

As America emerges from what may be the shortest slump in memory — largely because of New Economy forces — it's becoming clear that the New Economy was not just a flash in the pan, but rather a major economic transformation, the kind that comes about every half century or so. As a result, it's time for states to refocus their efforts on the task of restructuring their economies to meet the realities of the New Economy. The states that do well in five years will be those that continue to press to put in place a comprehensive state New Economy policy framework.

The 1999 *State Index* laid out such a policy framework. The 2002 *State Index* updates and expands that framework by discussing new goals and policy proposals states can adopt to succeed. But it is worth repeating one thing: To succeed in the New Economy, states will need to overhaul their familiar approaches to economic development. As a result, this report focuses on eight key steps states can take to “get better” in the New Economy: 1) focus on the quality, not just the quantity of jobs; 2) know your state's function in the global economy; 3) get smart about business incentives; 4) co-invest in the skills of the workforce; 5) co-invest in an infrastructure for innovation; 6) support industry clusters; 7) boost quality of life; and 8) help more regions succeed in the New Economy.

Before discussing the specific policy proposals, it's worth saying a word about the current state budget shortfalls. There is no doubt that the economic slowdown of 2001 has exacerbated state fiscal conditions. Projected revenue shortfalls in 2002 account for as much as 10 percent of state budgets. Some of these shortfalls result from the economic slowdown, but states are poorly positioned to respond. In spite of the good times of the 1990s, virtually all states ignored the advice of any sage financial planner to save for the future and instead focused their efforts on cutting taxes and expanding spending. The result, according to *Governing* magazine, is that the median balance of the 38 state rainy day accounts was just 3.26 percent of general fund revenues, and it's even less if the median included all 50 states. As a result, most states are cutting expenditures, including economic development. But collectively, if states are to grow their revenues, there's only one way to do it: grow the incomes of their residents, who will then pay more in taxes. Embracing the kinds of economic development strategies outlined here is even more of a priority in an era of slower fiscal growth.

FOCUS ON THE QUALITY, NOT JUST THE QUANTITY, OF JOBS

For more than a generation, many states' economic development offices have largely been on auto-pilot, relentlessly pursuing the goal of “getting big” and adding more jobs — whenever, wherever, whatever. It didn't matter if the unemployment rate was low, if some parts of the state were booming (with high housing prices and transportation congestion), or if the companies getting incentives provided low-paying, poor-quality jobs and were likely to leave for even greener pastures in a decade. The goal was often simple: the more jobs, the better. To paraphrase the television commercial, they measured success one new job at a time.

But in many states, an approach focused almost exclusively on getting more jobs does little to help residents earn higher incomes and enjoy a better quality of life. Some states that have been losing population, or states with regions with high unemployment or out-migration, like those on the Great Plains, want to retain a “get big” strategy (or at least a “don't get smaller” strategy). However, **for most states, the central focus of economic development should shift from adding new jobs to boosting incomes and creating better jobs for all of the state's residents.** To do this, states should replace, or at least supplement, the chief metric of success used today — job creation — with a new one: income growth. Governors should be able to proudly point out that per-capita incomes in their states grew significantly on their watch.

Shifting the goal from getting big to getting prosperous requires shifting the means from trying to get cheap to getting better. As states sought to grow jobs, many did it by trying to get cheaper. They provided physical infrastructure for factories, gap financing for big industrial projects, and financial and tax incentives to cut the costs for industry, all the while keeping general business costs as low as possible, even if it meant investing less in economic fundamentals like infrastructure and education and scrimping on programs like unemployment insurance. But following a low-cost, industrial recruitment strategy—cutting taxes and services or offering subsidies in hopes of making a state attractive to companies — is not the path to raising wages and quality of life.

Rather than simply trying to be a cheaper place in which to do business, states should focus on being a better place.

This means boosting the skills of the region's workforce, developing an environment that supports technological innovation, creating fast and responsive government, and ensuring a high quality of life that will be attractive to knowledge workers. This is not to dismiss the importance of fiscal discipline. But low costs with a poor quality of life and minimal infrastructure for business is not the ticket to success.

TABLE: Beliefs About Economic Development in the Old and New Economies³⁹

In the old economy, people believed that:	In the New Economy, people believe that:
Being a cheap place to do business was key.	Being a place rich in ideas and talent is key.
Attracting companies was key.	Attracting educated people is key.
A high-quality physical environment was a luxury that stood in the way of attracting cost-conscious businesses.	Physical and cultural amenities are crucial to attracting knowledge workers.
Regions won because they held a fixed competitive advantage in some resource.	Regions prosper if organizations and individuals have the ability or skill to learn and adapt.
Economic development was government-led.	Only bold partnerships among business, government, and the nonprofit sector can bring about change.

KNOW YOUR STATE’S FUNCTION IN THE GLOBAL ECONOMY

Crafting an economic strategy for the New Economy requires an acute understanding of the state economies and, in particular, how its key industrial sectors compete in a global economy. It behooves states to carefully analyze their economy to identify and assess the competitive position of their key industry clusters. For example, high-tech is not one industry, it is many, and each has different requirements and locational patterns. Biotech is different from pre-packaged software, which is different from telecommunications equipment. As a result, it’s not appropriate to have a single “high-tech” policy. A state’s strategy should grow out of its unique industrial structure, economic assets and limitations, differences in sub-state regional economies, and business and civic culture. Therefore, a state should develop an in-depth and ongoing understanding of its economy, including how the major economic sectors work and what these economic strengths and weaknesses are. Too often decisionmakers think they already know what’s going on (e.g., “everyone knows that we are strong in venture capital”) and skip this essential stage in the eagerness to “get on with it.” But this is a critical mistake. States should also not be afraid to take off the rose-colored glasses and examine both their strengths and weaknesses, opportunities and threats. Too often states confuse economic development strategies with marketing documents, wanting to put forward their best face. But the best strategy is an honest one. Marketing the state’s strengths can come later.

But there is another key step. After analysis, a state must organize to help translate its knowledge into action, at both the private and public sector levels. A number of states, including Kansas, Indiana, and Rhode Island, have developed public-private councils to foster economic and community development. As a result, states should **form economic policy councils that bring**

together key leaders in business, government, labor, civic groups, and higher education to provide in-depth analyses of the economy, develop creative economic strategies, and build widespread consensus for action.

GET SMART ABOUT BUSINESS INCENTIVES

While most states have added New Economy economic development policies in the last few years, many still maintain expensive and usually wasteful industrial recruitment and retention incentive programs. Collectively, states spend more than \$15 billion annually on firm-specific incentives.⁴⁰ Economic development incentives are seldom targeted to specific economic development goals, other than to “shoot anything that flies,” while “claiming anything that falls.” For example, several years ago, half the jobs created by companies in Minneapolis that got tax subsidies paid less than \$8 per hour — surely not the route to raising incomes in the Twin Cities.

It’s not that incentives are a bad idea all the time, it’s that they mostly go to zero-sum activities. The lion’s share of incentives are spent to convince particular companies to stay put or to move in. They do nothing to encourage firms to boost training, R&D, or investment in new capital equipment, all things that would increase their productivity or innovative capability.

Moreover, incentives often don’t even change firms’ location decisions. More often than not companies use the threat of moving or dangle the carrot of moving in to extract government booty after they’ve already decided where they want to locate. For example, even though Maryland gave Marriott Corporation more than \$60 million not to move across the Potomac to Virginia, later information strongly suggested that Marriott had no intention of moving.⁴¹ Even if incentives really do make the difference, it’s not unusual for firms to renege on the deal, taking the money and

BOX: THE INCENTIVES “POKER GAME”

Every year states are confronted with hundreds if not thousands of offers and threats by businesses to move in or move out, taking or bringing with them tens of thousands of jobs. Companies want governments to make them offers they can't refuse, in the form of tax breaks, free land, low-interest loans, or agreements to buy their products (as Alabama did when it agreed to buy Mercedes Benz for the state motor pool). When states play this game, though, it's like playing a high-stakes poker game where the other player has all the advantages.

Engaging in an incentive negotiation for a state is like playing a draw poker game with three of your cards dealt face up, while the other player (the business and its professional site location consultants, many of whom are paid on commission) has all its cards dealt face down. In other words, businesses know all the information about the state, but the state doesn't know if the business is bluffing in its decision to move, or what the bottom line number is that will influence its decision.

But it's actually worse than this. In this high-stakes poker game the state is not playing with its own money, so it has little incentive to bid low. State staff responsible for placing the bets (e.g., crafting the incentive packages) have professional motivations to bet aggressively since successfully landing the company brings kudos, while people seldom know if the bet was too high. Moreover, not only does the money almost never come out of the budget of the department doing the bidding, it usually doesn't even come out of the budget of the governor, since most incentive packages are paid over a long period of time after the current governor is out of office. In addition, the person whose money the state is playing with (e.g., the public) can seldom find out how much is bet, since incentive packages are often hidden in a veil of secrecy. Losing the game means that not only does the state lose that particular hand, but it might be forced out of the game completely. In other words, governors are seldom criticized for bidding too high, but they are criticized by the media and business community for underbidding and losing that “big deal.” Given all of that, why not ‘let ‘er rip’ and bet high?

Finally, staff also have an incentive to play poker (industrial recruitment and incentives) and not a different game (supporting indigenous development by working with industry clusters, developing training programs, etc.) because many of the current staff of state development departments are very good at poker (e.g., finding and negotiating with prospects), but not so good at other games. As a result, current staffs have a big investment in keeping things the way they are.

running, either by later moving to another location or by not creating the jobs originally promised.

While it would be in the interest of all states to not provide incentives to attract or retain companies (there would still be the same number of jobs in the U.S. economy and government would have more to invest), public officials are locked in a Prisoner's Dilemma (a non-zero-sum game in which two parties can either both cooperate and benefit, or defect and lose). States need to find a way out of this, but if they are unable to do so, strong action by the federal government to limit bidding wars by taxing firm-specific incentives (and returning the revenues, along with current federal economic and community development assistance, to states that swear off incentives) may be needed. But absent federal action, there are things states can do to better play the incentives game. As a result, the time is ripe for states to seriously reform incentive policy and use the savings to invest in New Economy economic development investments. Therefore, states should:

Pass incentive disclosure laws. In most states it's hard to get information on the actual scope and extent of incentive packages that have been granted. Many states simply have no idea how much incentives are costing them. But there is little reason why government should keep incentive deals secret from taxpayers and voters. As a result, states should pass laws requiring the administration to disclose and post online all firm-specific incentives. Three states — Maine, Minnesota, and North Carolina — have passed comprehensive incentive reporting requirements, while five other states (Connecticut, Louisiana, Ohio, Texas, and West Virginia) have weaker disclosure statutes. In Minnesota, all companies that receive more than \$25,000 in state aid are required to report the number of jobs created with the money, along with wages paid. The main argument against disclosure is that it compromises business secrets and taxpayer privacy. But the government is not forcing companies to take incentives, and the incentives reported are not those that any business can take as part of the tax code (such as the R&D tax credit); they are special deals that individual firms apply for and receive.

Pass “clawback” laws. In many states, companies that get incentives pay no penalty if they move out of the state or downsize, even though the state was basing its incentive package on a promised number of jobs. For example, in Cincinnati, 14 of 85 companies that received property tax abatements for proposed expansions failed to produce the jobs they promised. To put a stop to this, states should pass so-called “clawback laws” that require companies to repay incentives if they fail to meet the objectives they agreed to in the deal. For example, in Minnesota, businesses must repay their subsidy if they move out of state.

Some argue that this penalizes firms that might be doing poorly, but the incentives are never given just to help firms, they were given with an expectation of a return (e.g., more jobs). If the firm can't meet its commitments, it's appropriate for the public to get its investment back.

Make incentives contingent on higher wages. If states give public money to companies, they should at least expect it to lead to a higher standard of living. But it's not uncommon for states to provide incentives to firms paying wages much lower than the median wage. As a result, states should tie incentives to a wage floor so that if a certain share of a company's jobs pay below a certain level, they are not eligible for incentives. Several states have done this. Kansas allows only businesses that pay wages above average for the industry to take its corporate income tax credit.⁴² Rhode Island tied eligibility for its investment tax credit to company wage levels. Minnesota won't provide any incentives to businesses that pay below a predetermined wage floor. Opponents complain that such provisions will deter companies from locating in these states. But in many cases incentives don't swing the decision, and even if they did, do states really want to spend money to lower their standard of living? By focusing incentives on firms with higher paying jobs, states take seriously the effort to raise incomes.

Require that incentives are paid for in near-term budgets. Many incentive packages accrue to firms over a number of years. For example, when Alabama gave Ipsco, a steel mini-mill, subsidies worth \$187,000 per job, much of the money came from a waiver of corporate income taxes over 20 years. When it's not coming out of their own budgets, administrations are more likely to provide generous and wasteful incentives. As a result, states should pass legislation requiring at least half of any incentive package to be paid for out of the administration's current budget, even if the incentives are paid to the firm over a number of years. The state would have to deposit money from its current budget into an escrow fund to cover the future payments to the company.

Use incentives to support the state's economic strategy. Incentives are a means, not an end. But few states use incentives strategically to support their overall economic goals. To the extent that states continue to use incentives, they should be limited to achieving certain goals, such as encouraging development in distressed parts of the state or boosting key industrial clusters. For example, throughout the 1980s, Massachusetts encouraged biotech corporations to locate in Worcester to help build its biotech cluster.

Use savings on incentives to expand New Economy investments. If states cut their incentives even in half, the average state would gain tens of millions of dollars annually that could

be used for the type of New Economy investments listed below. However, governors and other key officials need to make it clear that by reining in incentives they are not reining in economic development efforts, only making them more accountable and effective.

CO-INVEST IN THE WORKFORCE SKILLS

States need to adopt policies to ensure that American companies have the skilled workers they need to be productive, while simultaneously ensuring that American workers have the skills they need to navigate, adapt, and prosper in the New Economy. States can do several things to improve the skills of the workforce:

Create incumbent worker training programs funded through a supplemental unemployment insurance tax. A number of states, including California, Delaware, Minnesota, Massachusetts, New Jersey, Rhode Island, and Tennessee, assess a small surcharge on the unemployment insurance (UI) tax to pay for employer-based training. For example, Rhode Island assesses an additional 0.2 percent surcharge on employer UI taxes to fund an employer-based training grant program. Most of the funds go to industry consortia focused on upgrading the skills of workers in key industrial sectors. Indiana's training payroll tax funds an apprenticeship and job-training program. These programs not only improve company productivity and reduce the risks of layoffs, they provide skills to workers so that if they are laid off they can get back to work more quickly.⁴³

Design incumbent worker training programs that encourage firms to become learning organizations. Many states spend a large share of the training funds on so-called "quick response" training that largely serves as a retention or attraction subsidy to individual companies. Incumbent worker training programs need to do more than simply train workers, they need to help firms become ongoing learning organizations. Programs can do this by requiring firms receiving assistance to develop long-term work-based training plans and by encouraging continuing investments by the employer in training. For example, Louisiana requires a firm to engage in a detailed planning process as part of submitting a training grant proposal and allows the training program to be up to two years in length. Both aspects support the firm in thinking about an overall training plan for the firm — not just the immediate training problems.⁴⁴

Co-invest in industry-led regional skills alliances. A number of states, including Pennsylvania and Wisconsin, are shifting the focus of workforce training efforts to support industry-led skills alliances. For example, area manufacturers formed the Philadelphia Advanced Manufacturers Academy to address a shortage of skilled machinists through a 61-week program set in a modern learning factory environment. Similarly, Indiana worked

with the Inland Steel Corporation and its Indiana-based suppliers to form the Indiana Steel Industry Supplier Training Network. States should play active roles in the creation and co-funding of these alliances by shifting support for training away from individual firms and toward groups of firms and alliances.⁴⁵

Fundamentally reorganize programs funded under the 1998 Workforce Investment Act (WIA). States should take advantage of the opportunities afforded by the federal Workforce Investment Act to ensure that the state's Workforce Investment Boards (WIBs) are more than just bureaucratic programs operating on the margin of the labor market. States should encourage local WIBs to be active partners with the private sector in creating a trained workforce. Best practices include doing in-depth labor market "audits" that identify broad business trends and specific skill needs; developing expertise in the needs of a specific industry sector and building long-term relationships and company and union training alliances within it; consolidating employer outreach into a single "employer services" unit; creating partnerships with private employment and training organizations; and developing tailored training programs.

States should avoid setting policy for WIA in isolation from the rest of its education and training programs. States and local areas need a coherent vision for all their workforce programs. This means aligning the missions of all programs, including WIA and TANF (Temporary Assistance for Needy Families), creating a one-stop system, using information technologies to automate services and improve quality, providing training and re-employment vouchers to individuals in need of services, and developing "consumer report cards" to track the performance of training providers.⁴⁶

Reimburse community colleges for non-credit career-prep enrollments. With the New Economy's requirement for lifelong learning, career training is becoming more important. Not surprisingly, a growing number of community college students are enrolled in career training courses. Yet while states subsidize enrollment in college-prep courses, many require that students enrolled in non-credit career training courses pay full costs or more. Because they do not get reimbursed or get reimbursed less by the state, colleges have less incentive to develop good non-credit programs. As long as there are adequate standards for the non-credit courses (length of the course, connection to employer-based training, etc.), states should reimburse schools for enrollments. For example, Texas provides full reimbursement for non-credit courses that employers set up or that students take to get ready to go back to work. Oregon reimburses state community colleges for career courses, just as it does for college prep-courses. As a result, over 30 percent of Oregon students are in career advancement courses. Georgia's Hope Scholarship allows people to take any course that issues a technical certificate that is rec-

ognized by the state. North Carolina subsidizes career education, non-credit courses in order to keep the costs low. All states should put career-oriented non-credit courses on a level playing field with credit courses, and ideally work to ensure that non-credit courses are part of certificate programs.⁴⁷

Establish tax credits for company investments in remedial education, literacy training, and English as a second language. Many companies seeking to upgrade the skills of their workforce often find that a significant share of their workforce lacks basic skills. Moreover, in most states there are long waiting lists for remedial education.⁴⁸ However, company-based programs for basic skills training have proven highly effective. As a result, states should create a tax credit for company investments in this kind of training.⁴⁹

Create "Learning Stores." In most places it's extremely difficult for the average citizen to locate publicly supported workforce development programs. To fix this, states should create easy-to-find "Learning Stores" located where people typically go (e.g., shopping malls). In some cases this may be as easy as making sure that state "one-stop" workforce centers are located in easily available places. In other cases it may require creating expanded and more comprehensive centers. Individuals should be able to enter a learning store and consult with a learning specialist and/or get self-service at a kiosk to: access relevant labor market information, including growing occupational categories and their skill requirements; find out how to assess their skills; locate courses, degree programs, and certificate programs in the occupations/skills they are interested in; and determine the financial assistance they qualify for.

Boost science and technology college graduates. At a time when technology is becoming a more important driver of the economy, the number of science and engineering graduates is declining or stagnant. Moreover, in spite of the concern in some states about "brain drain," there is a remarkably high correlation (0.97) between the number of Ph.D. scientists and engineers employed in a state and the number of Ph.D. scientists and engineers that graduate in the state. States can do a number of things to boost S&T graduates at all levels. New Jersey provides funds to help colleges and universities develop science, math, and information technology curricula. Minnesota is considering a proposal to provide in-state tuition rates for high-achieving non-resident students majoring in science and technology fields. The Connecticut Innovations Technology Scholar Program provides financial assistance to Connecticut college students studying the sciences and also provides internships in science and technology fields. Pennsylvania provides a three-year science scholarship for students who maintain a "B" average and undertake an internship with a Pennsylvania technology company. Maryland has adopted a similar program. Through its Technology

Opportunity Program, Ontario has provided \$228 million over three years, matched by \$136 million from the private sector, to universities and colleges that commit to meeting goals for significantly increasing enrollments in fields such as electrical engineering, computer and software engineering, communications engineering and computer science.⁵⁰

CO-INVEST IN AN INFRASTRUCTURE FOR INNOVATION

In an economy increasingly powered by technology and innovation, the ability of states to create an environment in which innovation thrives is critical to economic growth. But universities are not the only knowledge incubators; in fact, most knowledge is produced by companies. States need to foster strategies that enhance the ability of companies to produce and use knowledge. States should do several things, including:

Increase higher education funding to create key competencies that support New Economy growth.

Universities can be key nodes in New Economy development. But in most states, higher education governance and budgets are considered separate from the state's economic development efforts. And too often when states seek to boost colleges and universities' role in economic development, they simply increase higher education funding indiscriminately. If states are to effectively enlist higher education in economic development, especially in helping small and mid-size entrepreneurial firms,⁵¹ they need to tie at least a share of increased funding to specific goals (such as doing research related to key industry clusters, providing technical assistance to companies in the state, or obtaining industry funding for R&D) and outcomes (such as increasing the transfer of technology to companies in the state). While universities and colleges have key missions other than economic development, the latter is part of their mission and they should perform that mission well.⁵² As a result, states should set clear economic development objectives for state-funded higher education institutions and tie a share of increased funding to how well they meet these goals. They should also encourage universities to establish external advisory councils made up of industry leaders and faculty to provide insight into research trends and entrepreneurial activities.

Boost university technology commercialization.

While some universities excel at commercializing their discoveries, most do not. In many universities, faculty are simply not focused on working with industry and when they are, the technology transfer offices are focused on maximizing revenues from licensing faculty's intellectual property, even if this means giving little attention to technologies with less revenue potential but significant economic development impact. Commercialization succeeds when industry R&D staff is able to establish personal contacts with uni-

versity researchers and where the university has an active and liberal policy to get its technologies in the marketplace and to allow faculty to become entrepreneurs. States should carefully examine rules regarding licensing of intellectual property and holding of equity positions with an eye toward making it easier for universities to commercialize research. For example, in order to address constitutional barriers to commercialization, Oregon has proposed the creation of a Higher Education Tech Transfer Account which would provide a mechanism to allow universities to hold equity in the products and companies created by their research. Oklahoma passed a state constitutional amendment overturning a provision that prohibited university faculty from holding equity positions in companies based on their technologies. In addition, states should boost funding for university research "centers of excellence" and other programs designed to develop and commercialize university technology.

Boost or create R&D tax credits.

Over two-thirds of states offer an R&D tax credit, but most credits are modest, averaging around 5 percent. At 22.5 percent, Rhode Island has the highest rate in the nation. Studies show that the R&D tax credit is an effective way of stimulating private-sector R&D.⁵³

Create or increase tax credits for research investments at universities or federal labs.

Many states have (modest) tax credits for company expenditures on research whether it's conducted by the firm or at a university. But because the result of company-funded research at universities is shared, the benefits are less likely to be fully captured by an individual firm. As a result, firms will under-invest in this kind of extramural research. As a result, it makes sense for states to have more generous tax credits for company expenditures on research at universities or federal labs. At least one state, Massachusetts, has done this, by establishing a 15 percent credit for basic research expenditures at universities, compared to its regular 10 percent credit. Ontario's Business Research Institute Tax credit provides a fully refundable 20 percent credit on research expenditures incurred under approved contracts with eligible research institutes, including universities, hospital research institutes, and certain non-profit organizations, compared to its regular 10 percent credit.

SUPPORT INDUSTRY CLUSTERS

In regional economies, the whole is often greater than the sum of the parts. In other words, firms in related industries often cluster together in a particular region, allowing them to take advantage of common resources (e.g., a workforce trained in particular skills; technical institutes; a common supplier base). But clusters are important for another reason — in a knowledge-based economy, having knowledge is not enough; it must be shared, and in some regions clusters of firms that network and communicate are

able to raise the overall knowledge levels that they can draw upon. Perhaps the best known cluster is California's Silicon Valley, where a large agglomeration of high-tech firms makes it the world's most vibrant technology region. But it's not just Silicon Valley that has industry clusters, and many clusters do not consist of "high-tech" firms. As a result, states should reorient their economic development programs to support regional industrial clusters, both based on existing groups of firms but also around emerging clusters where the region has some initial capabilities (e.g., several firms and university research capabilities).

Catalyze and empower industry clusters. In many states, clusters of similar firms exist but have little formal interaction with each other. States can help by organizing roundtables to bring industry leaders together to talk about common challenges facing their industry and the steps the state can take to help boost the cluster's competitiveness. They can provide small matching grants to help clusters establish industry self-help associations. For example, as part of its efforts to create a statewide strategic economic plan, the Rhode Island Economic Policy Council brought together leaders from the state's software companies. With the help of a small state start-up grant, the companies formed an industry association that works to help all firms in the cluster become more competitive. States should also consider proactive efforts to foster "turn-key industry networks" whereby a major economic development agency sponsors the development of a network, nurtures it, and then lets it go on its own. For example, this is what the Massachusetts Technology Collaborative did in helping to form the Massachusetts Medical Device Industry Council, a trade association for medical device manufactures.⁵⁴

Reorganize state programs around clusters. A cluster of firms, rather than the individual firm, is a much more logical point of economic development assistance for states. Working with entire clusters of firms is not only more cost effective, but also helps boost the synergies and cross-firm learning that can transform low-performing clusters into high-performing ones. As a result, whenever possible states should work with entire clusters of firms. For example, states should fund industry training programs through groups of firms with the same skill needs, as opposed to making grants to individual firms. They should reorient other programs, such as manufacturing extension, business finance, business assistance, and technology transfer, around clusters. In addition, states should tie increased funding to community colleges and four-year colleges and universities based on how they meet the training and research needs of regional clusters.⁵⁵ And to the extent that states continue industrial recruitment, it should compliment a cluster strategy. For example, Missouri is targeting efforts around life science clusters in St. Louis and Kansas City so that both major regions in the state reinforce each other.

BOOST QUALITY OF LIFE

Because a skilled workforce is now the most important factor of production, a region's pool of skilled workers is a key factor determining success. In the old economy, workers used to move to be near jobs. In the New Economy, companies increasingly look to move to where knowledge workers live. Because they are in greater demand and have more ability to be particular about who they work for and where they work, knowledge workers often choose to live in places that provide a high quality of life in addition to a good job. Most states face a number of challenges in creating a great quality of life, with high amenities, low crime, and good transportation.

For many states, boosting mobility in the state's crowded metropolitan areas is the most important task in improving quality of life. States like Washington, Georgia, California, Maryland, New York, and Massachusetts have major metropolitan areas that are near gridlock. Besides making life miserable for millions of commuters, road congestion severely reduces the economic attractiveness of a place.

In spite of this, little has been done to solve road congestion. Between 1987 and 1998, while vehicle miles traveled on freeways or principal arteries in urban areas increased by 42 percent, lane miles increased only 16 percent (with almost all coming from reclassifying rural areas as urban). No wonder congestion has worsened.⁵⁶

This is not to say that states shouldn't continue to work on demand-reduction strategies such as encouraging transit-oriented and infill development, investing in transit, supporting rational metropolitan-wide planning, and imposing impact fees on new developments equal to public sector costs. However, while demand reduction strategies are needed, they are incapable of adequately responding to 20 years of failure to expand our nation's highway infrastructure to meet the needs of a larger and more mobile population. As a result, states should:

Expand road capacity in congested metropolitan areas. If states are serious about returning mobility to their residents, they will need to do more to increase the supply of transportation, particularly by building more roads and widening existing roads, especially in congested metropolitan areas. In most metropolitan areas there are ample opportunities to widen existing arterials without having to claim new rights-of-way. In fact, many states should place congestion mitigation as the top goal for their transportation efforts.

Pay for new road capacity with user charges. Few states have the money to pay for both maintenance of existing infrastructure and expansion. As a result, they have not made the needed investments to expand transportation infrastructure to meet demand. The fairest and most efficient way to add new revenues is for states to increase user fees, such as gas taxes and vehicle registration fees. States should also experiment with road pricing systems. The ability to collect tolls on the fly with EZ-pass systems (wireless transponders in vehicles) means that states can establish toll roads or toll lanes without impeding traffic flow.

Use information technology to modernize state transportation systems. Intelligent Transportation Systems (ITS) use advanced information technologies to manage and operate surface transportation. ITS involves devices to detect disturbances in traffic flow, real time traveler information systems, computer controlled ramps and traffic lights, “on the fly” toll collection systems, and a host of other applications. States should fund a wide array of applications, including building “HOT Lanes” to let drivers pay to use underutilized HOV lanes.

HELP MORE REGIONS SUCCEED IN THE NEW ECONOMY

In many states, the story of the 1990s was a common one: The state’s major metropolitan areas boomed, while other parts of the state, including rural regions and smaller cities dependent on traditional manufacturing, lagged behind. Such development patterns hurt state economies by raising costs in congested metro areas and unemployment rates in other areas. As a result, it’s incumbent upon states to develop and implement strategies that ensure that more regions thrive in the New Economy.

Develop “balanced growth” strategies. Few state economic development departments care much where growth occurs, they just want growth. As a result, governors should bring together key parties to craft a statewide balanced growth strategy that explicitly lays out a path of how to boost growth in lagging regions. A key part of any strategy will entail explicitly stating that supporting any and all growth in booming and crowded metropolitan areas is not in the best interests of the state. Siphoning off some growth from large, congested sprawling metros to smaller places will reduce congestion and costs in the former, and boost the economic prospects of the latter. Places like Boston, San Jose, and Washington, DC don’t need more residents and jobs, but places like Springfield, Ill., Fresno, Calif., and Hagerstown, Pa. do, and could easily add more people with positive impacts, such as letting people have a good job while staying in the places they grew up.

Focus efforts on “growth poles.” States need more than a plan, they need to make the hard political choices that enable them to target limited resources to investments in places that are most likely to be able to take advantage of opportunities. In contrast to what many think, the New Economy does not give every place the ability to be competitive — certain factors like quality of life, a reasonably sized labor pool, and access to transportation still matter. As a result, there will be some places that are very small, remote from metro areas, and with a poor quality of life and fewer amenities that are not likely to succeed in the New Economy. In contrast, other places that are of modest size and have a good quality of life have real opportunities, especially if they are linked with high-speed telecommunications connections. For example, a place like Cedar City, Utah, a small city of about 35,000 and located on I-15 about a 5-hour drive south of Salt Lake City, is poised to be a magnet of growth. With a state college, a Shakespeare festival, and a stunningly beautiful natural environment, Cedar City would be an ideal growth pole for Southern Utah. It’s big enough that a software company from California might want to move there and be confident it could attract the kind of workers the company needs. But it’s small enough that it’s hard to imagine it suffering from congestion or high housing prices. In contrast, it would be much more difficult for a smaller town in Southern Utah, far from the Interstate and without the same quality of life, to be a magnet for growth.

As a result, states should provide regional planning grants to sub-state regions that are working to select growth poles for targeted development.

Once growth poles are identified, states should target economic development resources, including industrial recruitment efforts, to designated growth poles. They should also develop seed and early-stage venture funds to support the growth of new businesses in these areas. For example, prior to becoming governor of Virginia, Mark Warner helped create seed capital funds in areas of the state such as Hampton Roads, Charlottesville, and Roanoke. In addition, states should provide regional planning grants to support building the capacity of economic development leadership in growth pole areas. These grants should support a new model of public-private partnership that engages civic and business leaders in developing and implementing a regional development strategy.⁵⁷ Finally, state governments themselves are a job creator and their facilities can stimulate economic development. As a result, states should relocate government facilities that do not need to be in crowded metro areas to designated growth poles.

Aggregate demand in underserved areas to build a market for broadband.

The information technology revolution allows an increasing share of economic activities to remain functionally close (to customers, suppliers, and other parts of an organization) while becoming more physically distant. But for this to work, places need access to broadband telecommunications. As a result, states need to develop concerted efforts to ensure that most parts of their state have high speed broadband connections, particularly for businesses.

States can do several things to help facilitate the rollout of broadband, including reducing the rights-of-way charges and taxes they levy on providers. For example, the Michigan Senate has passed legislation that would preempt local authorities over rights-of-way for telecommunications use and reduce the fees that could be charged for access to those rights of way, while giving telecom providers tax credits for rights-of-ways fees.

States can also fund regional efforts to aggregate demand for broadband.⁵⁸ One reason why telecom providers have been slow to build out broadband to more rural communities is that the costs are higher and the revenues lower. When aggregated from government, education, and large business users, broadband demand in many rural areas can make investments pay off. As a result, a number of regions have developed initiatives to form broadband buying co-ops that invite telecom providers to bid for their business and extend affordable broadband to their area. For example, New Hampshire formed public-private partnerships to create the Monadnock and North Country “Connects,” giving businesses in rural parts of the state access to high-speed telecommunications at affordable prices. New Hampshire modeled the initiative after Berkshire Connect, which expanded affordable telecom services in Western Massachusetts. The Massachusetts Technology Collaborative created an affinity group of business and government Internet users, and since early 2000, Berkshire Connect has provided high-speed Internet and data services to its members through a regional network constructed by private vendors chosen through a competitive proposal process.⁵⁹

The Canadian province of Alberta is taking this concept a step farther. Through its Supernet project, it is working to connect every community that has a hospital, school, library, or provincial government office to an affordable high-speed, broadband Internet network. At the same time, Supernet will ensure that businesses and residences in 422 communities will have access to high-speed Internet (10 to 100 mb per second) at competitive rates.⁶⁰ The government will provide \$193 million for the project to lay 8,410 kilometers of fiber. In areas of the province where it makes no sense to lay fiber, a wireless system will be used. Much of the investment will go to 368 communities where the private sector is sim-

ply unable to make a business case to build. In return for commitments by the government to purchase telecom services over the course of the next 10 years, the province has also obtained commitments from two private sector providers to build out in other areas. In all areas, Internet service providers will be able to purchase use on the network for resale to homes and businesses. Once the initial capital costs are covered by government, the network is designed to be self supporting.

Help industries located principally in non-metro areas become more competitive.

One way to help non-metro areas thrive is to help the industries there become more competitive. As a result, states should carefully identify rural-based industries and how new technologies can make them more competitive. In many cases this means helping natural resource-based industries develop new products and adopt new production processes. A number of state programs do this. Kansas State University runs a technical assistance program to help agricultural co-ops develop value-added food processes. South Dakota’s Value-Added Agriculture fund supports feasibility and marketing research for agricultural processing projects. South Dakota has also developed a regional program to boost wind energy production in the Southwest corner of the state, creating good jobs in the process. New Valley Connections, a public-private partnership in California’s San Joaquin Valley, is implementing a cluster-based economic development strategy for the region’s agri-businesses that focuses on making the San Joaquin Valley a center of research and development for agri-based new product development.⁶¹

SUMMARY

The New Economy is here to stay. It brings state economies enormous potential for growth, but also introduces challenges. If states do not invest in a knowledge infrastructure — world-class education, training, and technology — companies will not have the skilled workers and cutting-edge tools needed to grow and create well-paying jobs. Simply put, states that meet the challenges of the New Economy — focusing on innovation, learning, and constant adaptation — will be the ones that prosper.