equipping the workforce for the knowledge-based economy is critical to maintaining competitiveness. An important component of effective economic development is thus building a skilled workforce to support business and economic growth. Traditionally, workforce and economic development have different but related priorities. The primary goal of workforce development is to build workers' skills and credentials and connect them to jobs with family-supporting wages and benefits. Workforce programs, however, can also advance and align with economic development goals by maintaining a supply of labor that meets the needs of current and targeted new businesses. In contrast to many state and local economic development initiatives, workforce development programs are typically federally funded with pass-through grants that are administered by the state and implemented by local workforce agencies.

Occupational and Job Training

Occupational and job training is one area in which state and local governments can help build the skilled labor pool necessary for a thriving community. State and local governments offer many avenues for job training that do not require a four-year degree. Those avenues may include high school classes, community college education, and specialized occupational training. In addition to public institutions, a host of private trade schools and for-profit colleges specialize in specific training such as nursing, truck driving, and certain information technologies. For-profit colleges have become one of the fastest-growing postsecondary institutions in the country, but research has demonstrated that community colleges provide a higher-quality education at a lower cost to students (Deming, Golden, and Katz 2013). Moreover, for-profit colleges have recently been plagued by low completion rates and high debt-to-earnings ratios for graduates.²⁸

Community colleges are critical to the successful training of a state's workforce. These postsecondary schools offer the associate's degrees and certificates that signal certain skills to employers. States exhibit wide variation in how they use and support community colleges. Central New Mexico Community College, for example, has a specific site for custom training that can replicate a shop floor.²⁹ This allows new hires to be trained off site under real conditions and existing employees to gain experience working with new processes or machinery.

Sector Strategies and Partnerships

Sector strategies and partnerships focus on training workers for a particular industry sector, cultivating industry relationships to identify well-paying jobs in high-demand occupations (Conway and Giloth 2014; Eyster and Briggs 2016). Education and training agencies work with sector-specific employers to develop a curriculum and support strategy to help candidates enter and advance in those occupations.

Career pathways initiatives, for example, identify education and training steps for workers to advance in a particular industry. They create sequences of “education coursework and/or training credentials aligned with employer-validated work readiness standards and competencies” (US Department of Labor 2015; Eyster and Briggs 2016). Both adults and youth, especially those who may be disadvantaged, may benefit from career pathway programs that provide guidance and support for completing postsecondary education and training (Eyster et al. 2016). The pathways may be specific to a location and related to the community’s existing industries and companies, or it may be related to professions and skills in demand more generally, such as nursing programs (Fein 2012). For example, the Valley Initiative for Development and Advancement organization in Texas coordinates programs with business partners and economic development organizations to identify effective approaches for training low-income adults.³⁰

CERTIFICATION

Certification of job skills is another way states can help employers identify qualified workers, reducing hiring costs to businesses of all sizes. By participating in recognized certification or licensure programs, prospective hires can show an employer that they meet certain criteria for types of jobs or occupations. Certifications are typically provided by third-party entities that administer a formal test or assessment of skills or knowledge in a particular area. These certifications are not to be confused with the educational certificates provided by schools or other organizations, which confirm completion of a training or educational program.

Although obtaining a certification or license may require them to receive training or an educational certificate, workers can often pursue certification outside of a four-year degree program. Employers can use the certification requirements in job postings, making matching more efficient. Examples of certifications abound in computer services: Microsoft, for example, has skills certifications for many of its business applications. Certification preparatory courses are often taught by private entities or community colleges, and certification is often requested in job postings.³¹ Certification or other industry-recognized credentials can be included in a career pathway program, sometimes in lieu of a postsecondary degree.

Some industry sectors have strong national governing bodies that implement consistent certification standards across states. For example, the National Council of State Boards of Nursing administers the National Council Licensure Examination for entry-level nurses.³² However, not all industries have the same level of national coordination, which can lead to inconsistent assessment standards and limit geographic mobility for workers. Some private providers have attempted to implement more uniform soft-skill and workplace-readiness certificates to address this challenge. For example, ACT, a nonprofit testing service, has developed a workplace-skills certification program that has been adopted by 24 states to help coordinate programs. The Arkansas Career Readiness Certification is an ACT Work Ready Community program that assesses job seeker skills and has identified employers that support the certification and use it to assess new hires for placement.³³ Utah has its own certification program through the Utah State Board of Education through which students can take certification exams showing mastery of course information.³⁴

Evaluations of work-readiness and soft-skill certification programs, however, have found that they do not consistently influence employers' hiring decisions. This is potentially because the curricula were developed with insufficient input from employers in local labor markets (Rey-Alicea and Scott 2007; Stix 2014; Spaulding and Johnson 2016). Many of these certifications were developed to meet requirements for safety-net programs such as Temporary Assistance for Needy Families, so their effectiveness is determined by how employers perceive the rigor of the programs and how well a certification matches the employer's needs.

APPRENTICESHIPS

Apprenticeships are another form of career training through which employers hire unskilled workers and train them on the job in specific trades or occupations. Mostly found in construction, building, and manufacturing trades, apprenticeships in fields such as health care and hospitality services are becoming more popular. In 2016, the federal government announced a new \$90 million investment in apprenticeship programs. The program includes \$60 million specifically for state-level strategies to expand apprenticeship and another \$30 million for businesses and partnerships.³⁵ Hilton Hotels, for example, has implemented a hotel management apprenticeship program, partially funded by a US Department of Labor grant.³⁶ Evidence suggests that apprenticeships are cost-effective ways to increase productivity and skills.³⁷ Despite the renaissance of interest in apprenticeship programs and evidence supporting their efficacy, recruiting employers to participate is still a challenge. Implementing an effective marketing strategy or soliciting the assistance of an intermediary, such as a trade union or industry association, may help recruit additional employers.³⁸

Apprenticeship programs, run either by the federal government or state agencies, are active in every state. Federal apprenticeship grants offered through the Department of Labor provide over \$30 million annually to state and local agencies (table 2). Other federal agencies, such as the Departments of Education and Veterans Affairs, also provide grants that can be used for apprenticeship programs. Though apprenticeships are expanding into the service sector, the most popular federally funded apprenticeships tend to be for occupations in trades such as electrician, plumber, carpenter, or construction laborer.³⁹

Many states also offer tax incentives to companies that provide apprenticeship programs. Iowa has a joint program with the Iowa Economic Development Authority (which identifies companies) and the Iowa Workforce Department (which manages the apprentices). South Carolina has used an apprenticeship program (Apprenticeship Carolina) operated by the South Carolina Technical College System to leverage its other investments in auto companies (e.g., tax incentives and infrastructure improvements) and build a highly trained workforce. This program, which offers companies \$1,000 per apprenticeship for four years, has been touted as a reason for South Carolina’s success in recruiting companies such as Volvo and BMW.⁴⁰ However, those companies also received other incentives that complement workforce programs like apprenticeships.

TABLE 2

Department of Labor Apprenticeship Funding, 2006–15

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Funding (millions)	25	24	25	25	28	32	29	28	32	34

Source: The US Department of Labor’s Agency Financial Reports from 2010 to 2016; see “Budget, Finance, Performance, and Planning,” US Department of Labor, accessed April 21, 2017, <https://www.dol.gov/general/aboutdol#budget>.

CAREER AND TECHNICAL EDUCATION

Career and technical education (CTE), formerly known as vocational training, is funded by the Carl D. Perkins Vocational and Technical Education Act of 1984 (or the Perkins Act),⁴¹ and administered by K–12 schools and postsecondary institutions. The goal of CTE is to help students obtain the academic, career, and technical skills necessary to succeed in the workforce. CTE programs may build upon or connect to some of the other strategies described above, including sector-specific career pathways and apprenticeships. CTE programs also seek to build academic skills that prepare K–12 students for postsecondary education.

Customized Training

State-funded programs tailored to an employer's needs are most beneficial to businesses that are expanding or relocating. Existing companies with successful track records are best suited to train new hires in house. State programs and incentives to encourage training vary, ranging from reimbursing companies for their own training programs to setting up custom programs through community colleges. Training programs may provide direct grants to companies for training or retraining employees, or they may provide financial assistance directly to employees to acquire training based on employer needs. The California Employment Training Panel, for example, provides grants to employers for training and allows the employer determine the methods and scope of that training.⁴²

The benefits of training grants are difficult to assess. In many cases, the grant is a subsidy, similar to a job creation credit, for an action that the company would be doing otherwise. Incentives such as New Mexico's Job Training Investment Program, which provides companies with grants for training equivalent to half of the employees' wages for the first six months of employment, can be used for classroom training but are given directly to the company.⁴³ Some programs are responsive to employer needs but provide grants to the trainers rather than the employers. The Iowa Accelerated Career Education pays for training coordinated by an employer through a community college. The employer guarantees "consideration" of graduates of the training program but does not guarantee employment.⁴⁴ Bartik (2009) notes that custom training through community colleges can be much more effective than tax incentives. Many states issue grants to local areas to provide wage subsidies for employers to train people on the job. This subsidized, on-the-job training has been associated with positive employment and earnings outcomes for workers (US Department of Labor 2014).

Workforce Intermediaries

Another coordination-focused tool for workforce development is the use of workforce intermediaries to guide a sector strategy. These intermediaries are agents that serve as coordinators in a community to better match job seekers with employers, brokering "resources and services to improve how workers and employers come together in their regional labor markets" (Conway and Giloth 2014). Nonprofits, educational organizations, union groups, or public agencies can all potentially act as an intermediary. The intermediary will build strategic partnerships with employers to identify the skills, credentials, and level of experience they need for available jobs. They also coordinate services with providers in a community to help job seekers connect to employment and training services they need to qualify for

available jobs. The goal is to improve the competitive stock of the industry by having a ready pool of skilled labor and to offer more opportunities to low- and middle-income or displaced workers. For example, Broadening Advanced Technological Education Connections is an intermediary with the goal of improving science, technology, engineering and math education and increasing the supply of highly skilled workers in the Boston area. Since its inception, it has grown to focus on other regions.⁴⁵ Broadening Advanced Technological Education Connections is funded primarily through a grant from the National Science Foundation. Another example is the Pennsylvania Industry Partner program, which lets groups of employers request training grants from the Pennsylvania workforce department. Funding, however, has limited the reach of that program (Eyster and Briggs 2016).

Investment in the Community

Public investments play an important role in economic development. Along with workforce skills and tax incentives, firms identify transportation infrastructure, utility infrastructure, and higher education resources as important factors in their location decisions (table 1). Robert Atkinson in the *Harvard Business Review* reminds us that boosting productivity, which drives economic growth, requires public and private investments in research, infrastructure, and human and physical capital.⁴⁶

At the state level, public investments can drive economic growth when focused on activities such as infrastructure and education. If taxes are used for productive public investments, states with relatively high tax burdens can have better economic outcomes than states with lower ones (Stone, Bania, and Gray 2010). Other investments in the social safety net are also critical to healthy communities but are less clearly defined as economic development programs.

State investments are motivated by a need to create efficient marketplaces and vibrant, dynamic communities. Put simply, governments want to make the best environment for businesses to reliably obtain inputs and access markets. Inputs include the workforce, raw materials, electricity, and technology. Reliability refers to availability and capacity. Reliable modes of access, whether by rail, truck, boat, or plane, combined with proximity to marketplaces, contribute to productive economies. And access to labor is often critical, requiring not only training and education but also adequate transit and transportation options to attract workers. Investments in research universities can often both improve the capabilities of the workforce and generate technology that can be commercialized.

Transportation Infrastructure

Investment in highways, roads, seaports, airports, and other transportation infrastructure underlies the economy of a region, determining the flow of goods, services, and labor. The economic benefits of infrastructure investments are widely touted, but not all investments are equal. Some may pit communities against each other or generate more advantages for a neighboring state. Such spillover effects can undermine support for projects that have national and interregional benefits (Shatz et al. 2011).

As companies grow from their start-up or small-business roots, their customer base grows, extending outside the state and even internationally. State strategies to support local businesses should facilitate access to these markets. For example, Massachusetts maintains and supports Logan

International Airport through the Massachusetts Port Authority, a quasi-government entity. The state highlighted this resource in its successful relocation bid to General Electric: Logan is four times the size of Bradley International Airport in Connecticut.⁴⁷ In Ohio, a rail spur largely financed with federal funds became a selling point for economic development officials.⁴⁸

Similarly, maintenance of roads and bridges has become an economic development issue. The majority of federal grants for capital outlays are for transportation (77 percent).⁴⁹ Transportation projects (roads, rails, and airports) account for nearly two-thirds of the capital investment states make.⁵⁰ As federal highway funding has plateaued, state policymakers are increasingly worried about the condition of surface transportation and its effect on businesses trying to get goods to market. In Utah, to garner support for investment, Governor Gary Herbert cited specific transportation improvements' contribution to the economy.⁵¹ Oregon's Department of Transportation attempted to quantify the ramifications of deteriorating highway conditions (Oregon Department of Transportation 2014). And Wyoming Governor Matt Mead, justifying the increase in the state's gas tax, was explicit about how vital the state highway system was to economic development.⁵²

The need for adequate infrastructure is generally acknowledged, but its relationship to economic development is still an open question. Some research suggests that public infrastructure investments are a better value than tax cuts and corporate subsidies (McNichol 2016). But as a transportation evaluation report from Florida notes, the investments may not show up in such easily obtained measures as output (State of Florida Office of Economic and Demographic Research 2016). Gallen and Winston (2016) point out that inefficient investment may curtail growth in economic welfare. Moreover, investments that improve the efficiency of the whole transportation system can lead to gains that may not show up in the data, such as reduced commute times or fewer accidents, but that improve quality of life and may attract skilled workers and families.

Haughwout (2001) looks at the consumption benefits of infrastructure investments, noting that such benefits don't show up in productivity models, because they may be invested in leisure activities rather than labor activities. But to the extent that quality of life issues influence location decisions for both employers and workers and increase demand for goods and services, investment in efficient movement of people and product is clearly a rational part of an economic development strategy.

Electricity and Telecommunications

Reliable and inexpensive electricity is critical to industrial activity. Providing access and discounts is another tool states have to attract industry. The Beacon Hill Institute (2013) cites electricity prices as one of the factors that determine the competitiveness of a state's infrastructure. Because manufacturers are the largest customers for power generally and electricity specifically, it is no surprise that utilities work very closely with state and local economic development agencies. For example, the New York Power Authority manages a program called Recharge NY, which provides businesses and nonprofits with long-term reduced-cost contracts for electricity in exchange for job creation and retention and capital investment.⁵³ Beneficiaries of the program are overwhelmingly manufacturers.

Telecommunication infrastructure, including internet transmission, is traditionally a local issue, but states can play a role in providing infrastructure (such as grid enhancements and connectivity programs) and grants to local governments. The ability to make wired and wireless connections between employers and employees, contractors and vendors, and residents and government services quickly and efficiently can improve the quality of life, reduce some transaction costs, and make the marketplace more efficient.

Increasing broadband access can be an economic development tool, as demonstrated the competition to become a Google Fiber city, where Google invests in fiber-optic infrastructure promising much faster access to the internet.⁵⁴ Expanding broadband to all state buildings, including schools, as well as opening up public-access hotspots in libraries and community centers, improves the ability of all residents to access the internet. This in turn expands skills for students and improves access for services and commerce, fast becoming a necessity rather than a luxury in modern life (box 2). DiMaggio and Bonikowski (2008) show how internet usage at both home and work is positively correlated with earnings. Analyses such as theirs have prompted several states to form broadband task forces to figure out how to increase the availability of quality internet service to all residents.⁵⁵

BOX 2

Digital Infrastructure

In 2014, software and internet start-ups accounted for 43 percent of venture capital dollars and 27 percent of angel investor deals.^a To compete in this sector, technology infrastructure investment is critical. Chattanooga, Tennessee, for example, has invested in municipally owned high-speed internet, which has led to a technology boom.^b That statistic is also often cited as the reason cities are competing for Google Fiber. Greater access to high-speed internet generates more opportunities for entrepreneurship, continued learning, and training.

One side effect of the perceived “Y2K” problem at the turn of the millennium was a massive investment in technology at all levels of government and the private sector. Broadband capital investment peaked in 2000 at over \$100 billion, over fifty percent higher than current levels, and is often credited with leading to expanded capacity and innovation.^c

The rapid advance of technology has also created a need for massive data centers, and states know that such connections to the backbone of the internet—trunk lines that are the major hubs for internet traffic—are important to recruiting software start-ups.^d As more appliances and devices are connected to the Internet, it will be even more important for the underlying technology infrastructure to support that spread, and connectivity will only become more of a selling point to high-tech industries.

^a Data from PwC/National Venture Capital Association, see “PwC MoneyTree,” accessed March 22, 2017; and from the University of New Hampshire’s Center for Venture Research, see Jeffrey Sohl, “The Angel Investor Market in 2014: A Market Correction in Deal Size,” Center for Venture Research, May 14, 2015, accessed March 22, 2017.

^b Klint Finley, “Chattanooga Is Offering Internet Faster Than Google Fiber,” *Wired*, October 15, 2015.

^c For data on broadband capital investment see “Historical Broadband Provider Capex,” US Telecom, accessed March 03, 2017.

^d For a map of major internet hubs, see Durairajan et al. (2015).

Education Investment

The most important and the largest state investments are for education, both K–12 (kindergarten, elementary, secondary) and higher. Studies for decades have identified links between economic prosperity and education. Investments in education, particularly higher education, have been recognized as an economic development tool (Bell 2008). In addition to education leading to a more skilled labor force, good schools at all levels are often needed to attract high-skilled workers to a community.

K–12 investments are long-term investments in growing a skilled workforce, and they make communities more attractive to workers (Bartik 2012). States have moved aggressively to establish and fund early-childhood programs. In 2015, funding increased 12 percent nationally, according to the

Education Commission of the States, and those increases were broad-based, occurring across 32 states (Parker, Atchison, and Workman 2016). One study illustrated that improving public schools leads to stronger economic growth, but such growth may be dampened by outmigration of students (Hanushek, Ruhose, and Woessmann 2015).

Investment in higher education is important to keep a pipeline of skilled talent available and to maintain a competitive edge. Higher education investments play a critical role in sparking new ideas, transferring knowledge throughout the community, and creating new markets and industries (Shaffer and Wright 2010). Richard L. Florida (2002) points to creativity as one of the necessary elements for vibrant cities, and one of the main indicators of a creative city is the presence of a major research university. Such universities not only generate ideas that can be commercialized, but they also concentrate highly skilled individuals, supplying the workforce for start-ups and attracting out-of-state companies. Pittsburgh, for example, emerged from a long-term recession because of the collaboration and coordination of its higher education institutions (both public and private). As discussed in the section on investment in workers, four-year institutions are not the only educational actors that help prepare a skilled workforce. Community colleges also provide an important pipeline of skilled labor for regional firms (Eyster and Briggs 2016).

Having strong higher education institutions, however, is not guaranteed to develop new business. States must coordinate and connect higher education institutions and research with the business community to maximize economic development through the generation of local start-ups. Most research universities have a technology commercialization or transfer office that can help inventors and innovators commercialize their ideas. Institutions also set up technology parks, where new and existing companies can colocate, potentially creating an industry or research cluster to help expand activity and innovation.⁵⁶ Tech Launch Arizona combines technology transfer with colocation at University of Arizona Tech Park in Tucson. In 2016, they helped 14 start-ups and 278 patent filings, according to their annual report.⁵⁷ Start-Up NY, an economic development program in New York, is mostly providing tax incentives to companies. The design lets state universities create economic development zones on their campuses in an effort to connect the dots between higher education and economic development. To date, the program has not paid the dividends promised, but it is recognition of the need to make higher education institutions a strategic partner rather than simply a resource.⁵⁸ However, states should be cognizant of how much revenue they are forgoing to encourage these centers. The start-up could end up being acquired by an out-of-state company (which is a desirable outcome for many entrepreneurs), and public universities forgo royalty and licensing revenue by spinning off valuable patents to private entities.

Documenting the Results

States spend billions of dollars on a wide variety of economic development programs, including investments in business success, skilled labor, and access to markets, but comprehensive data on specific programs are often lacking, and data on combined programs are virtually nonexistent. Given the range of activity and programs aimed at improving the economy, it is unsurprising that evidence of effective programs and combinations of programs is difficult to compile. The central question for many programs is the “but for” question, which asks whether or not the program made a difference in a company starting, expanding, or relocating. The question is usually asked of a specific program but, as documented, there are a host of programs available that may influence firm location decisions. For example, did General Electric move to Boston because of the airport, the workforce, or the tax incentives? The answer is likely that the combination of all three led to the decision.

Data

Ostensibly, data collection should not be a problem. After all, states or firms themselves usually document benefits (whether tax credits or training grants), and companies have a certain number of workers at a certain average wage along with a certain amount of investment in buildings and equipment. Most credit and grant programs require an estimate of these variables, but the data are often not easily accessible or made public. Information can typically be requested through state public information laws, but that can be a cumbersome and expensive process.

For incentives, Good Jobs First’s Subsidy Tracker is one of the most comprehensive data sources on economic development subsidies and shows information culled from news articles, press releases, and other reports (Mattera and Tarczynska 2013). But it doesn’t include all companies receiving benefits (only those that are announced), so it is still an incomplete picture. Further, companies often take advantage of programs that are not reported and, critically, it isn’t clear that we are measuring the marginal effect of the program rather than activity that would have happened even without the incentives.

Timothy Bartik at W.E. Upjohn Institute for Employment Research recently created a comprehensive incentive database for some of the major business incentives, including customized training (Bartik 2017). The database is available to anyone and should provide insights into the effectiveness of specific business incentives and facilitate more evaluation of these programs.

Another source of data is annual reports from the administering agencies. These reports vary in quality and scope and can also vary within programs across years. Consistency is a problem if annual reports are not clearly defined during a program's implementation. Data are also mostly reported by program, so annual reports often count results multiple times for companies that receive several benefits. This is especially true if incentives come from different government entities. Thus these reports do not provide the most crucial information: the contribution of a specific program to economic activity. This is a common problem for comprehensive tax expenditure and workforce training reports, wherein added jobs may be related to both tax credits and workforce investment.⁵⁹

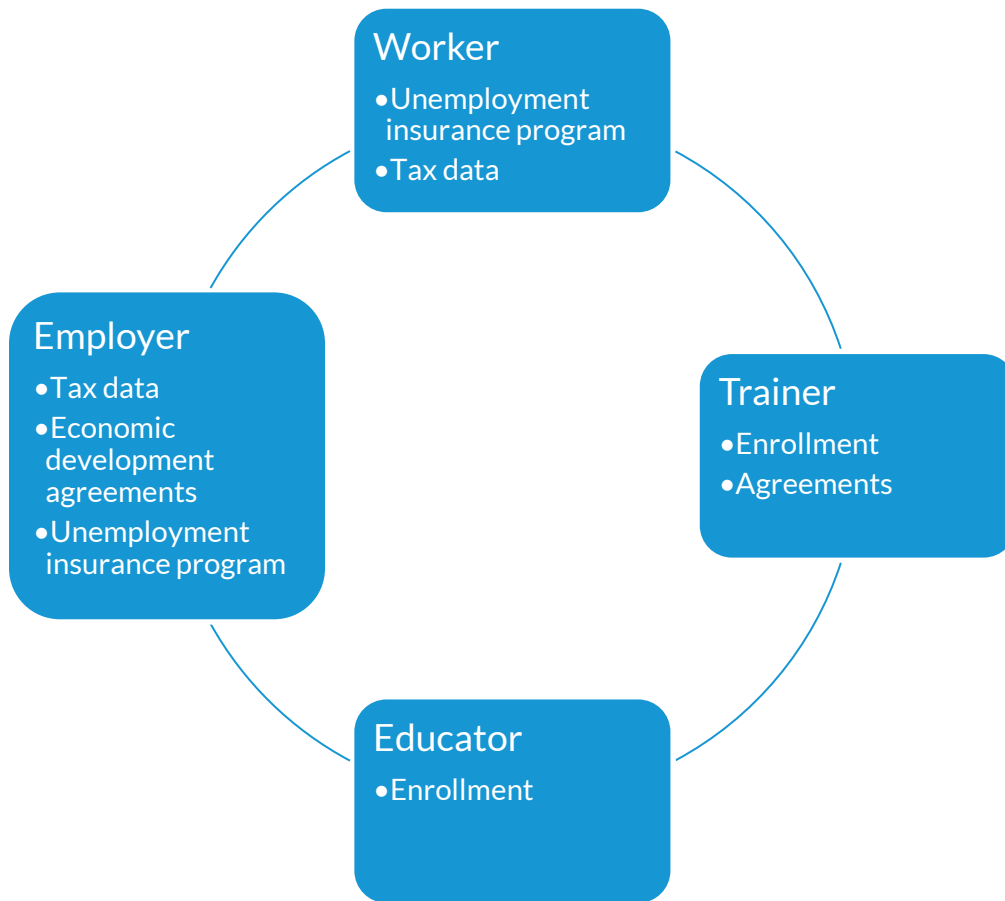
Currently, most state tax departments publish tax expenditure reports, which include valuable detail about the amount of tax incentives by program and the number of recipients. However, they don't report recipients receiving several incentives and typically don't have information on the number of jobs created. Some state economic development agencies publish tax incentive reports with firm information on reported jobs and investments, but because of taxpayer confidentiality, the claimed tax incentive amount may be missing. Accordingly, evaluating the payoff of these investments to the state is difficult.

Thus, the most useful data for evaluating economic development incentives could be administrative data from specific tax returns linked to employment records or to training and enrollment records (figure 2). Acquiring such data would require workforce development agencies to coordinate with the state tax department (for tax data) and unemployment agency to get information about credits received, taxes paid and jobs created. However, such agencies are often governed by very strict federal laws about reporting information from taxpayers or employers, so they rarely combine their data. Doing so, however, would allow a very rich and detailed look at economic development programs. Further, confidentiality concerns have been overcome in other areas where cross-agency data can help evaluate public incentives, such as in efforts to link school, student, and teacher information together over time. Other efforts are ongoing to improve the collection and quality of data for state economic development evaluation. The Council for Community and Economic Research is spearheading a project to understand and overcome the barriers to sharing administrative data between agencies (State Data Sharing Initiative 2017).

There are other actors with important data, however: Trainers and educators have data on enrollment and any agreements they've made with specific companies. Such data are the furthest from reach but are potentially very valuable in assessing how job training and education can translate into increased opportunity and income. Combining all of the administrative data sources, a herculean effort, would provide a highly detailed and informative picture of how programs can be combined.

FIGURE 2

Data-Sharing Elements



Source: Authors' analysis.

Pew Charitable Trusts, in partnership with the Council for Community and Economic Research, set up the “Business Incentive Initiative,” a pilot project in six states to share data among departments, improve the quality of data by verification, and establish regular reviews (Pew Charitable Trusts 2016). The Council for Community and Economic Research also tracks state economic development incentives, allowing comparisons of types of credits (but not dollar amounts) across states.⁶⁰

Roadblocks to Evaluation

There are dozens if not hundreds of active participants in a single state economic development effort, including state and local agencies, utilities, and universities. For the state to coordinate the activities of

all of these participants is nigh impossible. It is the state's role, however, to provide an umbrella of support.

Ideally, economic and workforce development policies should work in conjunction at both at the state and local levels. In practice, however, governments operate the two programs with different goals and outcomes in mind, and their activities are therefore not often coordinated (Conway 2011). With a few notable exceptions, workforce development at the state level has traditionally consisted of an amalgam of federal programs. The federal grants the states use require a high degree of uniformity and administrative effort. Their primary missions, as allowed by the flow of funds, are defined by the major federal job training programs. As a result, the workforce development agency may not have the same kind of latitude as an economic development agency.

A few states have merged their economic development and workforce development agencies to coordinate their activities (Eyster and Briggs 2016). North Carolina, for example, houses both agencies under the North Carolina Department of Commerce and offers workforce development activities, such as online job postings and applicant screenings, under their incentives umbrella.⁶¹

Making decisions about how to allocate public dollars and making trade-offs across programs becomes even more difficult when considering not just targeted investments in specific economic or workforce development programs but also broader tax policies and government spending (such as for infrastructure or schools). Effective public education from prekindergarten to high school not only prepares a future workforce but also makes a state attractive to high-skilled workers who have children or are looking to start families. The higher education system creates and supports the skilled workforce and acts as an incubator for ideas and research that can be spun off into new start-ups. But such larger investments come at costs, and the trade-off may mean that fewer tax incentives are available, including property tax abatements that shift funding from public education.

Methods

Because of a lack of transparent data resulting from either collection problems or conflicts between reporting agencies, researchers have looked at other ways to evaluate economic development. Bartik (1991) provides the most comprehensive survey of the research on economic development. The question researchers ask is important in determining whether a program is deemed successful or not. In some cases, the question is, "What are the impacts of a specific economic development investment on a specific place?" Other research focuses on broader questions, such as, "Does the existence of a program

impact the state's overall economic growth rate or unemployment rate?" In many ways, the questions and their answers are both unsatisfying because they omit the details of the programs.

Understanding how programs are evaluated and the advantages and disadvantages of different methodologies will better inform decisions about the economic development strategy. Many policymakers rely on case study reports on specific programs that use input-output analysis to show economic benefits (common examples include the impact of sports stadiums or large manufacturers). These reports vary in quality and can be informative, but they must be carefully reviewed to ensure they capture the true fiscal costs and economic benefits. The ideal result is a determination of how economic factors vary from what they would have looked like without the intervention, but such claims are difficult to assess. For example, it is important to know whether the investment location was a high-growth or low-growth area before the investment. This distinction can bias the results of a study, making a credit seem more or less effective (Bartik and Erickcek 2014). Careful scrutiny is even more important when the study is conducted for an advocate that is for or against a particular program.

Another way of evaluating economic development programs is econometric analysis, through which researchers look at an economy-wide variable, either within a state or across states, for evidence of an impact from a particular policy. For example, a study examining state angel investor tax credits concluded that entrepreneurial activity increased because of the credit (Bell, Wilbanks, and Hendon 2013). The report supports the concept of angel investor credits but does not definitively endorse any particular credit. It also doesn't identify the cost of the program and whether the increase in entrepreneurship activity justified the program's direct cost compared with other means that could have yielded similar results.

Evaluation is also critical if tax incentives or direct cash subsidies were made contingent on specific outcomes being achieved. Being able to examine these results independently and rigorously will help determine the program's effectiveness and support recapture of taxpayer dollars going to noncompliant companies. Evaluations should also consider the range of services provided to a company to better assemble economic development packages that truly grow the economy and improve the state residents' standard of living.

Unifying the Strategy

The alchemy of economic development requires coordination that no state has been able to achieve. The moving parts are the purview of different agencies with different agendas and different mandates. This is not by accident; the missions are different for different agencies, and too often, programs that are critical to economic development are not established, administered, and evaluated from an economic development perspective. Consequently, there is an element of mystery about what works and what doesn't.

Because of the competitive pressure, states continue to offer lucrative tax incentives in the name of economic development but shortchange other investments in education and infrastructure that might be more beneficial in meeting state economic goals. A renewed focus on infrastructure deterioration has meant some states are diverting funds from education and training activities to infrastructure, but they might be better off using some funds currently targeted to economic development programs.

State economic development and workforce leaders and staff are already coordinating in some states. Alabama, Florida, Michigan, Minnesota, North Carolina, North Dakota, and West Virginia have combined their economic development and workforce agencies, reflecting the close connection between economic development and workforce development. In those states, more deliberate coordination may take place among the agencies if department leadership prioritizes it. State economic development representatives also currently sit on many state and local workforce investment boards, so they may have already been a part of previous state planning efforts under the Workforce Investment Act of 1998, the Workforce Innovation and Opportunity Act's predecessor.

Coordination Opportunities

Although there appears to be broad consensus on coordinating the disparate strands of economic development policy, there are few cogent examples. Encouraging this kind of coordination should be a priority for evaluating programs and ensuring public money is spent most effectively. Federal intervention or coordination of aid could encourage state agencies to work together and foster coordination. Or a coordinated federal program could incentivize or require evaluations of program effectiveness as a condition of funding.

Even without federal intervention, however, it will be increasingly important for states to both recognize how these programs interact and evaluate the most cost effective way to achieve the desired results: a thriving economy with good jobs and effective government services.

Other than clarity around desired goals, one way to start is by coordinating long-term planning among the key agencies of economic development, workforce development, and transportation. Such coordination would not be collaboration or joint administration, both of which would be infeasible given their different missions and requirements; rather, their coordination would entail priorities being set and administered by a broader authority in either the executive or legislative offices. Then agencies would be mandated to communicate and ensure programs understand what strategies and proposals are underway in sister agencies. Further, good ideas should be spread and bad ones prevented through expanded scrutiny. Planning can also identify opportunities or threats on the horizon. For example, the 2012 Nebraska Long Range Transportation Plan identified almost \$20 billion in infrastructure needs between 2013 and 2032 (Nebraska Department of Roads 2012). Together, agencies can figure out if such priorities are more important for growth and, if so, if they should receive more funding even if tax incentive programs needed curtailment. Businesses might also be explicitly offered infrastructure improvements through road or utility investments rather than direct tax incentives.

Underlying all investments must be an ability to collect and connect data about investments from different agencies and outcomes. This means establishing procedures to share administrative data to produce reports. Ideally, the economic development agency could give a list of companies receiving benefits (such as tax credits, financing, or other assistance) to both the workforce department and the tax department. The former could match the companies with actual employment numbers and identify those companies that have used or requested workforce development services. The tax department, probably the most concerned with confidentiality, could be charged with appending tax information, including the amount of tax credits, and aggregating the information to protect the taxpayers.

To maximize the impact of business assistance tools, coordination with the various federal, state, and local agencies is important. Clear assistance roles and ongoing communication will ensure resources are allocated to reach the highest number of businesses. Similar to “one-stop shops” for job seekers, states should consider creating a business one-stop shop to provide information about technical assistance, financing programs, and state and local procurement opportunities. A combined facility with the job seekers can also create a forum for job matching.

Combining the core functions of state economic development into a coherent strategy that optimizes the allocation of scarce resources is complex and difficult. The coordination has to occur at

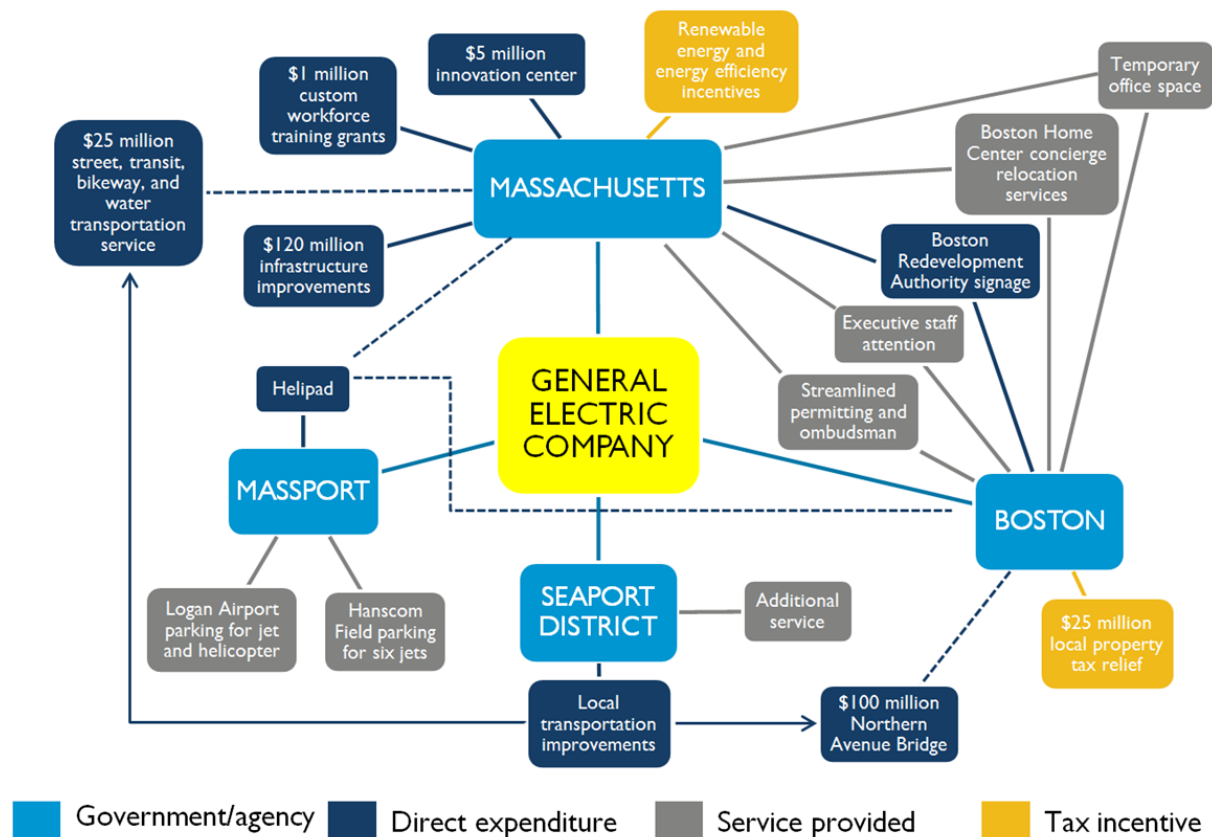
the cabinet level (i.e., among state agency secretaries and the governor) and include the legislature. Coordination also has to occur among the different levels of government, institutions such as those for higher education and nonprofits, and utilities.

As the scale of incentives increases and states continue to face fiscal challenges, the importance of efficient planning of economic development programs is evident. Recent announcements of major relocations and major expansions illustrate state policymakers' thirst for new economic activity and the complexity of the agreements structured for companies. Although many tax incentives are related to the number of jobs created or the amount of investment made in the state, a host of economic development programs have no safeguards; these are the other nontax investments, such as infrastructure and training. General Electric's incentive package negotiated with Boston and the Commonwealth of Massachusetts illustrates both how programs work together and the intricacy of oversight necessary to ensure their benefits outweigh their costs (appendix A).

Appendix A. Anatomy of an Economic Development Deal

FIGURE A.1

Diagram of General Electric Incentives



Source: Authors' analysis of "Summary of Incentives: General Electric Company Headquarters Relocation to the City of Boston, Massachusetts," January 13, 2016, accessed April 13, 2017.

Notes: Dashed lines indicate financing/coordinating agency; solid line indicates administrative agency. The helipad promised by the city and state proved controversial, and GE has indicated it is not necessary (see Benoit Tessier, "Never Mind about That Helipad, GE Tells Boston," *Boston Globe*, February 14, 2017).

In 2016, General Electric (GE) announced that it had decided to move its headquarters from Fairfield, Connecticut, to Boston, Massachusetts.⁶² Whether the firm needed a publicly financed incentive plan to move to a high-technology and highly educated hub such as Boston is debatable, but several government agencies stepped up to offer a package that combines the three types of investments states make to

promote economic development.⁶³ Figure A.1 shows the incentives included in the package, the level of government that will administer them, and some of the shared funding streams.

- **Investments in the marketplace:** According to the agreement, property tax incentives accounted for \$25 million. In addition to various tax abatements, the agreement included different “concierge” services to help GE move its headquarters and its people. These included promising attention from key executive staff in the governor’s and mayor’s office, identifying and arranging temporary office space, and having a mobile office for new resident resources (such as driver’s licenses) set up on the GE campus. Unlike general business assistance and financing, few other businesses get preferences such as access to the airport and parking for aircraft.
- **Investments in the workforce:** Part of the package included relocation assistance for GE employees as well as \$1 million for customized training. Further, Massachusetts already offers workforce programs that GE can avail itself of, and some of the concierge services will identify appropriate programs. For example, GE has already begun posting jobs on Massachusetts JobQuest, an online job board hosted by the Office of Labor and Workforce Development.⁶³
- **Investments in the community:** Infrastructure investments were the bulk of the incentive package. These primarily included targeted access and improvement projects at the selected site that GE would have had to pay for otherwise, but others, such as renovating a bridge or upgrading transit options, will benefit the entire community. The new Innovation Center, which according to the agreement documents is intended to be more of a public resource that GE manages, is an investment in the type of cross pollination between GE and the public and private research institutions nearby that encourages entrepreneurship and advanced industry clustering.

It is difficult to ascertain how much of the incentive is a reward for GE (i.e., the firm was planning on moving anyway) and how much was necessary for it to relocate. Similarly, it is difficult to disentangle how much influence the nearby university community had on the decision versus the direct incentives included in the agreement.

It will be incumbent on the state and local officials to monitor the move and determine which components of the agreement were the most effective and which features will have benefits that extend beyond GE. If the provisions smoothing out regulations, permits, and employee relocation were most important, the state and city should revisit the service administration and assess how to improve the process for all businesses and new residents. The agreement’s transparency, which is commendable, may set the bar for other companies that want special airport access and specific improvements to public space.

Appendix B. Nevada Coordinated Strategy

Nevada suffered greatly during the housing collapse, likely more than any other state. Its economy has traditionally been built on gambling and construction. In 1997, those two industries contributed 31 percent of output compared with about 8 percent nationally. By 2013, those two industries contributed just 16 percent.

TABLE B.1

Share of Gross Domestic Product (Output), US and Nevada, Select Years

US	1997	2007	2013
Gambling and lodging	1.4%	1.3%	1.3%
Construction	6.2%	4.9%	3.8%
Nevada			
Gambling and lodging	16%	13%	12%
Construction	15%	10%	4%

Source: Bureau of Economic Analysis, Real GDP by state (millions of chained 2009 dollars).

Nevada had to revisit everything to diversify its economy, improve its workforce, and attract new industries. In 2012, the state retooled its entire economic development strategy, laying bare its weaknesses and identifying new strengths.

“All stakeholders, planning strategically and leveraging their resources, must work together to produce the thinkers, the dreamers, and the doers that Nevada needs.” – Nevada Governor Brian Sandoval

The Nevada Governor’s Office of Economic Development presents its economic development strategy in a summary plan and provides a series of planning documents.⁶⁵ On its website, the office lists plans for

- broadband,

- renewable energy,
- transportation electrification,
- feedstock security,
- health workforce,
- food security, and
- inland port.

The state has looked at the entire economy and produced reports not usually available on a state economic development website. Those reports played an important support role for Governor Sandoval's push to get more funding for education and massive incentive packages for new electric battery and vehicle industries.

Appendix C. Federal Requirements for State Long-Term Planning

The principles and the guidelines are evident in documents prepared for federal economic development agencies, workforce development agencies, and transportation agencies. It is possible that these federal guidelines can aid in coordination and expansion of evaluation.

- The US Economic Development Agency provides a practitioner’s guide to economic development tools that includes as one of its four primary tools an “occupational cluster analysis,” described as a way to spark collaboration among economic development, workforce development, and educators.⁶⁶ Innovation in America’s Regions, the federal Economic Development Administration’s website for regional economic development, offers cluster analysis tools.
- The Workforce Innovation and Opportunity Act explicitly calls for better integration of economic development in the workforce training plan (Eyster and Briggs 2016). Eyster and Briggs note that making the business case to invest in workforce development, including return on investment, is one of the most effective strategies to foster collaboration among economic development stakeholders.
- Major federal transportation acts (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users [SAFETEA-LU] of 2005; Transportation Equity Act for the 21st Century [TEA-21] of 1998; Moving Ahead for Progress in the 21st Century [MAP-21]; and Fixing America’s Surface Transportation Act [FAST] of 2015) have all included language about the need for transportation plans to support economic development. A guide that trains transportation planners on economic analysis notes that the “assessment of economic development potential” is important but not widely used (Horst and Carini 2011).

In some cases, the federal government has targeted distressed communities for comprehensive assistance. Programs like Strong Cities Strong Communities (which encouraged coordination of different federal resources to specific communities) could be used as a precedent for coordinating investment strategies across programs administered by different agencies.⁶⁷

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