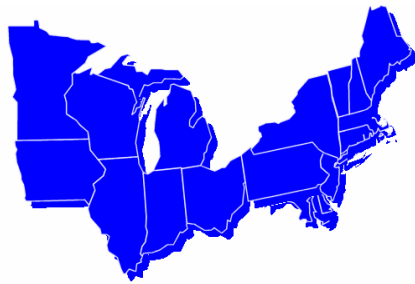


Public-Sector Economic Development:

Concepts and Approaches



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The Center for Regional Policy

The Northeast-Midwest Institute is a Washington-based, private, non-profit, and non-partisan research organization dedicated to economic vitality, environmental quality, and regional equity for Northeast and Midwest states. Formed in the mid-1970s, it fulfills its mission by conducting research and analysis, developing and advancing innovative policy, providing evaluation of key federal programs, disseminating information, and highlighting sound economic and environmental technologies and practices.

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States served by the Institute and Coalitions are: Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

Executive Summary

This executive summary presents highlights from the full report on public-sector economic development. The report offers a framework for local, regional, and state policymakers to use as they assess economic development prospects.

Economic development increases a regional economy's capacity to create wealth for local residents. Development depends upon the deployment of a region's building blocks – labor, financial capital, facilities and equipment, know-how, land, other physical resources, and public and private infrastructure.

Why the Public Sector Plays a Role in Economic Development

Public-sector involvement in economic development, while not always successful, often stems from legitimate concerns about the following:

- *Information market failures* – The regional economy will benefit to the extent that the public sector can improve the flow of information in a regional economy in a cost-effective manner.
- *Spillovers* – Self-interested buyers and sellers fail to take into account the spillover effects that result in larger costs or benefits for a community or region.
- *Sunk investment* – If public infrastructure or private resources are left idle, an area misses out on the economic potential of its sunken investment.
- *Social impacts* – Improvements in the well-being of specific people and places may be particularly important for low-income, low-skilled residents who are less likely to move from declining areas to growing ones.
- *Political pressure* – Serious concerns about the state of a region's economy will lead to public-sector economic development efforts, good or bad.

Potential Drivers of Growth

Export base and import substitution. Outside sales bring dollars into the region and drive other local economic activity. Dollars leak out of a region when local households and businesses buy “imports” made elsewhere. While useful as a theoretical concept, this simplistic economic base concept is incomplete. If export sales and import substitution were the only sources of growth, the world economy would not grow without export sales to other planets.

Productivity. A region's wealth can expand absent any increase in exports or decrease in imports if productivity rises. Here, growth comes from expanding the production possibilities frontier – what can be produced with a given level of labor, materials, and equipment.

Specialization and trade. A region concentrates on its most efficient economic activities, earns income from those activities, and then uses that income to import goods and services that are the specialties of other regions.

Place and space. The implications of geography affect the spatial distribution of economic activity as businesses balance access to consumer markets and production inputs (for example, labor and materials) against costs for land and transportation.

Human capital and innovation. The skills, knowledge, and ideas that people bring to the workplace can drive productivity improvements and economic growth.

Financial capital. Increased private investment – made in response to existing market demand or emerging opportunities – creates new jobs, which increase local income, which leads to greater local demand for goods and services, which in turn leads to more private-sector investment and continues the cycle of growth.

Entrepreneurialism. Risk-taking entrepreneurs are needed to take the ideas, labor, equipment, and materials and turn them into business activity.

Clusters or Agglomeration. Businesses may cluster to take advantage of access to buyers or inputs into the production process, including skilled workers, specialized supplier firms, production technologies, and natural resources.

Product Life Cycles. Regional growth may be affected by the “life cycle” of a product as it moves from the start-up phase to standardized, or mass, production.

Nine Guiding Principles for Public-Sector Economic Development

- *Market forces are the dominant drivers of a regional economy.*
- *Public-sector economic development efforts must focus on factors internal to the workings of the regional economy and under the influence of public policy at any given level of government, be that local, regional, state, or federal.*
- *Sensible economic development policy must build upon the strengths of the regional economy.*
- *Economic development should yield real net impacts on growth or, in the short term, the potential for growth.* For economic development initiatives, key questions regarding impact include 1) do the gains from public-sector action for one location outweigh the negative effects on other locations; 2) do the overall benefits exceed the initiative’s costs; 3) do the benefits of economic development action exceed the benefits that could have been realized had the dollars and resources been directed to other purposes; 4) would the development and growth have taken place without any public-sector involvement?
- *The public sector should pursue economic development policies that result in broad benefits for residents and businesses in the region, especially benefits that will continue to have a positive impact even if specific businesses close or move.*
- *Public-sector economic development efforts should pay attention to the needs of lagging or distressed areas and of groups at the lowest rungs of the economic ladder.*
- *Public policy should recognize the regional nature of economic development and advance strategies that address challenges and opportunities throughout the regional economy.*
- *Regional economies will benefit from the production of goods and services that depend upon capital-intensive processes and skilled workers, incorporate high levels of locally added value, and reap strong profits.*
- *Economic development efforts should address the development potential of places, as well as the needs of people in that place.*

Preferred Approaches to Public-Sector Economic Development

The public sector should take the following approaches to economic development.

- *Carefully and objectively analyze the structure of regional economies in order to identify comparative advantages, critical industries and occupations, internal linkages, and emerging prospects for development and growth.*
- *Make sensible investments in the public infrastructure as a way to spur regional economic development and growth.*

- *Invest in public education and skills training to better the lives of residents and improve the skills and knowledge that those residents bring to their jobs.*
- *Minimize firm-specific tax breaks and public subsidies.* When selecting locations, businesses must first consider critical production factors, including labor quality, costs, and availability; transportation costs and modes; access to markets for their goods and services; and access to supplier firms. That being the case, tax incentives for economic development in most cases work best where they are least justified by swinging decisions from one site to another within the same region – the region the firm already has identified as the one they want for their new location.
- *Pay attention to industries and businesses that contribute to the economic base by selling their goods and services outside the region or by competing for local sales that would otherwise go to businesses located elsewhere.*
- *Pursue economic development strategies that boost the productivity of key regional industries.*
- *Improve the quality of life in regions in order to keep and attract people.*
- *Focus economic development on industries, occupations, and businesses that provide high-quality, good-paying jobs.* Exceptions may make sense when the goal is to open up employment opportunities for low-skilled residents.
- *Look for ways to encourage higher pay by local industries and businesses.*
- *Exercise great caution before expending public dollars as financial capital for private ventures.*
- *Strive for a strong return on investment from any public-sector economic development initiative, program, or action.*

Public-Sector Economic Development: Concepts and Approaches for Local, Regional, and State Action

State and local governments have long concerned themselves with regional economic development. Public officials pursue economic development initiatives to spur job growth, increase income for local residents, raise property values, expand the tax base, improve the quality of life, stabilize communities, reduce poverty, and even lower crime rates. In the drive to influence regional economies, policymakers commit public resources to economic development efforts. The expected payoffs are development and growth, but public resources may be misdirected or wasted if state and local governments engage in economic development efforts without understanding the opportunities and limits regarding public actions and regional growth.

State and local economic development efforts work best when they fit the role for public-sector action and build upon regional potential and strengths to improve the long-run prospects for economic growth and vitality. This report presents ideas about the public-sector role in economic development, the dynamics of regional economies, sources of growth, guiding principles for economic development, and preferred approaches to public-sector economic development activities. Taken together, the sections that follow offer an overview of economic development theory and practice and provide a context for policymakers as they assess economic development prospects. The information found here will help guide discussions about sensible economic development strategies.

Economic Development and Growth

Economic development increases a regional economy's capacity to create wealth for local residents. It depends upon deployment of a region's building blocks – labor, financial capital, facilities and equipment, know-how, land, other physical resources, and public and private infrastructure. (Kane and Sand, 1988.)

Economic development is essential to the ongoing growth and vitality of a region, but development itself differs from economic growth. Economic development implies a qualitative change in what or how goods and services are produced through shifts in resource use, production methods, workforce skills, technology, information, or financial arrangements. A regional economy can grow without changing if it simply produces more of the same – same goods and services – in the same manner. For example, an increase in the population of an area will mean more income and more demand-driven growth even absent qualitative changes in the economic development environment. Development implies something more. Development and growth complement each other in the long run, although in the short run development will tie up resources that could otherwise feed more immediate economic growth. (Flammang, 1979.)

In the broadest context, public-sector economic development efforts cover any capacity-building investments or actions, including, for example, good schools and roads. Some argue that the best public-sector approach to economic development is one that focuses on investments and efficiencies that shape the broad economic environment for business and labor through education, the transportation infrastructure, public safety, water and waste systems, regulation, and the overall tax structure. In a narrower sense, economic development often refers to direct assistance for businesses and industries. In this case, the public sector takes action to reduce costs or risks for businesses and thus encourages business investment and productivity. (National Conference of State Legislatures, 2004.) Both views – the broad and the narrow – tie back to the dynamics of regional economies and potential sources of growth. And in both cases, policymakers must consider the appropriate role for public sector in regional economic development.

Why the Public Sector Plays a Role in Economic Development

A region's economic development and growth depend upon the independent actions of many players, the overwhelming majority of whom operate in the private sector. The regional economy is shaped by the decisions of consumers, investors, loan officers, workers, corporate officials, business owners, entrepreneurs, and students, all of whom make choices and take actions that affect economic outcomes.

Yet the public sector also plays an important role in the regional economy. Clearly government decisions and activity significantly influence the economic environment of a region when it comes to education, infrastructure investment and upkeep, taxes and regulations, zoning and land use, and the provision of public services. The public sector also takes more targeted actions for economic development to assist businesses and workers. Public-sector involvement in economic development often stems from legitimate concerns about positive and negative spillovers, failures in the information market, sunken investment in physical infrastructure, the social impacts of growth and development, and the political impacts of economic stagnation or decline.

- *Information market failures* – Free market theory assumes that buyers and sellers have perfect information about all elements of production, employment, and consumption decisions. The reality often falls short of this ideal. Adequate information may be lacking in the case of investors searching for opportunity, businesses looking for production locations, entrepreneurs needing start-up capital or business know-how, businesses using outmoded production or management techniques, and workers hoping to hone their skills and knowledge for emerging occupations and industries. The regional economy will benefit to the extent that the public sector can improve the flow of information among the players in a regional economy in a cost-effective manner.
- *Spillovers* – Self-interested buyers and sellers generally fail to take into account the spillover effects of their actions when those actions result in larger costs or benefits for a community or region. Consequently, the market will produce too much when buyers and sellers overlook negative spillovers, such as pollution caused by the production process, and too little when they overlook positive spillovers, such as the overall gain for an area from education and training for residents and workers. Negative spillovers justify some government interventions, such as pollution regulation. In the case of positive spillovers, they create a market for public goods and services, such as education and training, transportation infrastructure, water and waste systems, police and fire services, and the like. For each of these examples of positive spillovers, private-sector market signals would miss the broader, community-wide benefits from these goods and services if buy-and-sell decisions were left solely to self-interested actors.
- *Sunk investment* – Economic growth depends upon how a region puts its productive capacity to use. If public infrastructure or private resources are left idle, an area misses out on the economic potential of those sunken investments. The regional economy can benefit from public-sector efforts to deploy overlooked resources for productive use, as is the case when development occurs in distressed urban areas or at abandoned industrial sites that have been cleaned up through brownfield programs. Better, also, to have new growth occur at locations in a region where businesses can take advantage of existing but underused roads, utility systems, and other infrastructure elements than to have the growth occur where it will require significant expenditures for new infrastructure. (Bartik, 1995.)
- *Social impacts* – Growth has long-term impacts on the economic well-being of people and places. Job experience improves the ongoing employment prospects and occupational advancement of less-educated, low-skilled residents over time and in this way has long-term effects on the unemployment and poverty rates in a region. (Bartik, 2003.) Development may also prevent or short-circuit physical and economic deterioration in a neighborhood or other small geographic area. In these cases, successful public-sector economic development activity will improve the well-being of people and places. Such gains may be particularly important to low-income, low-skilled residents who are less likely to move from declining areas to growing ones. (Hoover and Giarratani, 1984.)

- *Political pressure* – Economic stagnation or decline prompts demands from voters for economic development initiatives. Even in regions with healthy economies, opinion leaders and residents may press elected officials for action if they perceive that the performance of their economy is lagging behind that of other regions or if the trend line for growth has slowed. Serious concerns about the state of a region’s economy will lead to public-sector economic development efforts, good or bad.

Public-Sector Impacts

Properly structured, economic development efforts by state and local governments can have a positive – albeit incremental – impact on growth. Real impacts may be hard to separate from the perception of impact. And while the perception of impact may be an adequate measure of success from a political standpoint, the economic framework demands more. For true success, public-sector economic development initiatives must pass the following four tests.

- *Does the impact of public-sector economic development activity sum to greater than zero?* The positive impact on one local area may come at the expense of another, as in the case, for example, of a firm simply relocating its production facilities from one site to the next. Economic development efforts that encourage such relocation may only move economic activity and jobs around instead of creating real economic growth. What yields positive impacts for one community or one local economy, then, might have no positive impact on economic growth in a region or the country as a whole.
- *Do the overall benefits of the public-sector economic development activity exceed its costs?* Benefits must be weighed against the costs in order to assess whether or not economic development efforts yield true gains. Here, benefits refer not just to gains for governments from increased tax revenues but also to increased well-being of the region and its residents. Practically speaking, an accurate measure of costs and benefits is quite difficult and easily manipulated for political purposes, which makes the measurement process a tricky one.
- *Do the costs of the public-sector economic development activity exceed the benefits that could have been realized had the dollars and resources been directed to other purposes?* When funds are spent on economic development, they cannot be used for other opportunities. The question becomes whether or not the positive impact from the economic development effort exceeds the positive impact that would have resulted from alternative uses for those funds. Alternative uses include, by way of example, public investments in education, or private consumption and investment spending by the businesses and residents who paid for the economic development initiatives with their tax dollars. These considerations are often referred to as opportunity costs.
- *Did the public-sector activity have a true impact and lead to economic development and growth, or would the development and growth have occurred even without public-sector involvement?* Quite often in economic development, public dollars underwrite activity that would have taken place without any public subsidies or investments at all. Here there is no impact from the public-sector activity but only the appearance of it.

What the Public Sector Does for Economic Development

Three Broad Approaches to Public-Sector Economic Development

In pursuit of impacts from public-sector economic development, state and local governments have adopted a range of philosophies and strategies. Broadly speaking, economic development efforts, particularly at the state level, can be split into three types, aimed at 1) business recruitment, 2) business creation, retention, improvement, and expansion, and 3) the creation of a suitable environment for industry-wide development.

Business recruitment. Economic development has long involved the recruitment of businesses to specific sites, communities, or states through the use of marketing efforts, site preparation, tax reductions, subsidized financing, cut-rate utility arrangements, targeted infrastructure development and job training, and even publicly funded cash reimbursements to cover certain relocation costs. Recruitment efforts often focus on businesses – especially manufacturers – that “export” their goods and services for sale outside the region. State and local governments often offer tax breaks and other incentives in order to attract export-oriented businesses. The impacts of these recruitment strategies are mixed, especially at the state level. Businesses attracted to one location because of cost savings from public subsidies may soon relocate to yet cheaper locales. If the costs of tax breaks and subsidies exceed the tax payments from the new businesses, tax incentives for newcomers mean less funding for the crucial public services and infrastructure needed to build local capacity for wealth creation. In this way, the tax breaks may undermine public-sector investments that otherwise could lead to more business growth through start-ups, retention, expansion, and attraction. Businesses that are already up and running in an area may end up paying taxes to subsidize the relocation of incoming firms. And often enough, governments provide incentive packages to firms that would have located within the same economic region even absent the tax breaks and public subsidies. From the standpoint of public-sector fiscal prudence, it makes little sense for governments to expend time and resources recruiting businesses that will require significant, new tax-funded roads, water and waste systems, and other infrastructure. (Bartik, 1995.) Also because almost all governments offer tax incentives and subsidies to relocating businesses, any one government’s incentive package is neutralized by the proposals from other communities and states, and the public sector in all states and regions end up poorer.

Business creation, retention, improvement, and expansion. State and local governments have moved beyond an exclusive focus on industrial recruitment and broadened their economic development efforts to encompass the creation of new enterprises, the retention of local firms, and the improvement and expansion of existing businesses. This important and welcome evolution has turned the spotlight on internal growth drivers in a regional economy and put existing and newly created businesses on more even footing with firms recruited from elsewhere. Tax incentives and public subsidies are offered to existing businesses as a strategy to encourage retention and expansion, resulting in many of the same problems that plague recruitment efforts. Beyond the tax breaks and subsidies, economic development has come to include firm-focused initiatives for entrepreneurship training, access to financial capital, workforce training programs targeted to the needs of local businesses, business incubators, technology transfer efforts, and international export promotion and other sales expansion initiatives. Economic development has increasingly emphasized strategies designed to improve the productivity of local businesses through such programs as job-oriented education and training, and engineering and technology services for small and mid-sized firms. These public-sector programs spur real economic growth when they are cost-effective and increase the level of output produced from a given level of inputs. Not all creation, retention, improvement, and expansion programs have paid off, of course. Some subsidize activities and development that would have occurred without public support, and some steer public-sector decision makers into realms better left to the private sector, including business lending and investment. Yet the emphasis on business creation, retention, improvement, and expansion provides more balance to public-sector economic development policies.

Industry-wide development. In the last several decades, state governments in particular have dispatched economic development tools to create a suitable environment for industry-wide development that builds upon a region’s competitive advantages for the good of key or emerging local industries. This approach moves beyond the firm-specific focus common to most other economic development strategies. States analyze historical patterns, current circumstances, and emerging trends in order to identify the crucial core industries and agglomerations that drive growth for a regional economy, or ones that hold promise for doing so. The questions become: 1) What advantages does the state or region offer in terms of industrial concentrations, supplier networks, specialized infrastructure, occupations and workforce skills, geographic attributes, research and development opportunities, financial resources, and location considerations, and 2) what can the public sector do by way of economic development policy to foster those advantages for the economic health of the entire region? In short, what is possible and what is desirable for the regional economy? (Bradshaw and Blakely, 1999.)

In the context of industry-wide development, states pursue strategies for business retention and expansion, new business development, and industrial recruitment in ways that capitalized on local advantages or opportunities and foster critical sectors of the regional economy. Efforts also focus on crucial occupational groupings that have the potential to shape or drive the local economy. (Markusen, 2000.) The industry-wide approach recognizes that a region's economic advantages, not tax incentives and public subsidies, will spur development and growth in the long term. State initiatives often emphasize the importance of high-performance, competitive industries with high productivity levels and skilled workforces. (Bradshaw and Blakely, 1999.) Technical assistance programs may be designed specifically for firms in critical industries. Tax incentives may be targeted toward key sectors of the local economy, or used to offset state regulations or requirements deemed particularly harmful to businesses in those sectors. The focus on industry-wide development certainly does not eliminate the potential for missteps by the public sector, particularly when it comes to misguided efforts to shore-up declining industries or to wholly create a critical mass of new businesses in the latest, "hot" industrial sector, such as biotech or information technology. Done well, however, an industry-wide approach does open up the discussion to a broader array of public-sector initiatives – including infrastructure and education – in the context of regional development and growth.

Tax Incentives, Public Services and Infrastructure

The public sector employs a range of economic development strategies designed to encourage growth. The factors that influence business creation, improvement, expansion, and location vary and mostly fall outside the direct control of the public sector. Not surprisingly, then, governments focus much of their attention on the levers they control directly, including taxes, public services, and infrastructure.

Tax incentives. Public-sector actors use targeted tax incentives for all types of economic development, from business recruitment to retention and expansion to industry-wide development. Much of the research on economic development and taxes looks at the effect of taxes on business location decisions. Research shows that taxes have a limited impact on business location. (Rubin and Zorn, 1985.) When selecting locations, businesses first consider more critical production factors, including labor quality, costs, and availability; transportation costs and modes; access to markets for their goods and services; and access to supplier firms. While the impact of taxes on interregional location decisions varies from industry to industry, in general taxes are a secondary consideration.

But empirical evidence does indicate that taxes do matter to an extent, especially when businesses weigh several potential locations within a favored region – sites within a metropolitan area, for example, or sites in close-by states. (Bartik 1991.) Businesses identify the preferred region based on major cost and production considerations; taxes may tip the location decision of a firm from one specific place to another within a broader regional economy. From an economic standpoint, growth at one location within a regional economy drives growth for the regional economy as a whole, so tax incentives designed to draw businesses to one location in a region instead of another have little or limited impacts on overall regional growth. That being the case, tax incentives for economic development in most cases work best where they are least justified by swinging decisions from one site to another within the same region – the region the firm already has identified as the one it wants for its new location. (Fisher, 2004.) What's more, the effectiveness of tax incentives erode as more and more locations offer them, undercutting the advantage gained by the locality that first put them in place. (Wassmer and Anderson, 2001.) And the high cost of tax incentives, per job gained, undermines the cost-effectiveness of the tax-cut approach to economic development. (Bartik 1995.)

Public services and infrastructure. Public services and infrastructure influence business growth and location. Businesses and workers use public services and infrastructure, the very public expenditures that they pay for with their tax dollars. Research has shown that public investment in education and infrastructure is positively related to local business activity and growth, although it is difficult to determine if those public investments drove the growth or were, in fact, driven by it. (Bartik 1991.) Businesses benefit from the public sector's provision of education and training, transportation infrastructure, water and waste systems, and police and fire services, for example. Public services and infrastructure also contribute to a region's quality of life, which stands out as an increasingly important factor in the economic vibrancy of metro areas. (Florida, 2002.) And public officials cite infrastructure improvement as one of

the most commonly used economic development tools. (Bowman, 1987.) To the extent that tax incentives for economic development reduce funding for critical public services and infrastructure, they may even undermine long-term development and growth. (Lynch, 2004.) That said, public investment in traditional infrastructure alone will not turn around a declining regional economy. (Luger, 2002.)

Needless to say, businesses balance the cost of taxes with the desire for public services, and the importance of each of these elements will vary from business to business. In the best of circumstances, the public sector will minimize firm-specific tax breaks and subsidies and focus instead on fostering an environment that encourages development and growth in crucial sectors and throughout the region.

Public-Sector Action: Strategy Depends upon Area Size, Industry of Interest, Other Variables

For public-sector economic development efforts to succeed, policymakers and analysts must assess which factors for regional growth and development are external and beyond local influence, and then determine what can be done to influence the relevant local factors in a cost-effective manner and spur regional economic activity. (Kane and Sand, 1988.) Blanket judgments about economic development initiatives are difficult because a strategy's effectiveness will vary according to such factors as the specific location where economic development initiatives are undertaken, the industrial or occupational sectors affected, and even the size of the firms involved. What makes sense for a struggling and isolated rural community will differ dramatically from the favored principles and strategies for a growing metropolitan area. State economic development policy will involve different tools and targets than municipal efforts. Manufacturers may be keenly interested in initiatives that have no appeal to firms producing and selling business services, and the attractiveness of some economic development approaches designed to aid manufacturers may have distinctly different impacts on manufacturing firms depending upon their size or what products they produce. These variations complicate empirical research into economic development activities and must be taken into account when policymakers consider public-sector initiatives.

The Dynamics of a Regional Economy

Any attempts to formulate economic development policies and influence growth must be placed within the context of how regional economies operate. The potential sources of growth tie back to the basic dynamics of regional economies, which include the following:

- *Supply and demand* – Regional economies produce goods in response to demand from businesses and consumers both inside the region and outside it. The ability to meet that demand depends upon the supply of inputs, including financial capital, labor, natural resources, plants and equipment, technology, and know-how. Demand affects supply, and supply also influences demand.
- *Labor and capital* – Two critical supply-side drivers for a regional economy are labor and capital, both financial capital and the physical capital of facilities, equipment, technology, and production infrastructure. For labor and physical capital, quality and quantity are important. Labor and capital can serve as substitutes when, for example, a tight labor supply and high wages prompts the use of more equipment and fewer workers to produce a good or service. But labor and capital can be complementary as well, with the use of one prompting greater use of the other in a cycle of growth. (Hoover and Giarratani, 1984.)
- *Producers and purchasers* – Within the regional economy, people, businesses, and governments play dual roles as producers of goods and services and purchasers of goods and services. People are both workers and consumers. Businesses sell in the marketplace, but they also buy inputs for the production of their goods and services. Governments, too, both purchase and produce.
- *Linkages and multipliers* – Regional economic activity and growth flow in part from internal sales and purchases that link businesses and residents together and multiply the dollars that flow through the economy. By way of example, consider a business that buys inputs from supplier firms in the region and purchases labor from workers. The workers spend much of their income buying goods and services from other local business, which in turn pay other workers and buy inputs from more local

businesses. Payments made to supplier firms drive purchases from other suppliers and the payment of more salaries and wages to workers. And profits distributed to local owners may be spent or invested locally, as well. In this way, a dollar within the regional economy is multiplied as it passes through many hands. If the internal linkages within a regional economy are strong, with businesses and residents making many local purchases, the multiplier effect of a dollar will be strong.

- *Internal (endogenous) and external (exogenous) forces* – The regional economy responds to demand and supply from both internal and external sources. The inputs for production may be drawn from within the region or imported from outside it. Goods and services may be sold to local businesses and consumers or exported to buyers located elsewhere.
- *Location and size* – Location and size are important determinants of development and growth. Location, which does not change, matters because it affects transportation costs and modes, access to markets, and access to production inputs, including natural resources. The size of a regional economy, which can change, sets parameters for internal demand and supply, as well as for the extent to which businesses and workers within the regional economy can be linked through production and purchasing. Internal linkages within a small regional economy will be less extensive than those within a large one.

Potential Drivers of Growth

In order to affect the regional economy, public-sector development efforts must take aim at sources of regional growth. Growth theories provide an important context for economic development policies, one that should shape the strategies for public-sector action. Policymakers and economic developers can use their understanding of what drives growth as a reality check to assess economic development initiatives. The following list summarizes some notable concepts regarding how regions develop and grow.

Export base and import substitution. This concept of the economic base highlights the importance of sales outside the region and the substitution of local sales for imports into the region. The economic base model divides the regional economy into basic and non-basic sectors. The basic sector consists of firms that export goods or services to buyers outside the region. In keeping with the dynamics of linkages and multipliers, those outside sales bring dollars into the region and drive other local economic activity. The greater the level of goods and services being exported from the region, the greater the volume of dollars flowing into the region. Once they flow in, those dollars multiply as they roll around the regional economy as income that local owners and workers spend at businesses in the area. Firms in the non-basic sector help keep the dollars rotating through the regional economy, round after round, through sales to businesses and customers in the region. The impact of a region's economic multiplier is limited, however, by leakages; businesses and people in the region buy goods and services from outside the region, and owners and lenders invest their dollars elsewhere, so dollars leak out of the regional economy. An emphasis on the export base and import substitution underlies many public-sector economic development efforts, including those that focus on manufacturing firms, on tourism sales to visitors from elsewhere, and on the development of supplier firms that produce goods and services that local businesses would otherwise import into the region.

But the simplistic economic base concept is incomplete and inadequate. While they are contributors to the regional economy, export sales and import substitution are not the only – or likely even the main – sources of growth. If they were, the world economy would not grow without export sales to other planets. (Tiebout, 1956.) An overemphasis on exports and import substitution can crowd out internal development and short-circuit important trade-driven economic gains. A more complete picture of the regional economy must factor in change – not only changes in export sales or internal linkages, but changes in the mix of inputs, production processes, investment, consumer demand, distribution networks, and government taxation and spending. What's more, businesses that serve only the local market may offer cost savings and foster skills and knowledge that lead to export sales, thus helping to drive regional growth instead of just meeting export-driven demand. (Nojonen, Markusen, and Driessen, 1997.) Nonetheless, export base and import substitution remain useful concepts for understanding economic development, particularly for smaller regional economies.

Productivity. A region's wealth can expand absent any increase in exports or decrease in imports if productivity rises. (Bartik, 2003.) Increased productivity means fewer resources are used to produce the same or more output. The unused resources are freed up for other productive purposes. Here, growth comes from expanding the production possibilities frontier – what can be produced with a given level of labor, materials, and equipment. Productivity increases may stem from technological innovations, education and training for workers, improved business processes, investment in plants and equipment, new sources of production inputs, and trade. (Kedrova, 2004.) The built environment, including public infrastructure, also affects productivity. With advances in productivity, trade within the regional economy can be a powerful source of growth. (Markusen, 2000.) Increases in productivity also may lead to production advantages that attract buyers from outside the area for sellers inside the regional economy.

Specialization and trade. Economic actors within a region capitalize on relative efficiencies and productivity advantages to specialize in goods and services for sale to buyers in their own geographic area and for trade with other regions. Regions benefit to the extent that they are able to focus on the types of production best suited to local inputs, including knowledge, skill, technology, natural resources, and a strong base of suppliers firms. A region concentrates on its most efficient economic activities, earns income from those activities, and then uses that income to import goods and services that are the specialties of other regions. Demanding local customers may spur production efficiencies and quality breakthroughs among local businesses and in this way set the stage for specialization and export sales. (Fairbanks, 2004.) As concepts, specialization and trade highlight the importance of imports as well as exports to regional growth and development. Trade among regions can drive continued increases in productivity and well-being. (Dewar and Nelson, 1983.)

Place and space. Geography and location matter to economic development and growth. The implications of geography affect the spatial distribution of economic activity as businesses balance access to consumer markets and production inputs (for example, labor and materials) against costs for land and transportation. The impetus and outlook for economic development in an area, then, is often tied to the characteristics of place and space. By way of example, the desire for access to cost-effective transportation modes explains why many major cities sprung up on river banks and sea ports, as well as why many small towns are found along once-important rail lines. The exploitation of natural resources – including coal, iron and oil – spurs economic activity and regional development. In some places, business activity may be densely clustered in a geographic space because of the economic forces that encourage concentration, such as the quality or price advantages of a well developed base of specialized labor and supplier firms. In other areas, aversion to competition for customers or production inputs may lead to more disperse development.

Human capital and innovation. The workforce is a vital element of any economic development equation. The human capital that people bring to the workplace – skills, knowledge, and ideas – can drive productivity improvements and economic growth. An increased emphasis on brain over brawn among businesses makes human capital critical, particularly because costs have fallen for other production factors, such as communications and transportation. (Fairbanks, 2004.) People apply knowledge and create innovation in ways that foster development and spur growth in the regional economy. And the benefits of workforce skills and knowledge may have positive spillover effects on a broad range of businesses and the regional economy as a whole. (Lucas as discussed in Clement, 2004.) The vitality of a region may depend, at least in part, on clusters of highly skilled, educated, and creative workers. (Florida, 2002.) For economic development, it may work best to target occupations and people instead industries when it comes to recruitment, retention, and expansion, with a focus on workers with high skill levels and knowledge that can be applied to a range of industries. Because workers can move from place to place, regions need to improve their livability, or quality of life, for residents as a way to keep the talent they have and draw in new talent, as well. (Markusen, 2000)

Financial capital. Investment drives growth. Increased private investment – made in response to existing market demand or emerging opportunities – creates new jobs, which increase local income, which leads to greater local demand for goods and services, which in turn leads to more private-sector investment and continues the cycle of growth. (Eisinger, 1988.) The flow of financial capital within or to a region depends primarily upon the rate of return that investors can expect, but it also may be influenced

by the knowledge of investment opportunities, the familiarity that investors have with a place and its people, or the experience they have had before in the region. (Hoover and Giarratani, 1984.) The free flow of financial capital may fall short of the ideal in a region if markets fail because of imperfect information about opportunities for investors or funding sources for businesses, or because groups of people or types of businesses face institutional barriers that hinder their access to capital.

Entrepreneurialism. When it comes to economic growth from new business development, labor, capital, and good ideas alone aren't adequate. Risk-taking entrepreneurs are needed to take the ideas, labor, equipment, and materials and turn them into business activity. For this reason, entrepreneurialism matters for growth. (Audretsch, 2004.) Entrepreneurs contribute to the capacity and dynamism of a regional economy. Regions can capitalize on new business development if the economic, cultural, and regulatory environments are favorable for entrepreneurialism. (U.S. Economic Development Administration, 2001.)

Clusters or Agglomeration. Economic geographers have long noted the tendency of dominant firms in an industry to develop or locate in relatively close proximity to one another. This pattern of agglomeration is not surprising: Businesses may cluster to take advantage of access to buyers or inputs into the production process, including skilled workers, specialized supplier firms, production technologies, and natural resources. Clusters also may develop around cost savings from economies of scale, when, for example, a location offers a large pool of workers with appropriate occupational skills for a given industry, or the location contains a mass of qualified supplier firms competing for business. (Hoover and Giarratani, 1984.) Furthermore the existence of a successful firm from one industry can lead to the spin-off of new firms in that same industry, thus fostering agglomeration. While a force in regional economics, however, clusters are counterbalanced by the tendency of production to disperse over time as an industry matures, production becomes more standardized, and changes take place so that separate elements of the production process occur in different locations instead of at one plant or in one area.

Knowledge, too, is seen as a potential force in the creation of clusters. The importance of human capital may lead to an agglomeration of people with the education, skills, ideas, and experience necessary to propel a business sector forward and foster its growth in a given region. A regional economy can benefit from the spillover effects of ideas and innovations that talented individuals spread from local business to local business through their interactions. (Lucas as discussed in Clement, 2004.) Empirical research indicates that knowledge spillovers may contribute to clusters locally, although much of the variation in agglomeration remains unexplained by the factors of knowledge spillovers, labor market pooling, and the availability of production inputs. (Strange and Rosenthal as discussed in Clement, 2004.)

Product Life Cycles. Regional growth may be affected by the "life cycle" of a product as it moves from the start-up phase to standardized, or mass, production. The initial production of new products and services is likely to happen in locations where the innovation occurred and entrepreneurs first set up shop. However production activity will disperse to other locations as the industry matures and the production process becomes routine, at which point businesses may base location decisions on such factors as access to markets, transportation or communication costs, and costs for labor and materials. (Economic Development Administration, 2001.)

Nine Guiding Principles for Public-Sector Economic Development

Policymakers must formulate public-sector economic development efforts in ways that match both the appropriate roles for the public sector and the dynamics for growth in the regional economy. The guiding principles that follow build from the ideas about roles and growth presented earlier. These nine principles provide a general but useful framework for public-sector economic development policy.

- *Market forces are the dominant drivers of a regional economy.* Public policies may influence economic development and growth, but they cannot supplant the private sector, nor should they try. For this obvious reason, public-sector economic development efforts must build upon history, current circumstances, and realistic opportunities for growth in order to influence development. They should

not attempt to create growth wholly through public-sector investments and actions. (Hill, 2001.) As part of a broad strategy for economic development, the public sector should address regional needs for education, transportation systems, and other public goods that the private market will undervalue because their benefits flow to the broader society and cannot be fully captured by self-interested buyers and sellers. Government initiatives should take aim, too, at market failures, such as the impacts of imperfect information on business decisions about investment in overlooked locations and on worker choices regarding job opportunities and skills development. And government entities should establish the laws and rules that frame development and address the spillover effects of growth, such as pollution and transportation congestion.

- *Public-sector economic development efforts must focus on factors internal to the workings of the regional economy and under the influence of public policy at any given level of government, be that local, regional, state, or federal.* To a large extent, issues and elements beyond the control of policymakers establish the circumstances for a regional economy at any given moment. Many crucial economic factors lie outside the purview of local and state governments, including national and international economic growth rates, capital flows, international trade arrangements, federal fiscal and monetary policies, currency markets, and technological changes. When it comes to economic development and growth, policymakers need to understand what they can influence and how.
- *Sensible economic development policy must build upon the strengths of the regional economy.* Policies and programs must take into account the comparative advantages that an area has to offer and foster the opportunities for expansion and transformation presented by the region's geography and its existing economic structure.
- *Economic development should yield real net impacts on growth or, in the short term, the potential for growth.* The true impacts of economic development are difficult to predict and measure, but the chance for impact improves when policymakers and economic developers are keenly aware of the ways in which programs may fail to yield results at all. As discussed earlier, four good tests are: 1) Does the impact of public-sector economic development activity sum to greater than zero, or are the positive impacts on one place undercut by negative impacts on another? 2) Do the benefits of the public-sector economic development activity exceed its costs? 3) Do the costs of the public-sector economic development activity exceed the benefits that could have been realized had the dollars and resources been directed to other purposes? 4) Would the development and growth have occurred even without public-sector involvement? From an efficiency standpoint, the preferred course of action is one that yields the greatest impact at the lowest cost.
- *The public sector should pursue economic development policies that yield broad benefits for residents and businesses in the region, especially benefits that will continue to have a positive impact even if specific businesses close or move.* The desire for efficiency from public-sector economic development efforts must be balanced with the desire for an equitable distribution of the benefits. The residents and businesses that pay for public-sector economic development programs through their taxes should benefit from the results of their investment. They are more likely to do so when the economic development efforts secure broad and long-standing benefits than they are if the positive impacts are narrowly focused and fleeting.
- *Public-sector economic development efforts should pay attention to the needs of lagging or distressed areas and of groups at the lowest rungs of the economic ladder.* The benefits of growth will likely be greater for the unemployed and underemployed than for other residents, and greater, also, for distressed places than for growing areas. Short-term employment prospects for low-skilled and low-wage workers will affect their work experience, job skills, occupational standing, and earnings potential in the long run. (Bartik, 1991.) As for place, society may benefit from measures taken to spur growth in stagnant or declining locations where the public and private sectors have already invested in infrastructure, instead of locations where new infrastructure investment is required. The marginal cost of growth to government will be lower in areas where existing infrastructure is underutilized. From the standpoint of fiscal impacts on government, economic development may have negative results if job creation and business growth require major public-sector investment in new roads, schools, and other local infrastructure. (Bartik, 1995.)

- *Public policy should recognize the regional nature of economic development and advance strategies that address challenges and opportunities throughout the regional economy.* Regionalism is important. State economic development initiatives should allow for variation based on the opportunities, needs, and institutional capabilities of the different substate regions. (Luger and Stewart, 2003.) Local governments should coordinate economic development programs in order to minimize beggar-thy-neighbor approaches that shift business activity and jobs around within the regional economy without boosting growth. While boundaries for a regional economy may be difficult to discern, it makes sense as a general rule to consider a geographic area that constitutes a single local labor market – the space across which businesses draw their workers. (Bartik, 1995.)
- *Regional economies will benefit from the production of goods and services that depend upon capital-intensive processes and skilled workers, incorporate high levels of locally added value, and reap strong profits.* (Hill, 2001.) These products allow businesses in a region to compete on innovation and quality and earn a premium for their goods and services. Public-sector economic development efforts should recognize the importance of firms and industries that take this high road and offer good-quality jobs. Conversely, public-sector economic development efforts should not bank on the export of natural resources and simple commodities as a strategy for long-term growth. Producers of basic or standardized products and materials often compete primarily on price. As competitive pressures drive down price, producers must cut costs. Over time, businesses and workers involved in simple commodity production must work harder to earn less. (Fairbanks, 2004.)
- *Economic development efforts should address the development potential of places, as well as the needs of people in that place.* The well-being of residents will likely improve as the economy grows, but people may also increase their prosperity by moving from locations that offer limited economic opportunity to places where the economy is strong. For any place-oriented economic development strategy to make sense, the targeted geographic area must offer some potential for development and growth in order to warrant public-sector attention and investment. (Hoover and Giarratani, 1984.) Public-sector action for the economic development of a place will be particularly important to people who are less able or likely to move, including low-income, less-educated, and older residents. (Bartik, 1991.)

Preferred Approaches to Public-Sector Economic Development

What can policymakers conclude about economic development efforts based on the guiding principles and the sources of regional growth outlined above? For economic development, the public sector should take the following approaches to involvement in the regional economy.

- *Carefully and objectively analyze the structure of regional economies to identify comparative advantages, critical industries and occupations, internal linkages, and emerging prospects for development and growth.* Policymakers should use solid economic analysis to ensure that development efforts match regional circumstances and strengths, in part to guard against initiatives that have more to do with the latest economic development fads than with cost-effective opportunities to foster growth in the region. Accurate economic analysis identifies regional specializations that build the economic base and drive growth through both intraregional and interregional trade. Regional analysis helps policymakers focus economic development resources on industries, occupations, and functions that hold potential for the region.
- *Make sensible investments in public infrastructure.* To a great extent, the public sector exists to offer goods and services that the private sector will not adequately provide because the benefits spill over broadly and cannot be fully captured by private-sector sellers and buyers. The broad, uncaptured benefits from public goods and services include stronger economic growth for a region. The public sector has an important and positive role to play in economic development through its investment in and regulation of such infrastructure items as roads and transit, airports, water and waste systems, public safety, energy generation and transmission, communications networks, and university-based research and development. Infrastructure investment can yield broad benefits for the region in the

long term, even if specific businesses relocate or close. However infrastructure investment must be grounded in a realistic assessment of opportunities for growth and development and not pursued as an end in itself.

- *Invest in public education and skills training to better the lives of residents and improve the skills and knowledge that those residents bring to their jobs.* Education is a classic public good – the benefits of education flow not only to the consumer of the educational services but also to the broader community, which gains from having an educated workforce and citizenry. Businesses benefit from high quality labor and improved productivity, however businesses will under-invest in education and training for workers because they lose their return on such investments if the workers leave for new jobs. For these reasons, public-sector action is warranted. As is the case with investment in infrastructure, public investment in education and training can result in broad benefits that will advance a region's economy even if specific businesses close or move. This is true because well-educated and trained workers will improve the productivity and vitality of the regional economy. Of course, state and local governments must consider a potential and important drawback of education and training initiatives: The benefits will flow to other locations if the individuals who receive the education and training move out of the area.
- *Minimize firm-specific tax incentives and public subsidies.* Public-sector economic development efforts should foster an environment that encourages development and growth in crucial sectors and throughout a region. Better to spend public dollars or cut taxes in ways that benefit broad sections of the economy than to use them for specific firms. Firm-specific tax breaks and public subsidies can have some influence over business location decisions, particularly within a regional economy, but the assistance provided to one firm may be unfair to other businesses that don't receive the same treatment, and the opportunity costs will be high – the public funds could have been used for other beneficial activities. Furthermore, the high costs of tax incentives per job undermine their cost effectiveness. (Bartik, 1995.) To the extent that the public sector offers subsidies and targeted tax incentives for economic development, it should use them sparingly to promote development and growth in distressed areas or to expand the economic opportunities for people with low incomes and limited geographic mobility. Governments should strictly limit the number of areas targeted for incentives and subsidies so as to concentrate the impacts on truly distressed locations. And they should put agreements in place for reducing or recapturing tax incentives and public subsidies if recipient businesses fail to meet the job or development targets that justified public-sector involvement. (Weber, 2004.) All tax incentives should be transparent to the broad population of tax payers; governments should fully disclose the costs of lost revenues from such business assistance initiatives. (LeRoy, 2004.)
- *Pay attention to industries and businesses that contribute to the economic base by selling their goods and services outside the region or by competing for local sales that would otherwise go to businesses located elsewhere.* While not the sole source of growth – or even necessarily the primary source – outside sales do bring dollars into the regional economy and those dollars multiply as they move through the internal, economic linkages. What's more, local firms will strengthen those internal linkages and increase the multiplier effect of local dollars if they can efficiently substitute their goods and services for ones that local buyers had previously imported from outside the region. An overemphasis on outside sales or import substitution may crowd out internal development or hinder trade-driven efficiencies, but some emphasis on the economic base will help bolster the regional economy. The economic base approach also will help prevent public subsidies for commercial real estate and for most retail development, both of which take place without public-sector assistance because of existing local demand.
- *Pursue economic development strategies that boost the productivity of key regional industries.* Public-sector business assistance efforts should focus on improved productivity – that is greater levels of output produced from a given level of labor, equipment, materials and other inputs. Productivity improvements can yield higher wages, profits, and levels of capital investment. The public sector can play a role through programs that provide education and training, information, business advice, and technical assistance regarding production technologies, processes, and approaches. Public-sector involvement in productivity issues makes sense when private-sector

consultants ignore segments of their market because of high marketing costs, and when businesses lack the information they need to assess opportunities for productivity improvements. Those barriers are key issues for small manufacturers. (National Research Council, 1993; Modernization Forum and Nexus Associates, 1997.) Research into manufacturing extension programs has shown that productivity increases faster for smaller manufacturing establishments that receive technical assistance through public-private programs than for comparable establishments that do not. (Jarmin, 1998.) Research also has found that the benefits from productivity improvements for smaller manufacturers outweigh the costs of manufacturing extension programs, and the tax revenues generated by the programs can exceed the program costs. (Ehlen and Weber, 1997; Nexus Associates, 1996.)

- *Improve the quality of life in regions, particularly major metropolitan areas.* The quality of public safety, transportation systems, local infrastructure, park systems, neighborhoods, the arts, sports and recreation, schools and universities, and land-use planning all contribute to a region's livability, or, as regional economist Ann Markusen calls it "lovability." A high quality of life in an area keeps and attracts people, including well-educated and skilled workers, entrepreneurs, and business leaders. As the mix of skills and occupations becomes increasingly important to the economic well-being of regions, quality of life factors increasingly influence economic development and growth. Investments in amenities and livability are particularly important for major metropolitan areas because those areas constitute a region or state's face to the world. Deteriorating circumstances in major metropolitan areas convey the impression that the quality of life is poor in the whole region or state.
- *Focus economic development on industries, occupations, and businesses that provide high-quality, good-paying jobs.* Public-sector resources are limited. To the extent that state and local governments use those limited resources to foster economic development and growth, the initiatives should favor industries and occupations with above-average pay scales and benefits. High-wage, high-skill jobs offer greater benefits for the community. (Eisinger, 1988.) Higher pay for workers increases the multiplier effects of dollars that flow through the regional economy. Not only are high quality jobs more likely to pay premium wages, but they also may offer better on-the-job training and opportunities for career advancement. (Bartik, 1995.) It makes less sense to spend public funds to foster the development of low-pay industries and businesses. This is especially true for businesses that make few local purchases and are owned by individuals who live outside of the region, in which case the low pay may simply boost revenues and profits that are shipped out of the area. Exceptions may make sense when the goal is to open up employment opportunities for low-skilled residents.
- *Look for ways to encourage higher pay by local industries and businesses.* Not only do higher wages increase the multiplier effects of local economic activity, but they also lead to productivity increases because with higher labor costs businesses have a greater incentive to use improved production equipment and to train, seek, and retain workers with higher skill levels. Productivity growth drives economic growth. Unionization matters here. Union workers earn more than nonunion workers and are more likely to receive pension and insurance benefits. Public policy should insure the rights of workers to form and join unions, perhaps through quick, card-check approaches whereby workers indicate their preference for a union and get one, as opposed to long, bitter, and drawn-out workplace elections. Some states have influenced wage rates for low-paid workers by adopting minimum wage levels that exceed the national minimum wage. Of course, higher wages may have a negative impact because labor costs stand out as a major production expense. However empirical studies regarding the impact of unionization on business activity show big variations, from negative to positive, and the average impact of unionization calculated over many different studies rests at a level insignificantly different from zero (Bartik, 1991.) In all likelihood, the impact of higher wages will vary from industry to industry or even business to business.
- *Exercise great caution before expending public dollars as financial capital for private ventures.* For the most part, the public sector's best roles when it comes to financial capital are those of providing information, reducing barriers to access, and fostering networks among lenders, investors, entrepreneurs, and businesses. Overwhelmingly, financial resources flow toward investment opportunities through private markets, not government action. Financial capital programs both funded and run by the government often suffer from decision-making processes heavily influenced by

political considerations. Such programs also exhibit an aversion to risk that steers public-sector lending and investment toward the very ventures most likely to find financing on their own through private sources. (Wirtz, 2001.) For these reasons, public dollars generally should not be used for financial capital, including loans and venture capital. Better for the public sector to establish programs that encourage – perhaps through financial incentives – private capital sources to improve financing prospects for types of businesses and groups of people generally overlooked by the private market. (Bartik, 1995.) Public-sector incentives for private capital providers also may work as a way to increase access to capital for individuals and businesses in need of very small amounts of financing and therefore not likely to be cost-effective customers for private investors or lenders.

- *Strive for a strong return on investment from any public-sector economic development initiative, program, or action.* If the public sector commits resources to economic development, society should earn a positive return from that investment. For this reason, state and local economic development agencies should establish clear, consistent, and transparent objectives for successful public action and analyze all economic development proposals in terms of how well they meet the desired and measurable objectives. (Luria and Dziczek, 2003.) The measurement of impacts, while difficult, is important.

Comments on a Few Common Economic Development Strategies

State, regional, and local governments, along with their private-sector partners, use a wide range of economic development strategies to influence regional growth. Examples include programs that help local businesses adopt new production technologies and techniques, increase the skills of their workers, find sources of financial capital, improve their energy efficiency, navigate the maze of government regulations, identify appropriate locations for production facilities, and capitalize on new sales opportunities. As an economic development strategy, the public sector improves services and infrastructure in distressed areas and cleans up and redevelops polluted, abandoned industrial sites. And economic development programs often offer advice and technical assistance to entrepreneurs as a way to encourage new business development.

The ideas and principles outlined in this report are meant to arm policymakers with information they can use to better assess the wisdom of specific economic development strategies from the standpoint of appropriate public-sector action and possible sources of regional growth. A comprehensive analysis of all economic development programs, or even most of them, falls beyond this report's scope. However the following paragraphs offer a cursory critique of three common public-sector strategies for economic development.

Enterprise Zones. Enterprise zones have had limited success at best when it comes to jobs and growth. Here's how they work, in general: Businesses that locate or operate in enterprise zones can take advantage of breaks on property taxes, income taxes, and sales taxes, and may also receive tax credits for job creation and investment. The public sector also usually targets enterprise zones for improvements in infrastructure and public services, including, for example, police and fire protection. Most often the zone strategy is designed to make an economically distressed area attractive to businesses in search of new locations. Research from 2002 by Alan Peters and Peter Fisher found that while a few enterprise zones may have had a positive impact on jobs in some areas, "most of the evidence suggests that zones have almost no influence on local growth." (Peters and Fisher, 2002.) The value of the incentives offered within a zone is usually minor compared to the cost and value of critical production factors, such as labor, transportation, access to markets, and access to supplier firms. What businesses gain from locating within an enterprise zone may not outweigh the problems that often come with the territory in distressed areas – economic isolation, fewer public services, deteriorating infrastructure, and poor transportation systems, for example. (Peters and Fisher, 2002.) When it comes to creating jobs for residents within a neighborhood or place, the zone strategy often fails because businesses draw workers from labor markets that extend beyond the zone's borders. (Bartik, 1995.)

Enterprise zones have other problems, too. To the extent that enterprise zones offer benefits only to relocating businesses, they unfairly treat the existing businesses in a zone. To the extent that the benefits

of the zone are extended to existing businesses, the initiatives may unnecessarily subsidize economic activity that would have taken place in the area without tax breaks and other incentives. Location theory indicates that enterprise zones will have the greatest impact on businesses deciding between locations in adjacent areas or states, and consequently the establishment of zones in one state generally leads to the establishment of zones in nearby states. What's more, political pressure leads to the proliferation of zones within a state, rather than the narrow use of zones for truly distressed areas. The creation of zones in many states and the creation of many zones within one state neutralize the impact of these zones on business location decision.

High Tech Development. Many states and some communities have invested public resources in efforts to foster high technology development. In general, these efforts focus on innovative, capital-intensive, research-oriented industries that employ highly skilled workers and pay them well. Such industries can contribute to a regional economy's strength and vitality. But too often the "high tech" concept is ill-defined, and economic development efforts focus on the latest fads – biotechnology, nanotechnology, and information technology, for example – while ignoring the high tech elements of traditional industries, such as motor vehicles, plastics, and food products. Any public-sector initiatives aimed at high tech development must be rooted in a careful analysis of the regional economy, including its existing industrial structure and its comparative advantages, so as to avoid misguided attempts to simply create a new local industry using public-sector incentives and resources. The fact is that a high tech industry may drive growth in one region even though it holds little or limited potential for another regional economy. One useful way to analyze the high tech orientation of a state or regional economy is to focus not on the goods and services that an industry produces, but rather on the types of occupations it employs in that production, with the emphasis placed on scientists, engineers, computer professionals, and other highly skilled workers. Occupations with the potential to help shape the regional economy, both in technology oriented fields and outside them, are those that require high levels of skill, show potential for growth, are well-suited for jobs in several industries or sectors, tend to cluster geographically, offer opportunities for self-employment and business start-up, and match the skills of existing residents in the region. (Markusen, 2000.)

Public Subsidies for Training Programs. To the extent that state government offers economic development subsidies to businesses, the best types may be those that help underwrite training costs. Worker training can improve the productivity of local businesses. Training programs that impart new, transferable skills to residents likely leave the newly trained workers in good standing to secure jobs even if the businesses for which they were trained downsize or close. (Luria and Dzikczek, 2003.) And training can alter the employment and income prospects for people who are out of work or stuck in low-end jobs. While some of the newly trained workers may ultimately take their skills and relocate to another region or state, most will remain in their home area and continue to contribute to the productivity of the regional economy. When they are offered, state-sponsored, business-specific training programs should be reserved for jobs that pay good wages in order to insure that public dollars go to businesses that truly need trained workers and that the people who participate in the training really gain valued skills.

Conclusion

The public sector has both a strong interest and legitimate role to play in economic development efforts aimed at increasing a regional economy's capacity to create wealth for local residents. Government helps spur development and growth through investments in public infrastructure, the provision of public goods and services, and targeted assistance to industries, businesses, and workers. Public-sector economic development works best when initiatives build upon regional potential and strengths to improve the long-run outlook for growth. And local, regional, and state action must be aimed at issues and factors over which governments and their private-sector partners have control or influence.

Unfortunately, public-sector economic development efforts often fail to yield true, positive impacts. In order to avoid wasteful initiatives, policymakers must pursue economic development with an understanding for both the appropriate public-sector role in the regional economy and the drivers of regional economic growth. To assess the potential impacts of an economic development initiative, policymakers should consider if the anticipated gains from public-sector action for one location will be

outweighed by negative effects on other locations, if the overall benefits will exceed the initiative's costs, if the benefits of economic development action will exceed benefits that could have been realized had the dollars and resources been used for purposes other than the economic development initiative, and if the development and growth would have taken place without any public-sector involvement.

Public-sector economic development policy must recognize the obvious – that private, market forces drive the regional economy. The public sector should pursue economic development policies that yield broad benefits for residents and businesses in the region, especially benefits that will continue to have a positive impact even if specific businesses close or move. Economic development should pay attention to the needs of distressed areas and low-income groups. Efforts should address regional issues and opportunities – ones that span the distance of the entire local labor market – because economies are regional in nature and do not stop at municipal borders. And economic development policies also should recognize the importance of businesses and industries that depend upon capital-intensive processes, use skilled workers, and incorporate high levels of locally added value.

The best public-sector economic development approaches will flow from careful and realistic analysis of a regional economy and its potential for growth. To spur growth, the public sector should make sensible infrastructure investments, offer quality education and skills training, and improve the quality of life in the region. Public agencies and their private-sector partners should pursue strategies that boost the productivity of key regional industries. They should look for ways to aid industries that export goods and services outside of the region or efficiently meet the demand for goods and services that otherwise would be imported. They should encourage the development and growth of industries and occupations that offer high-wage, high-quality jobs. The public sector should minimize its use of firm-specific tax breaks and public subsidies, and also avoid the direct funding and operation of financial capital programs. And the public sector should secure a strong return to the broader community from its economic development efforts.

These ideas and suggestions offer a framework for understanding regional economic growth and assessing public-sector roles and approaches for economic development. The information presented in this report provides a context for economic development policy. However the success of even carefully formulated economic development policy will be difficult to predict and measure. The effectiveness of economic development strategies will vary from place to place, industry to industry, and even business to business. Policymakers can tap the guiding principles and preferred approaches found in this report as starting points when looking for ways to influence development and growth of the regional economy.

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Selected Sources

- Audretsch, David B. September 2004. "Entrepreneurship Policy & the Strategic Management of Places." Paper for conference on "Knowledge Clusters and Entrepreneurship in Regional Economic Development" at the Humphrey Institute of Public Affairs of the University of Minnesota, Sept. 13-14, 2004. Available at http://www.hhh.umn.edu/centers/slp/clusters_entrepreneurship/audretsch_entrepreneurship_policy.pdf.
- Bartik, Timothy J. January 2003. "Local Economic Development Policies." Staff Working Paper No. 03-91. Kalamazoo, MI: W.E. Upjohn Institute. Available at <http://www.upjohninstitute.org/publications/wp/03-91.pdf>.
- Bartik, Timothy J. January 1995. "Economic Development Strategies." Staff Working Paper No. 95-33. Kalamazoo, MI: W.E. Upjohn Institute. Available at <http://www.upjohninst.org/publications/wp/95-33.pdf>.
- Bartik, Timothy J. 1991. *Who Benefits from State and Local Economic Development Policies?* Kalamazoo, MI: W.E. Upjohn Institute.
- Bowman, Ann O'M. October 1987. "Tools and Targets: The Mechanics of City Economic Development." Research Report on America's Cities. Washington, DC: National League of Cities.
- Bradshaw, Ted K. and Edward J. Blakely. 1999. "What Are 'Third-Wave' State Economic Development Efforts? From Incentives to Industrial Policy," *Economic Development Quarterly*, 13 (3): 229-244.
- Clement, Douglas. September 2004. "Urban Legends." Federal Reserve Bank of Minneapolis. *The Region*, 18 (3): 10-13, 54-59.
- Dewar, Margaret E. and Glenn Nelson. November 1983. Memo. Unpublished.
- Ehlen, Mark A. and Stephen F. Weber. December 1997. "Estimating Economic Impacts of Government Technology Programs: Manufacturing Studies Using the REMI Model." NISTIR 6107. Gaithersburg, MD: National Institute of Standards and Technology.
- Eisinger, Peter K. 1997. *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States*. Madison, WI: University of Wisconsin Press.
- Fairbanks, Michael. Sept. 13, 2004. "Competitiveness and Globalization: Imperatives and Tools of Change." Remarks to conference on "Knowledge Clusters and Entrepreneurship in Regional Economic Development" at the Humphrey Institute of Public Affairs of the University of Minnesota. Presentation slides available at http://www.hhh.umn.edu/centers/slp/clusters_entrepreneurship/fairbanks.ppt.
- Fisher, Peter. February 2004. "The Fiscal Consequences of Competition for Capital." Paper for conference on "Reining in the Competition for Capital" at the Humphrey Institute of Public Affairs of the University of Minnesota, Feb. 27-28, 2004. Available at http://www.hhh.umn.edu/projects/prie/fisher_paper.pdf.
- Flammang, R. A. 1979. "Economic growth and economic development: Counterparts or competitors?" *Economic Development and Cultural Change*, 28: 47-62.
- Florida, Richard. May 2002. "The Rise of the Creative Class." *Washington Monthly*.
- Hill, Edward W. (Ned). Nov. 14, 2001. "Fundamentals of Economic Development." Presentation to "Mayor's Economic Summit" in Duluth, MN. Unpublished.
- Hoover, Edgar M. and Frank Giarratani. 1984. *An Introduction to Regional Economics*. New York, NY: Alfred A. Knopf. Third edition. Available at <http://www.rr.i.wvu.edu/WebBook/Giarratani/main.htm>.

Jarmin, Ronald S. June 1998. "Manufacturing Extension and Productivity Dynamics." Discussion Paper. Washington, DC: Bureau of the Census. Available via <http://ideas.repec.org/p/wop/censes/98-8.html>.

Kane, Matt and Peggy Sand. 1988. *Economic Development: What Works at the Local Level*. Washington, DC: National League of Cities.

Kedrova, Julia. June 2004. "Measures of Productivity." Federal Reserve Bank of Dallas. *Expand Your Insights*. Available at <http://www.dallasfed.org/eyi/free/0406product.html>.

LeRoy, Greg. February 2004. "Eight Concrete Ways to Curtail the Economic War among the States." Paper for conference on "Reining in the Competition for Capital" at the Humphrey Institute of Public Affairs of the University of Minnesota, Feb. 27-28, 2004. Available at http://www.hhh.umn.edu/projects/prie/leroy_paper.pdf.

Luger, Michael, Leslie Stewart. March 2003. "Improving North Carolina's Economic Development Delivery System." Available at http://www.kenan-flagler.unc.edu/assets/documents/ED_improvingDelivery.pdf.

Luger, Michael, Leslie Stewart, and Johannes Traxler. July 2002. "Identifying Technology Infrastructure Needs in America's Distressed Communities." Report for the U.S. Economic Development Administration. Available at http://www.kenan-flagler.unc.edu/assets/documents/ED_identifying_rpt.pdf.

Luria, Dan and Kristin Dziczek. November 2003. "Michigan's Manufacturing Initiative: From Concern to Action." Unpublished white paper.

Lynch, Robert G. March 2004. *Rethinking Growth Strategies: How State and Local Taxes and Services Affect Economic Development*. Washington, DC: Economic Policy Institute.

Markusen, Ann. 2004. "Targeting Occupations in Regional and Community Economic Development?" *Journal of the American Planning Association*, 70 (3): 253-268.

Markusen, Ann, Helzi Noponen, and Karl Driessen. 1997. "Trade and American Cities: Who Has the Comparative Advantage?" *Economic Development Quarterly*, 11 (1).

Modernization Forum and Nexus Associates. December 1997. "Working with Consultants: A Tool Kit for Manufacturing Extension Centers. Volume 3: Competition or Collaboration? The Role of Manufacturing Extension Centers in the Private Consultant Market." Modernization Forum Report for the National Institute of Standards and Technology. Dearborn, MI: Modernization Forum.

National Conference of State Legislatures. March 12, 2004. "Economic Development & Trade: State Economic Development." Web-based guide. Available at <http://www.ncsl.org/programs/econ/topics.htm>.

National Research Council. 1993. *Learning to Change: Opportunities to Improve the Performance of Smaller Manufacturers*. Washington, DC: National Academies Press.

Nexus Associates. March 18, 1996. "Evaluation of the New York Manufacturing Extension Program: Final Report." Report for the New York Science and Technology Foundation/Empire State Development. Belmont, MA: Nexus Associates.

Peters, Alan H. and Peter S. Fisher. 2002. *State Enterprise Zones: Have They Worked?* Kalamazoo, MI: W.E. Upjohn Institute.

Richardson, Harry W. 1978. "The State of Regional Economics: A Survey Article." *International Regional Science Review*, 3 (1): 1-48.

Rubin, Barry M., and Kurt C. Zorn. March/April 1985. "Sensible State and Local Economic Development." *Public Administration Review*, 45 (2): 333-339.

Tiebout, Charles M. April 1956. "Exports and Regional Economic Growth." *Journal of Political Economy*, 64: 256-265.

U.S. Economic Development Administration. 2001. Web-based guide on economic development. Available at <http://www.eda.gov/Research/EcoDev.xml>.

Wassmer, Robert W. and John E. Anderson. May 2001. "Bidding for Business: New Evidence on the Effect of Locally Offered Economic Development Incentives in a Metropolitan Area." *Economic Development Quarterly*, 15 (2): 132-148.

Weber, Rachel. Feb. 13, 2004. "Negotiating the Ideal Deal." Paper for conference on "Reining in the Competition for Capital" at the Humphrey Institute of Public Affairs of the University of Minnesota, Feb. 27-28, 2004. Available at http://www.hhh.umn.edu/projects/prie/weber_paper.pdf.

Wirtz, Ronald A. July 2001. "Public Venture, Public Gain?" Federal Reserve Bank of Minneapolis. *fedgazette*.