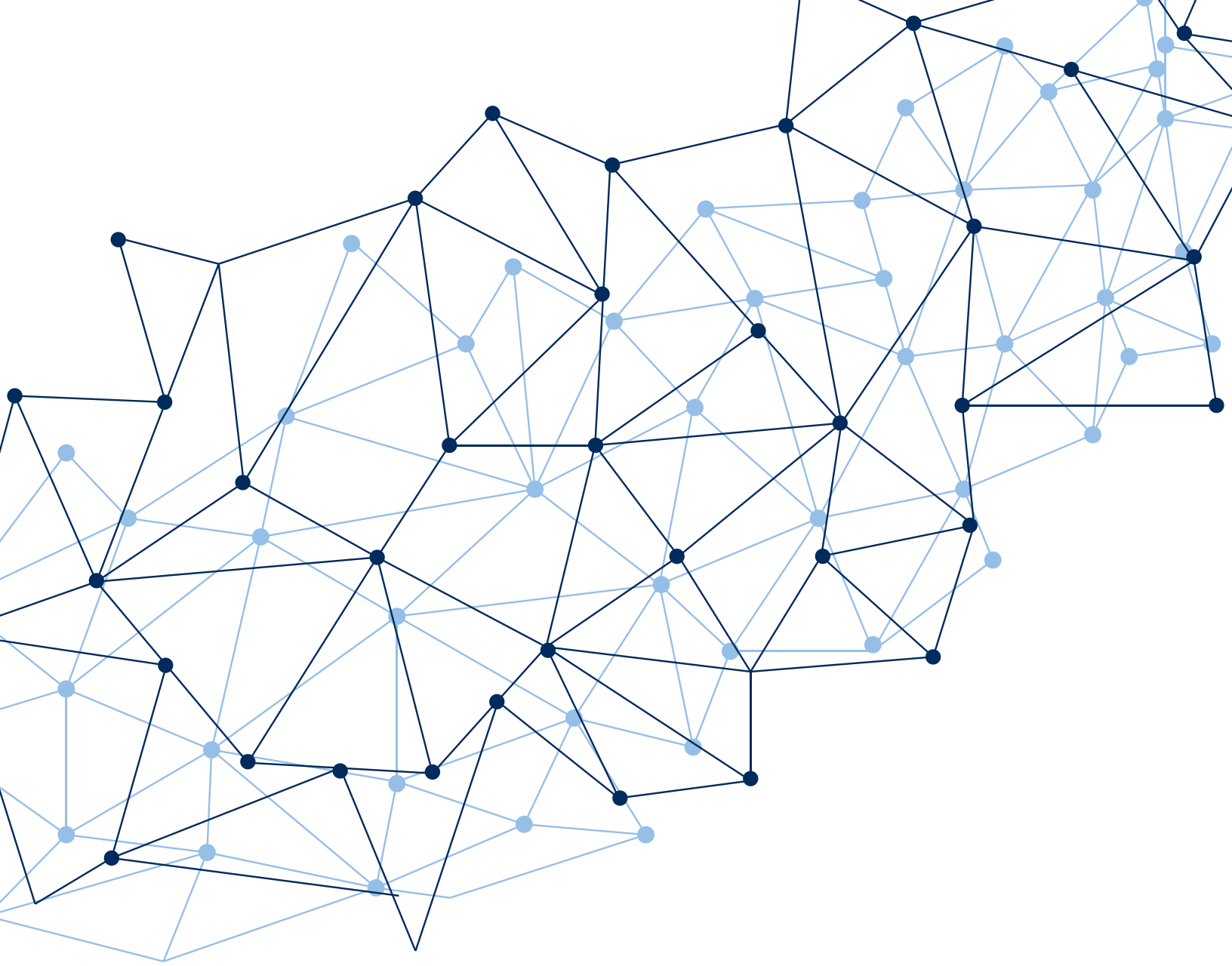

Redefining Economic Development Performance Indicators for a Field in Transition

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CREC CENTER FOR REGIONAL ECONOMIC COMPETITIVENESS

Executive Summary

State economic development leaders have embraced the need to report program outcomes to demonstrate the impact of their efforts but seek better indicators to measure those outcomes. This paper, Redefining Economic Development Performance Indicators for a Field in Transition, identifies a set of metrics beyond jobs and investment tallies to capture the broader benefits of economic development initiatives.

This effort reflects an ongoing transition within economic development as the field moves from a recession-driven emphasis on job creation via business attraction and retention to a focus on wealth generation and asset building, especially among communities that have not enjoyed the benefits of economic recovery. Accordingly, this paper examines metrics that capture a wider approach to economic development by focusing on indicators related to job quality/worker prosperity and business dynamics.

Job quality and worker prosperity

Economic development leaders seek indicators that recognize that all jobs are not equally beneficial to the economy and that many areas need better jobs, not more jobs. Job quality indicators tend to be:

- Wage related
- Benefits based
- Focused on skills development and career pathways
- Demographically or geographically targeted

Business dynamics

Business dynamics indicators go beyond job creation or investment to measure business churn, innovation, productivity and global activity. Business dynamics indicator categories address:

- Business formation, growth and survival
- Next generation competitiveness
- Sector, demographic or geographic characteristics

CREC does not provide recommendations on which metrics economic developers should adopt because circumstances and strategies vary widely. Instead, we offer the following guidance on themes that indicators should address and ways states can adopt them effectively.

1. **Connect metrics to program activity. Develop and document the logic model for each economic development program to articulate explicitly how inputs (investment or activity) are expected to translate into outcomes.**
2. **Consider adopting performance indicators that address job quality and business dynamics, where appropriate.**
   - Incorporate and monitor job quality metrics such as wage levels, benefits provided, occupations, and/or skill development and career pathways.
   - Address business dynamics (churn) indicators in addition to basic year-over-year summary business trends.
   - Include next generation business dynamic indicators related to innovation, productivity or global business activity among assisted businesses.
3. **Report program-related outcomes as distinct from broader economic benchmark indicators.**
4. **Evaluate data source options, including the feasibility, quality, and availability of data when selecting indicators.**
5. **Determine which indicators can be used to understand economic inclusivity within the state's overall economic development portfolio.**
   - Develop collection methods that capture relevant information about program impacts related to racial, ethnic or gender diversity and related to the distress of the places where investments are made.
   - Report the data internally (even if not required for external reporting) to allow agency leaders to monitor how well it is doing in addressing inclusivity issues across programs.
6. **Create a communication plan to drive productive use (and accurate dissemination) of economic development program outcome data.**

Introduction

With greater pressure from legislators and citizens to demonstrate a return from public funds invested in economic development programs, state leaders have embraced the need to report impacts in ways that demonstrate results and can be readily verified. These reporting efforts emphasize how economic development programs help in-state businesses succeed and, thereby, offer more economic opportunities to the state's citizens. States have an array of economic challenges they are trying to address so the impacts that matter most to policy makers and citizens vary depending on which challenge a program is designed to address and the goals and expectations associated with that program intervention. As a result, programs may have different measures that may not be easily aggregated across a portfolio of programs. Yet, in the final analysis, legislators and the public want to know how well the investments are doing, so, as described in an earlier white paper, states often relegate their reports to focusing on job creation and investment leverage as "least common denominator" measures for success.

Unfortunately, defaulting to a least common denominator measure incentivizes program managers to focus on jobs and investment, often to the detriment of a program with a legislative intent that may be quite different. For instance, jobs and investment are poor indicators of entrepreneurial activity. They do little to quantify effective customized training programs. They may not reflect the powerful impacts resulting from cluster building activities. They do not provide near-term results for initiatives that promote technology diffusion and innovation. These measures also do not represent the best way to measure impacts for business retention efforts. Yet, economic developers frequently capture jobs and investment-related performance to describe the impact of these varied programs.

The process of determining which indicators best provide a proxy for economic development policy goals is even more challenging in a full employment economy, such as the current national economic situation. Even programs that taken at face value are job creation or investment attraction programs may have policy objectives that are focused on other goals, such as diversifying the economic base or increasing opportunities for individuals to command higher wages. **The purpose of this paper is to review current economic development practice and help state policy makers select better metrics that indicate success in the face of changing policy priorities. In a robust economic environment (as opposed to times of economic distress), policy makers need a nuanced approach to monitor the performance of state investments.**

The State Economic Development Performance Indicators White Paper (CREC 2016) describes common indicators in use and the pros and cons of the two most common types of indicators: those representing jobs and investment. This paper, Redefining Economic Development Performance Indicators for a Field in Transition, is the second in the series and seeks to identify a more meaningful set of metrics that capture the benefits of economic development programs.

This effort reflects an ongoing transition within economic development as the field moves from a recession-driven emphasis on job creation via business attraction and retention to a greater focus on wealth generation and asset building, especially among communities that have not yet enjoyed the full benefits of economic recovery. In response, this paper examines metrics that capture a broader perspective on economic development by addressing:

- Job quality and worker prosperity
- Business dynamics

First, many economic development organizations are prioritizing efforts to encourage better jobs for workforce participants, especially those without four-year postsecondary degrees and/or living in distressed communities. Job quality and worker prosperity indicators emphasize wages and acquired skillsets, as well as opportunities created for under- and unemployed individuals.

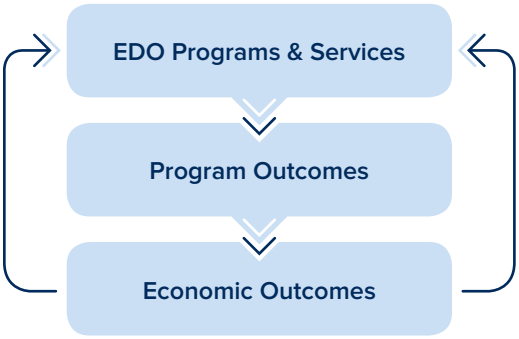
Second, economic development organizations strive to help businesses start and grow as an approach that helps citizens access better economic opportunities. Leaders are also considering how to prepare companies and communities for the next generation economy in which change is a constant and job growth is not assured. Business dynamics indicators go beyond job creation and investment to address not only business formation, expansion and survival, but also innovation, productivity, and global activity.

Approach

The CREC team drew on two primary data-source categories for this white paper. First, we reviewed recent reports from other organizations that are influencing the policy conversation around economic development performance measurement. A list of the sources we consulted is provided in the bibliography. Second, we synthesized the findings and recommendations from a series of performance evaluation projects CREC has completed for several federal-state program collaborations that are intended to improve economic outcomes at the state and local level. A full list is provided in Appendix I. These federal program evaluations provide useful models because in each case state or local entities are charged with implementing these initiatives across multiple states with different policy priorities. The team supplemented these two resources with information from the Council for Community and Economic Research (C2ER) State Incentives Database, data gathered for the previous performance indicators white paper, and consulting assignments completed by team members.

From these resources, we generated a list of more than 300 potential indicators. We sought to focus on a few key indicators that matter so we selected the subset most relevant in assessing the impact of programs on job quality/worker prosperity and business dynamics. In both cases, we considered whether a measure might also address greater economic inclusivity.

Figure 1: Services and Outcomes Linkages



We also separated program indicators with a direct link to economic development activities from those that represent broad economic outcomes. The presumption is that modest-sized state or local economic development initiatives are more likely to influence specific business activities among a targeted group of firms than to "move the needle" on an entire economy. While economic development organizations focus much of their performance monitoring on tracking program outcome indicators, monitoring broad economic indicators can guide policy makers in determining which program activities are most relevant to current policy priorities *(Figure 1)*.

One approach to explicitly articulating the rationale for a program is to define the logic associated with what policy makers are trying to achieve and why they choose the program inputs (investment or activities) that they do to achieve those goals or intended outcomes. In articulating this rationale as a "logic model," it is important to recognize the pre-existing condition in an economy that stimulated the need for a public investment and triggered action. This condition represents a starting parameter that affects the ability of the program to ultimately succeed in achieving the intended change in the state economy.

Examining the intended outcomes along with the existing conditions are fundamental aspects in the process of designing a logic model that helps determine the most appropriate evaluation indicators that measure the intended outcome. A logic model summarizes the policymaker's "theory of causation" in which resources available to an economic development organization are used to support processes that achieve relevant outputs. These efforts are connected to high-level economic outcomes (such as improved prosperity or full employment), even though many agency efforts may have only limited influence over the resulting conditions. For example, an economic development organization can control the distribution of tax credits for investment but has little influence on the business activity and related economic output that may result from that investment. Appendix II provides more insight into logic models and offers several examples of how they can be used to select performance indicators.

Job Quality and Worker Prosperity Indicators

Economic development organizations are increasingly looking beyond job tallies to assess the effectiveness of their programs and services. In many types of programs, jobs are not the primary result sought. Furthermore, economic development leaders seek indicators recognizing that not all jobs that result from their efforts are equally beneficial to the economy. Increasingly, policy makers and practitioners alike recognize that better jobs, not more jobs, are needed in many areas.

Of primary interest to policy makers today, practitioners are seeking to encourage the creation of quality jobs that can be filled by workers and jobseekers without a four-year university degree. One way to improve job quality and worker prosperity is to raise the value of individual workers in the eyes of businesses and help businesses compete globally in an environment in which they may have a higher wage structure than their competitors. This approach integrates the education and workforce development systems as vital components of state or local economic development. The activities undertaken tend to focus on increasing the supply of available skilled workers or reducing the costs to businesses associated with a skills mismatch.

In this context, the concept of "job quality" must be defined clearly. Often, economic developers focus first on average pay and benefits, examining how these align with the expectations of target industries or growth sectors. However, this may represent a limited view of job quality, which can also focus less on wages and more on benefits such as increased flexibility (including job-sharing, alternative work schedules, and addressing barriers to work associated with childcare, housing, transportation, and similar issues) and opportunities to develop individual skills or offer career pathway options.

The job quality concept also can incorporate a preference for jobs located in certain communities, especially when considered in terms of those residents and jobseekers in greatest need of work. This may mean that the creation of jobs in one place is more important to the state than the creation of jobs in another, especially in those places that are striving to improve opportunities for citizens with barriers (such as rural areas, traditionally distressed urban areas, or for workers in mature, geographically-concentrated industries). In fact, accessibility of job opportunities to un- or under-employed residents may be one of the most important economic development priorities that states currently face. Thus, indicators of interest tend to incorporate wage levels, industry categories, and the geographic location of the job.

In this section, we provide an edited menu of job quality and prosperity indicators organized into the following categories:

- Wage related
- Benefits based
- Skills development and career pathways
- Demographically or geographically targeted

Wage-Related Job Indicators

At first glance, many wage and salary indicators look the same. However, there are important nuances that change what the indicators convey. Some indicators focus on the wages of new jobs; others consider all jobs in an economy. Some draw attention to the change or difference between the wages of new jobs relative to all jobs rather than the wage level itself. Certain indicators emphasize a "living wage" standard for a community regardless of the "average wage" in a community. Some are organized by wages paid by a company while others measure wages earned by individuals who are targeted for help.

These myriad nuances in definition affect data collection, comparability in reporting across programs, and how performance is understood and measured. Furthermore, the geography of the job may affect whatever benchmarked standard may be selected. For instance, average wages or living wages can vary widely in states with labor markets that have large cost of living differentials. Furthermore, the timing of data collection can drastically impact the relevant measures. For instance, beginning wages and wages paid after a training

or experience period may vary widely or not at all. In addition, the permanence of the job may also impact the results. Thus, collecting wage data at the time of hire may provide one perspective while collecting the data six months or a year later may result in very different results when looking at either temporary positions or jobs that offer training wages designed to adjust upward after the training period is completed.

Benefits-Based Job Indicators

Economic development organizations often monitor whether companies requesting incentives expect to offer benefits to workers as part of their initial screening. However, our experience suggests that tracking benefits provided among those companies that receive incentives is not a common practice among states. Our research also identified only a few common indicators related to this category.

The two most prevalent indicators in this category address whether new jobs offer health care benefits and the total number of jobs with employer-provided benefits. Few examine the quality of those benefits (e.g., the net value of the benefit to the worker). Nor do these measures look at many types of commonly provided benefits beyond health care such as contributions to retirement. For instance, in our research, we found no measures examining the flexibility of work or whether companies offer other lifestyle amenities (such as transportation, housing, or child care assistance) designed to help overcome personal barriers that typically prevent employees from getting to work and functioning productively.

Skills Development and Career Pathways Job Indicators

Wages and benefits are not the only indicators of job quality. Jobs that provide clearly articulated career pathways, the potential for advancement, or skills training are increasingly valued. These career-quality job attributes are especially important in communities striving to create opportunities for individuals that have felt left behind by changes in the new economy. In some places, job quality measures are most closely tied to jobs that are typically suitable for those holding a college degree or higher.

In many communities, however, economic developers are striving to support companies with jobs for all worker segments, especially those without a bachelor's degree. In most cases, these programs seek to connect individuals to high growth industries or in-demand occupations, provide training or credentials, and leverage local procurement, spending and hiring. Measures of success focus on the efficiency of job placement activities, the acquisition of credentials and certifications, and the program's success in providing workers with better job opportunities.

Demographically Targeted Job Indicators

Economic development organizations are questioning whether economic benefits – however measured – accrue throughout their communities or are concentrated within small segments of the population or neighborhoods. Accordingly, indicators that measure outcomes by demographic category (including race, ethnicity, gender, or educational attainment level) or geography (downtowns compared to neighborhoods, rural areas compared to urban areas, distressed communities compared to all others) are in demand. This is especially the case in states that have large rural areas that continue to struggle due to out-migration or in areas that have severe worker shortages because their companies cannot attract skilled employees.

Job Quality Indicator Menu

No single measure will work for every state. The goal is to find the right mix of measures relevant to the state's preferred policy outcomes. Selecting the appropriate performance metrics requires identifying which program measures relate most closely to key economic program goals. In the following table, we organize a group of commonly-used program outcome metrics, aligning them to related broad-based economic prosperity goals. Many of the economic goals could be adapted to serve as useful outcome indicators if applied to individual programs, except the scale of impact varies significantly. For example, economic developers may track the number of living wage jobs in the entire economy (benchmark indicator) and/or the number of living wage jobs among companies receiving program assistance (outcome measure).

JOB QUALITY INDICATOR MENU

Program Outcome Measure	Economic Benchmark Indicator
Wage-Related	
» Average wages or salaries of jobs attracted » Wages for each position created » Living wage requirements associated with economic development programs » Wage gains after economic or workforce development program completion	» Average weekly wage » Change in average wage » Percent of jobs that are family sustaining » Number of living wage jobs » Number of higher wage jobs » Sector-specific average wage
Benefits-Based	
» Health care benefits for new jobs	» Number of jobs with employer-provided benefits » Percent of jobs with "quality benefits" » Average commute time
Skills Development and Career Pathways	
» Sectoral training enrollees and completions » Apprenticeships underway » Individual placement and earnings (post-training / credentialing) » Business use of workforce support services » Completion of entrepreneurship training » Credentials achieved for targeted occupations	» Number of qualified workers for target sector and occupations » Education/skill levels of jobs by industry » Availability of jobs in target occupations » Share of workers in target industries » Middle skill jobs in growth industries » Number of youth (by demographic group) separated from school or work
Demographically or Geographically Focused	
» Companies with local hiring agreements » Targeted hiring on development and infrastructure projects » Leverage of public investments for local jobs	» Jobs filled by college graduates in the community » Household income by race, location » Wages & salaries by race, location » Employment by sector by race, location » Hiring patterns of growing sectors, clusters / industries » Employment gap by race or ethnicity

Business Dynamics

Economic development organizations are looking beyond private investment figures to assess the impact of their business support programs and services. As defined here, business dynamics indicators encompass two different concepts: 1) business formation, growth and survival; and 2) competitiveness. Many economic development programs and metrics are designed to influence business formation and growth, including small business and capital access initiatives.

Much work has also been undertaken to understand and measure innovation, productivity, and global transactions as indicators of competitiveness. This section summarizes indicators associated with these categories and extends the subject to concepts of capacity and competitiveness to enable businesses to prosper in the next generation economy.

Helping businesses prepare for the next generation economy is a critical economic development function for two reasons.

First, many regions – both rural and urban – fear they may be left behind. The digital divide represents a real problem for many rural and smaller urban areas that do not have the critical mass required to attract private investment in the advanced telecommunications infrastructure required to support knowledge sharing – a critical component of technological innovation.

Second, the demise of many advanced sector companies soon after their creation raises the question of the long-term viability of almost every job. The communities enjoying success today may bear the brunt of loss from those very same companies in the not-too-distant future if they are not continuously focused on innovation.

Economic development should apply several basic principles in developing and implementing strategies.

1. Economic diversity can mitigate the impact of downturns in any single industry. Economic developers should identify new economic industries that build on and complement their existing economic base and existing assets (especially your labor force). What do we know about those assets? How up to date is that knowledge?
2. True economic development takes time. While the world is operating on "internet speed," one truism about economic transformation is that it is often requires a generation to re-tool an economy. The seeds being planted today may not be fully realized for years to come. Sure, we will make a few "hits" at the margin – a new plant comes into town or we fill up our incubator, but these are not the profound changes that we as economic developers seek to make in our communities as a legacy for our work. How realistic is the vision your state or community laid out for the next 5 to 10 years?
3. Economic success is based on sound business principles. There are no silver bullets for success. Success is almost always temporary unless it builds on sound companies able to make sustainable profits from their investments. As we seek to help companies grow, it is certainly valid for us to take entrepreneurial risks. What have we learned from past failures as well as our successes?
4. In times of economic turbulence, economic developers' jobs tend to change depending on whether a region is experiencing strong economic growth or economic dislocation. Now, we are competing globally for growth suitable to our region's needs. No matter what the local condition, however, a key aspect of economic development is focusing on helping companies and workers ease the pain of transition – whether caused by dislocation or economic disruption.

Even so, for many, economic success since the Great Recession was never fully realized. We must remain aware of who these are and continue to try to address their needs as well. It has been a few years for many of us since our last recession, but we should be ever vigilant and prepared.

In this section, we provide a menu of select business dynamics indicators organized into the following categories:

- Business formation and growth
- Next generation competitiveness
- Sector, demographically or geographically targeted

Business Formation and Growth

Growth-oriented entrepreneurs

These indicators identify or track both existing and new companies with high growth potential. The measures contrast with the small business/microenterprise indicators intended to track new businesses in general. The focus is less on the presence of companies or start-up activity and more on the patterns of business growth over time.

Business churn

These indicators recognize that both business births and deaths reflect an active economy. The measures include counts and trends in the number of small businesses, number of new business starts, and business characteristics (such as type of ownership and number of employees). Additional metrics of interest seek to describe business survival rates, local ownership or local-purchasing patterns, and the contribution that economic development interventions may have on business formation or survival.

Financing

Financing indicators considered here tend to fall into two categories. The first is total or per capita funding by source, such as venture capital or commercial loans. The second relates to participation in specific finance-based programs, such as small business lending, SBIR/STTR, or dealmaker networks.

BUSINESS DYNAMICS INDICATOR MENU – FORMATION & GROWTH

Program Outcomes	Economic Outcomes
Growth oriented entrepreneurs	
» Percent revenue growth of businesses receiving assistance » Accelerator activities and results » Collaborations (licensing, joint ventures, etc.) facilitated	» Number of high growth or sustained-growth firms » Number of Inc 5000 companies
Business churn	
» Number of individuals completing entrepreneurial training programs » Number of businesses that began after assistance » Incubator activities » Number of businesses started/ strengthened by program activities » Increased sales from buy local campaigns	» Number of new business starts » Number of business startups as % of all businesses » Number of jobs created by new businesses » Number of new and young firms/1000 people » Share of firms less than 5 years old/population » Share of employment in new and young firms » Percent of locally owned businesses » Number of businesses registered or licensed

BUSINESS DYNAMICS INDICATOR MENU – FORMATION & GROWTH (CONT'D)

Program Outcomes (cont'd)	**Economic Outcomes** (cont'd)
Business churn (cont'd)	
	» Growth of locally owned / grown companies » New establishments' 5-year survival rate » Tax receipts of sole proprietors » Census Business Dynamics churn rate » Change in number of firms by age of firm » Change in total number of firms by firm size » Firm survival » Firm expansion (jobs, output)
Financing	
» Per capita lending activity per SBA loan program » SBIR grant winners assisted » 3-year average of the number of investments/ number of companies assisted » Dollar amounts provided through capital access programs » Number of companies assisted through capital access programs » Private investment leveraged relative to program funds provided » Dealmaker networks; number of unique investors	» Total capital/financing for businesses by financing category (loans, VC, angel, etc.) » Number of companies reaching a first round of capital » Loans to businesses under $1m revenue » Annual amount of VC in the community » Total amount ($) raised by startups relative to private sector employment » FDIC SDI market share of deposits & lending » Commercial loans to small businesses » IPOs, valuations and funding rounds

Next Generation Competitiveness

Global activity

This set of indicators tracks exports, foreign direct investment, and other types of international business activity.

Innovation

Technology transfer, R&D spending, patents, and licenses are typical indicators used to understand innovation in state and regional economies.

Productivity

Value added or sales per employee are measures most typically in use. Facility modernization, cost savings, or improvements in business processes are other examples of contributing factors.

BUSINESS DYNAMICS INDICATOR MENU – NEXT GENERATION/COMPETITIVENESS

Program Outcomes	**Economic Outcomes**
Global activity	
» Number of assisted firms exporting » Number of assisted firms entering new international markets » Foreign direct investment activity facilitated	» Export totals and trends » Foreign direct investment totals and trends » Percent of globally connected entrepreneurs in the community

BUSINESS DYNAMICS INDICATOR MENU – NEXT GENERATION/COMPETITIVENESS (CONT'D)

Program Outcomes (cont'd)	**Economic Outcomes** (cont'd)
Innovation	
» Tech transfer activity from local universities to area businesses » Number of R&D contracts/grants for EDO-assisted businesses » R&D funding for EDO-assisted businesses » Number of assisted companies that develop/deploy new technologies » New products developed, commercialized or licensed by assisted companies	» Research funds available and awarded (public and private) » Patent counts » Patents per workers » 3-year average of gross income from licensing at universities » SBIR grant winners » Dollar amount of STTR/SBIR funding to local companies
Productivity	
» Assisted companies completing a facility modernization » Firms attributing new business/positive changes to assistance	» Labor force productivity/value added per employee » Sales/worker

Sector, Demographically or Geographically Targeted

Sector Focus

Indicators of business activity by sector are often used to determine economic diversity, economic density or clustering of desired industries, or alignment with target sectors, such as advanced manufacturing, that are identified in an economic development strategy. This set of indicators may also emphasize business and job counts in traded sectors that bring new money into the economy as opposed to local-serving businesses.

Demographically or Geographically Targeted

Program managers often use indicators that measure any of the above factors by demographic category (often race, but occasionally ethnicity, gender, or educational attainment level) or geography (downtowns compared to neighborhoods, rural areas compared to urban, distressed communities compared to all others). The most commonly cited metrics consider business-owner demographics or capital availability by demographic or geographic group.

BUSINESS DYNAMICS INDICATOR MENU – BOTH

Program Outcomes	**Economic Outcomes**
Sector Focus	
» Sector-specific incentives and programs » Number of assisted companies by sector	» Job openings by sector » Establishments by sector » Employment or establishments by traded industries » Diversity of businesses in the economy » Increased diversity of businesses in economy » Percent growth in tech oriented businesses

BUSINESS DYNAMICS INDICATOR MENU – BOTH (CONT'D)

Program Outcomes (cont'd)	**Economic Outcomes** (cont'd)
Sector Focus (cont'd)	
	» Share of jobs and output in advanced industries » Number of high-tech companies that are less than 5 years old
Demographically or Geographically Focused	
» Race, age, gender and income level of entrepreneurs assisted » Number of businesses assisted in distressed or under-served communities » MWBE businesses assisted » NMTC allocations and CDFI activities by location	» MBE business growth » Financing of MWBE businesses » Growth of companies by entrepreneurs of color » Number of businesses in urban distressed areas » Number of businesses in rural distressed areas » Number and value of loans to minority, women-owned, small, low-income businesses » Number of young entrepreneurs

The Challenge of Selecting Good Indicators

The first CREC white paper offered three basic recommendations for identifying good metrics for economic development. These three continue to apply, but we also offer a fourth suggestion - to prepare a communication plan - based on our experience conducting evaluation projects.

Start with the big picture

Economic development programs should have a clear statement of purpose and expectations of outcomes to facilitate evaluation and reporting. Many program managers default to the least common denominator metrics of jobs and investment even if these indicators are not particularly satisfying. **Where appropriate, legislative goals need to clearly document an interest in job quality or business dynamism as an anticipated outcome.** Because legislation creating a program frequently omits specific policy goal statements or offers vague objectives that are not easily measured, many economic development organizations are left to their own devices in developing appropriate indicators. This is particularly problematic for more nuanced goals that require legislative buy-in. Statutory language, program rules and the current economic development strategic plan are useful sources for directional (if not always specific) guidance on objectives and can generate ideas for appropriate performance indicators.

Align indicators with program inputs

Lofty strategic or programmatic language is often at odds with the actual resources available and type of service economic development organizations can offer businesses. **Good indicators acknowledge the scale and scope of both the program activity and the expected outcomes.** For example, it would be unrealistic to expect a façade improvement program to change the poverty level in a community, but it may reasonably be expected to improve foot traffic and sales by downtown businesses. It is also important to distinguish between outputs (process-oriented activities or deliverables) and outcomes (measures tied to program purpose). When economic development activities are not able or expected to lead directly to the expected outcome, logic models can make explicit the steps between the program and outcome.

Consider data access and data quality

Determine data sources and availability when selecting metrics to make sure data collection does not require time or money beyond your organization's means. Data options should also be reviewed to assess their quality and validity for evaluation purposes. **Define in advance how data will be collected, verified and reported and ensure that the process is feasible.** This is particularly true for measures associated with job quality or business dynamism. For instance, information about health care benefits is not readily available and is difficult to monitor, yet these employer-provided benefits may be critically important.

Prepare a communication plan

For tracking performance indicators to be more than a data exercise, economic development leaders must also consider how to report and communicate the indicators to various interested stakeholders. Questions to consider are:

1. Do the indicators answer key stakeholder questions or align with their interests?
2. How does indicator data fit with other economic development information or reports that stakeholders receive?
3. Is the information presented in the right format for the intended audience(s)?
4. Do the indicators help focus the conversation on economic development strategy and outcomes?
5. Is there a forum for an exchange of information or conversation around the indicators?

Conclusion

Job and investment measures alone do not sufficiently convey how communities are better off because of economic development efforts. This paper identifies metrics that indicate beneficial outcomes for businesses and residents resulting from economic development program activities. Specifically, it describes a variety of indicators related to job quality/worker prosperity and business dynamics that are either in use or have been recommended by policy or economic development organizations.

In this paper, CREC does not provide recommendations on which metrics economic developers should adopt because circumstances and strategies depend on leadership's priorities, local/regional characteristics, and a wide variety of program goals. Instead, we offer the following guidance on themes that indicators should address and ways states can implement them effectively.

1. **Connect metrics to program activity. Develop and document the logic model for each economic development program to articulate explicitly how inputs (investment or activity) are expected to translate into outcomes.**
2. **Consider adopting performance indicators that address job quality and business dynamics, where appropriate.**
   - Incorporate and monitor appropriate job quality metrics such as wage levels, benefits provided, occupations, and/or skill development and career pathways.
   - Address business dynamics (churn) indicators in addition to basic year-over-year summary business trends.
   - Include next generation business dynamic indicators related to innovation, productivity or global business activity among assisted businesses.
3. **Report program-related outcomes as distinct from broader economic benchmark indicators.**
4. **Evaluate data source options, including the feasibility, quality, and availability of data when selecting indicators.**
5. **Determine which indicators can be used to understand economic inclusivity within the state's overall economic development portfolio.**
   - Develop collection methods that capture relevant information about program impacts related to racial,

ethnic or gender diversity and related to the distress of the places where investments are made.

- Report the data internally (even if not required for external reporting) to allow agency leaders to monitor how well it is doing in addressing inclusivity issues across programs.

6. **Create a communication plan to drive productive use (and accurate dissemination) of economic development program outcome data.**

CREC will continue working with state and local economic development organizations to help think through ways to improve the use of quality indicators for incentives, workforce development and business support programs. We all have much to learn and share on this topic. We also seek insights about how to advance the practice of evaluating economic development as well as opportunities to collaborate with state and local leaders seeking to make improvements.

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APPENDIX I – CREC Program Evaluation Project Synopses

Following are several recent and current projects that CREC is undertaking that helped inform this white paper.

Appalachian Regional Commission's 50-Year Impact

The Center for Regional Economic Competitiveness (CREC), in partnership with West Virginia University (WVU), completed an in-depth evaluation of a wide array of programs for the Appalachian Regional Commission. The project included a new website to further educate the public about the significant structural and socioeconomic changes that have taken place in the U.S. Appalachian Region following the Appalachian Regional Development Act's passage in 1965.

Assessing the Advanced Manufacturing Jobs and Innovation Accelerator Challenge (AMJIAC) Initiative

CREC worked with NIST MEP to develop a survey instrument and conduct phone and in-person interviews with AMJIAC awardees. The questions covered the life of the grant, from development of proposals to the completion of projects. CREC then synthesized findings from these interviews—as well as a document review of project proposals, integrated work plans, and quarterly progress reports—to convey a narrative about each region's strategies, accomplishments, and efforts moving forward resulting from the AMJIAC initiative. The report captures insights about the MEP Center's role in each AMJIAC award, including how the project helped to advance the initiative's NIST MEP-related objectives, accomplishments that resulted from the MEP Center's involvement, and any lasting influence the AMJIAC activities are anticipated to have on the region's future efforts to support manufacturing.

Assessing and Evaluating the Defense Industry Adjustment Program

The Center for Regional Economic Competitiveness (CREC) and EntreWorks Consulting provide technical assistance for the OEA by assessing and evaluating the design and effects of Office of Economic Adjustment's Defense Industry Adjustment (DIA) program and the assistance that its grantees provide to defense-dependent communities, workers, and businesses. Through this work, CREC and EntreWorks seek to develop a logic model and evaluation framework to (1) better understand the impact the DIA program has made on the states and regions that have received funding; (2) assess how impacts differ between program recipients given the various uses of funds and stated program objectives; and (3) collect more information to help tell the story of OEA's DIA program impacts.

New England Regional Aerospace & Defense Exchange (RADE) Evaluation

CREC is assessing the Regional Aerospace & Defense Exchange (RADE) Defense Industry Adjustment project's effectiveness and impact by developing quantitative and qualitative evaluation criteria. Working with the Connecticut Department of Economic and Community Development, CREC will collect outcome and activity metrics through stakeholder engagement events and interviews to develop a logic model. The model will be used to align appropriate benchmarks with desired outcomes related to diversifying the state of Connecticut's economy and helping defense contractors enter new markets.

State Data Sharing Initiative

The State Data Sharing Initiative (SDS) seeks to improve public policy program outcomes by enabling evidence-based policymaking through greater sharing of state administrative records in support of rigorous policy analysis and program evaluation. SDS is implemented by CREC with support from the Laura and John Arnold Foundation. CREC is gathering information about state laws and regulations that govern business revenue and UI data disclosure to determine best practices for maintaining the safety of data as well as best practices for expanding access to confidential data for qualified researchers and policymakers. CREC is also assisting five states seeking to reform their data governance and sharing policies based on best practices from other states.

Support the State Small Business Credit Initiative Lending Programs, 2012-2016, U.S. Treasury Department – State Small Business Credit Initiative

Working collaboratively with commercial lending, community development finance, and equity capital subject matter experts, CREC provided assistance and support services to the U.S. Treasury's State Small Business Credit Initiative by developing an evaluation of more than 150 business finance programs in all 50 states. The final report (released in October 2016) summarizes annual reviews that CREC undertook in each of the past four years and assessed the overall program's impacts as they related to several key program goals, including investments in small and young firms, investments in low and moderate income communities, as well as job creation and retention impacts.

Talent Pipeline Management, US Chamber of Commerce Foundation

CREC is supporting the USCCF Talent Pipeline Management (TPM) Academy by helping 40 practitioners from 45 U.S. regions articulate their TPM initiatives and develop measurable program goals and objectives. CREC is facilitating these networks in two cohorts through a process in which they develop action plans and align performance measures with what they expect to achieve from the academy as well as from their TPM initiative. CREC has developed a logic model for the process and will produce an evaluation report on improvements to the clarity of their goals and the progress made in implementing their strategies as a result of the process.

APPENDIX II - Articulating Relevant Indicators through Program Logic Models

Logic models provide a way to explicitly articulate the rationale of how an input (investment) is translated into an outcome, recognizing the pre-existing condition in an economy. Examining this process can help us in identifying the most appropriate evaluation measures.

Logic models are invaluable as a stepping stone in identifying appropriate indicators associated with job quality and worker prosperity as well as related to business dynamics associated with entrepreneurship and innovation. This Appendix provides examples of logic models and demonstrates how they can be used to identify meaningful economic development program performance indicators.

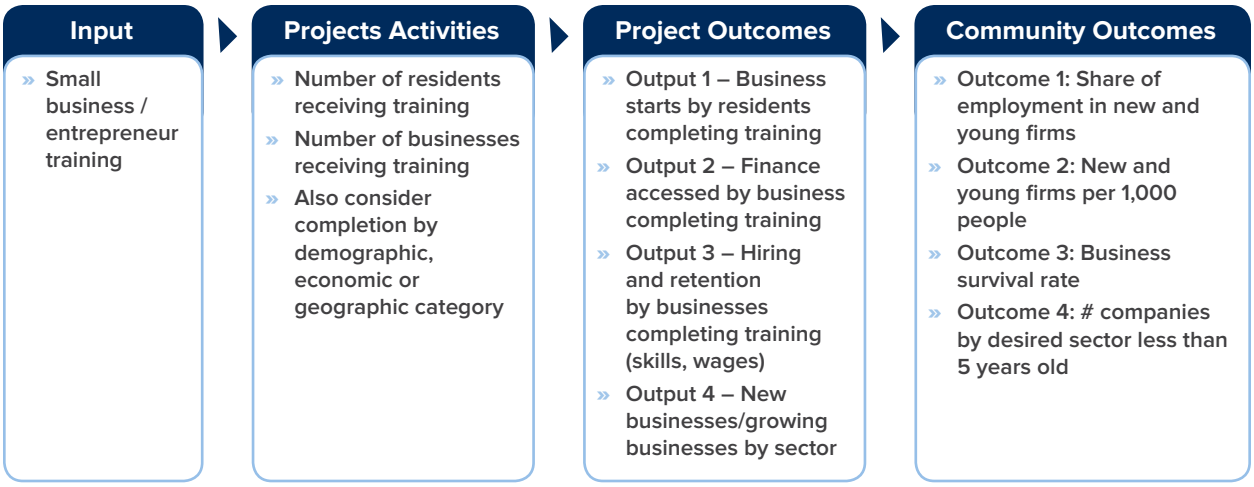
Innovation Program Logic Model

The U.S. Economic Development Administration has worked with SRI International to develop an Innovation Program Logic Model to describe that agency's investment philosophy. This effort provides one good example that describes for policymakers the connection between initial inputs (investments, policy interventions) through outputs, outcomes and vision for a wide variety of economic development program options.

INNOVATION PROGRAM LOGIC MODEL

Initial Conditions and Capacities	Inputs	Project Activities	Enhanced Participant Capabilities	Capacity Outcomes	Realized Outcomes
Economic conditions / business cycle (regional, national, global)	Portfolio of Programs	Events, Networking & Referrals	Technology Development	Community Capacity	Export Trade
Industry / cluster conditions, competitiveness and level of definition / development	EDA Funding	Mentoring, Coaching, & Technical Assistance	Product & Business Development	Firm & Industry Capacity	Jobs
Existing regional network and innovation ecosystems	Other Funding	Facilities & Equipment	Human Capital	Entrepre-neurship Capacity	Innovation
Existing workforce skills and knowledge	Client / Participant Resources	R&D & Technology Development Support	Networks & Marketing	Innovation Infrastruc-ture	Investment
Existing facilities		Financing Support	Finance		Increased Earnings
					Business Growth
					Wealth
					Sustainability

The Innovation Program logic model can be applied to two indicators that we think are especially promising business dynamics indicators: business starts and survival, and worker upskilling in assisted establishments.



"So-That" Logic Model

A separate way of linking inputs and activities to outcomes is the "so-that" logic model. Washington state has developed a "so-that" logic model to guide its performance measurement and evaluation activities, and this is used in a variety of analyses, including its incentive evaluations. An example of a "so-that" logic model[1] from Washington state is provided below:

"SO-THAT" LOGIC MODEL

Exempt solar-powered cars from sales and use tax

...in order to...

Reduce the price charged to customers for solar-powered cars **by an average of X%**

...thereby...

Inducing some customers to buy solar-powered cars when they might not otherwise

...thereby...

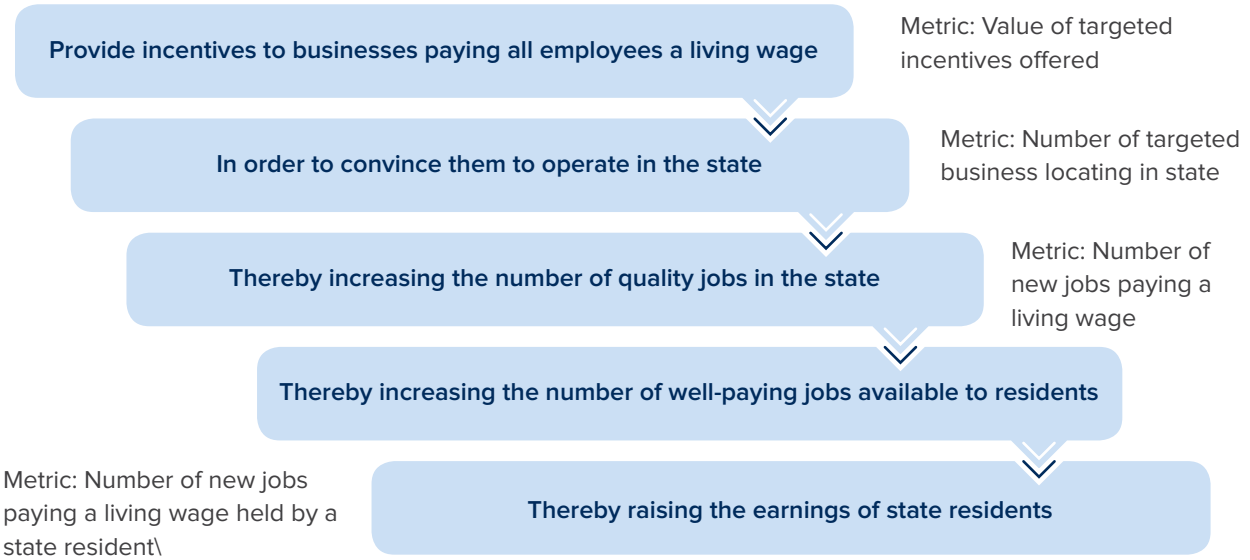
Increasing the number of solar-powered cars on the road in Washington **by a specific number of cars**

...thereby...

Ruducing the amount of CO_2 emissions in Washington **by Y%**

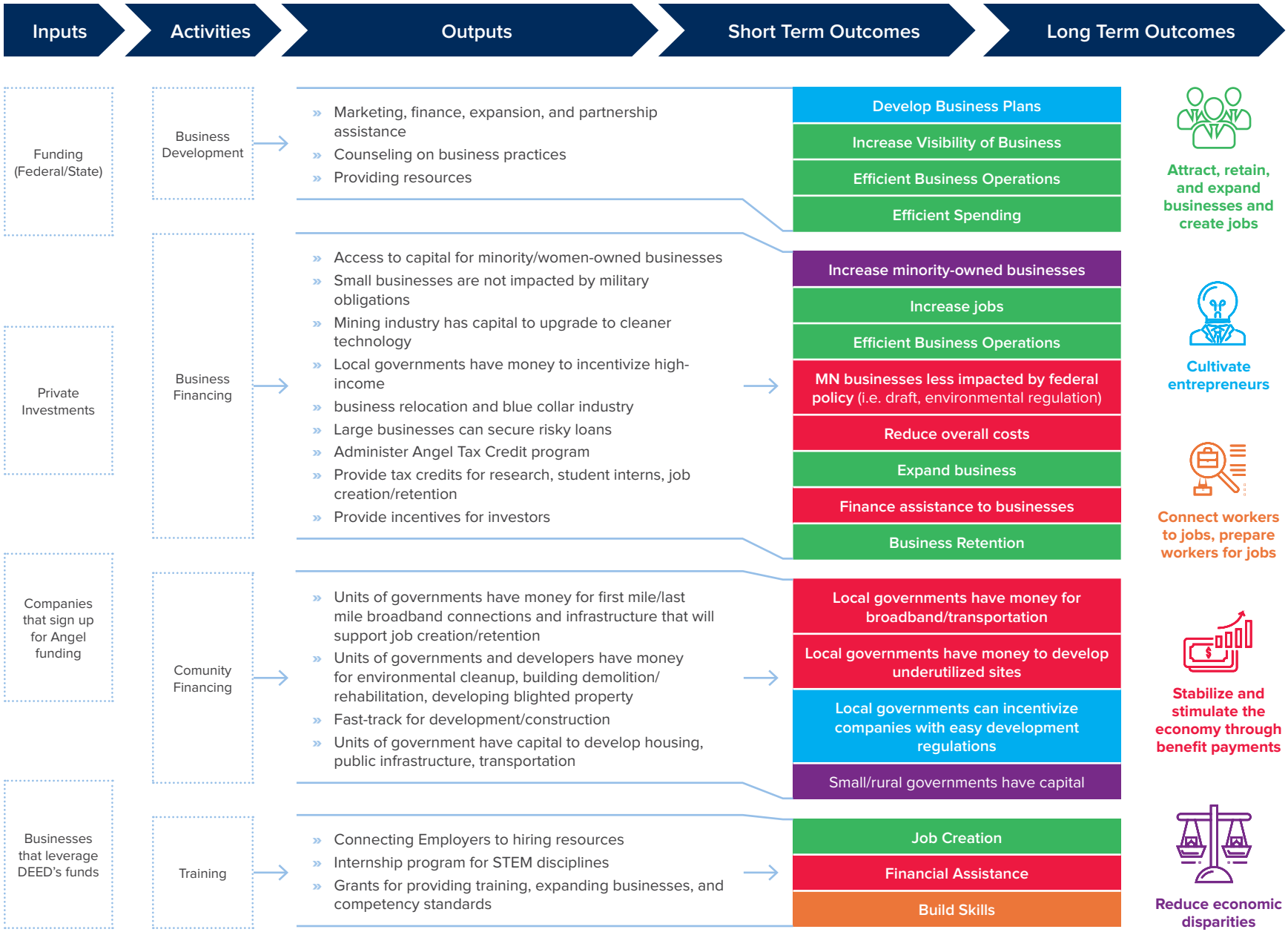
[1] Evaluator Roundtable, The Pew Charitable Trusts. November 3-4, 2015, Washington, DC. (ppt)

In the following example, we demonstrate how researchers can apply the “so that” logic model approach to a promising job quality/worker prosperity indicator related to a living wage.

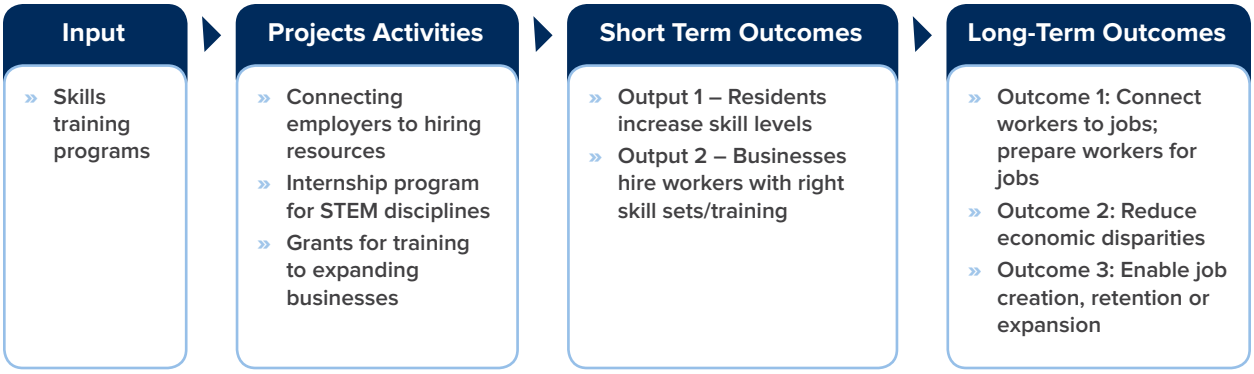


DEED Economic Development Program Logic Model

The University of Minnesota-Twin Cities recently completed the DEED Economic Development Program Indicator Evaluation Plan for the Minnesota Department of Employment and Economic Development (DEED). The report includes a logic model for DEED’s economic development programs “to bridge the disconnect between data collection and organizational management in a way that could be clearly communicated to the agency’s internal and external stakeholders” and help “measure whether the agency’s business and community development programs were achieving the stated long-term outcomes.”


Inputs
Activities
Outputs
Short Term Outcomes
Long Term Outcomes
Funding (Federal/State)
Private Investments
Companies that sign up for Angel funding
Businesses that leverage DEED's funds
Business Development
Business Financing
Comunity Financing
Training
» Marketing, finance, expansion, and partnership assistance
» Counseling on business practices
» Providing resources
» Access to capital for minority/women-owned businesses
» Small businesses are not impacted by military obligations
» Mining industry has capital to upgrade to cleaner technology
» Local governments have money to incentivize high-income
» business relocation and blue collar industry
» Large businesses can secure risky loans
» Administer Angel Tax Credit program
» Provide tax credits for research, student interns, job creation/retention
» Provide incentives for investors
» Units of governments have money for first mile/last mile broadband connections and infrastructure that will support job creation/retention
» Units of governments and developers have money for environmental cleanup, building demolition/ rehabilitation, developing blighted property
» Fast-track for development/construction
» Units of government have capital to develop housing, public infrastructure, transportation
» Connecting Employers to hiring resources
» Internship program for STEM disciplines
» Grants for providing training, expanding businesses, and competency standards
Develop Business Plans
Increase Visibility of Business
Efficient Business Operations
Efficient Spending
Increase minority-owned businesses
Increase jobs
Efficient Business Operations
MN businesses less impacted by federal policy (i.e. draft, environmental regulation)
Reduce overall costs
Expand business
Finance assistance to businesses
Business Retention
Local governments have money for broadband/transportation
Local governments have money to develop underutilized sites
Local governments can incentivize companies with easy development regulations
Small/rural governments have capital
Job Creation
Financial Assistance
Build Skills
Attract, retain, and expand businesses and create jobs
Cultivate entrepreneurs
Connect workers to jobs, prepare workers for jobs
Stabilize and stimulate the economy through benefit payments
Reduce economic disparities

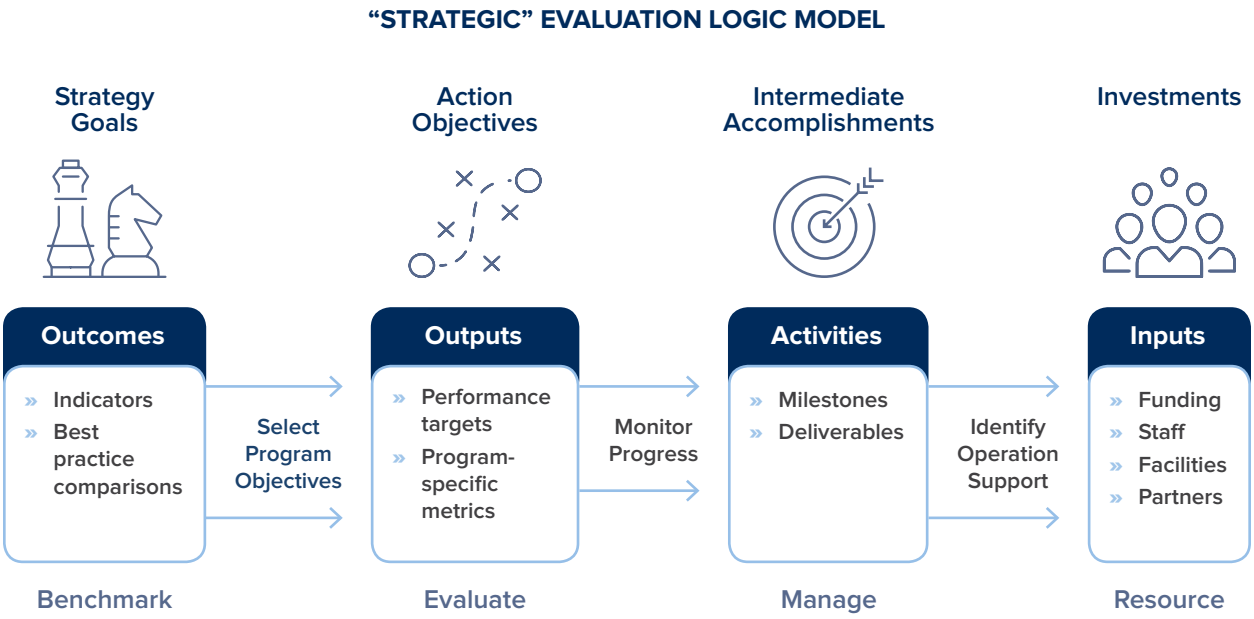
Adapting the DEED logic model to enhanced job quality goals connected to workforce skills training is illustrated in the following example.



Strategic Evaluation Logic Model

In this stylized version of a logic model to help describe the strategic planning process, CREC reverses the traditional order of the logic model to demonstrate that a sound investment strategy can be tied to the strategic goals of the economic development organization. In CREC's approach, the policy maker and evaluation begins by identifying the strategic outcomes sought and then traces back through the expected results to milestones associated with project activities. This allows leaders to determine targeted activities and needed resources based on policy goals. This process is iterative as resource constraints may cause the analyst to adjust expected outcomes.

The CREC approach is represented below:



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